

A DEFENCE OF METAPHYSICAL ETHICAL NATURALISM

RYO CHONABAYASHI

This thesis is submitted to Cardiff University in fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

February 2012

Philosophy

DEDICATION

I dedicate this work to Daisaku Ikeda who has been giving me uncountable encouragement. If there had not been his great inspirations, I would not have found a great joy in doing philosophy, and could not have completed a doctoral work in philosophy.

I also dedicate this work to my father, Naohiko, my mother Akiko, my sister, Mai, my brother, Shun and my sister in law Sae, and another brother Yu Chonabayashi. Without their unceasing support, I could not finish this work.

Finally, I dedicate this work to my wife, Hisayo Chonabayashi. I hope this dissertation will be the first work from my side for our shared determination that we seek and promote a philosophy which enables us to manifest our full potential.

ACKNOWLEDGEMENT

I deeply thank my thesis supervisor, Nick Shackel for his constant encouragement and constructive comments on my writings. Without his support, this dissertation would be a much poorer work than it is.

I also thank the people in the Philosophy Section of Cardiff University. Cardiff was such a great place to discuss philosophy with very talented teachers and friends. I especially thank Robin Attfield, Richard Gray, Jules Holroyd, Chris Norris, Clear Rees, Alessandra Tanesini, and Jon Webber who gave me various helpful suggestions about my dissertation. I also thank many talented postgraduate students there with whom I had invaluable opportunities to discuss philosophy and various things about life. Special thanks to Alison Venables and Rhian Rattray who supported my life in the Cardiff Philosophy Section in various ways.

These people very kindly gave me permission to read their published or unpublished work: Brian Leiter, Alex Miller, Christian Miller, Michael Rubin, Neil Sinclair, and Torbjörn Tännsjö. I wholeheartedly thank their kindness.

I gave my papers on various occasions, and received many helpful comments which contributed to the completion of this dissertation. I thank all the audiences on those occasions. Especially I thank Charles Pigden and Christine Swanton who gave me helpful comments on my papers.

This research is partly funded by So-Yu-Kai Research Scholarship which is provided by Soka University in Japan. I am grateful to the grant committee for supporting my research at Cardiff.

Finally, I would like to express my gratitude to Yutaka Ishigami. He is the first person who taught me philosophy and I thank his constant encouragement since then.

Abstract

This dissertation is a defence of metaphysical ethical naturalism according to which there is a moral reality which is part of the natural world. The implication of this view is that moral properties, such as moral goodness, justice, compassion and so forth are part of the natural world, and inquiries concerning these moral entities are conducted in similar empirical ways of reasoning to that in which scientific inquiries are conducted.

I defend metaphysical ethical naturalism by a variety of explanationist argument in the tradition of Cornell realism. I examine preceding proposals for this argument, and focus on one version of it, which I call ‘the abductive argument for moral realism’. Although there was a suggestion about the abductive argument, the argument has not been discussed enough in the literature. This dissertation is a defence and discussion about the abductive argument which has not been properly examined.

The defence of the argument requires the examination of how first-order ethical theory can be developed in the similar empirical ways scientific theories are developed. This will be an attempt to show the analogy between scientific inquiries and ethical inquiries. Describing the analogy between science and ethics, I will argue that the analogy can be best explained in terms of the approximate truth of normative theory which implies the existence of mind-independent natural moral properties.

CONTENTS		
		Page
Introduction		9
1. Metaphysical Ethical Naturalism		15
1.1 Moral Realism		16
1.1.1 The Mind Independence of Moral Properties		16
1.1.2 The Epistemic Objectivity of Moral Judgements		18
1.1.3 Moral Realism and Moral Fallibilism		19
1.1.4 Moral Entities can be Platonic <i>Ante Rem</i> Universals		20
1.1.5 Moral Realism needs Moral Cognitivism		22
1.2 Ethical Naturalism		23
1.2.1 Moral Properties and Other Natural Properties		23
1.2.2 Non-Reductive Naturalism and Reductive Naturalism		26
1.2.3 Non-Reductive Naturalism and Non-Naturalism		28
1.3 Methodological Naturalism in Ethics		29
1.4 Other Naturalisms in Ethics		32
1.4.1 Foot		32
1.4.2 Jackson		34
2. The Explanationist Argument for Metaphysical Ethical Naturalism		38
2.1 Recent Work for Naturalism		38
2.1.1 Railton's Reductive Naturalism		39
2.1.2 Brink's Defence of Naturalism		40
2.2 The Basic Explanationist Argument for Naturalism		41
2.3 The Explanationist Thesis		42
2.3.1 Phenomena We Experience		43
2.3.2 Explanation		47
2.3.3 The Best Explanation		51
2.3.4 Inference to the Best Explanation and Realism		53
2.3.5 The Explanationist Thesis and Naturalism		55
2.4 Two Ways to Defend the Second Premise		57
2.4.1 The Singular Argument and the Abductive Argument		58
2.4.2 The Absence of the Discussion on the Abductive Argument		60
2.5 Singular Moral Explanationist Argument		62
2.6 Objections Against the Singular Argument		64
2.6.1 The Epiphenomenalist Objection		64
2.6.2 The Alternative Explanation Objection		64
2.6.3 The Semantic Objection		65
2.6.4 Moral Pessimistic Induction		65
2.6.5 The Normativity Objection		66
3. The Boydian Abductive Argument for Moral Realism		69
3.1 Boyd's Suggestion in 'How to be a Moral Realist'		70

3.2 Boyd's Argument for Scientific Realism	70
3.2.1 Scientific Realist Theses	71
3.2.2 Approximate Truth	71
3.2.3 Empirical Reliability	74
3.2.4 Theoretical Presuppositions	75
3.2.5 Realist Explanation	78
3.2.6 Philosophical Package	80
3.3 Analogous Argument for Moral Realism	84
3.3.1 Abductive Argument for Moral Realism	85
3.3.2 The Approximate Truth of First-Order Ethical Theory	86
3.3.3 The Empirical Reliability of First-Order Ethical Theory	91
3.3.4 Theoretical Presuppositions of First Order Ethical Theory	93
3.3.5 Moral Realist Explanation	95
3.3.6 Moral Realist Philosophical Package	99
3.4 The Abductive Argument and the General Objections against Naturalism	102
3.5 Some Defects of Boyd's Suggestion	107
4. Prospect for the Defence of the Abductive Argument	113
4.1 The Summary of the Previous Three Chapters	113
4.2 The Abductive Argument as a Placeholder Argument	115
4.3 On the Empirical Reliability of Normative Theory	116
4.4 On the Different Methods of Ethics	121
4.5 On the Moral Realist Philosophical Package	122
5. In Defending the Abductive Argument (Part 1) -a case of consequentialism-	126
5.1 Consequentialism	126
5.1.1 Theory of Right Acts	127
5.1.2 Theory of Wellbeing	128
5.2 The Empirical Reliability of Consequentialism	131
5.2.1 Prediction about People's Wellbeing	132
5.2.2 Subjective Measures of Happiness	132
5.2.3 Objective Measures of Happiness	134
5.3 The Theoretical Presuppositions of Consequentialism	137
5.3.1 Carol's Society	137
5.3.2 Revising Consequentialism	139
5.3.3 Theoretical Presuppositions	143
5.4 The Moral Realist Explanation of Consequentialism	145
5.4.1 Constructivist Explanation	146
5.4.2 No-Miracle Argument for Consequentialism	146
6. In Defending the Abductive Argument (Part 2) -a case of virtue ethics-	150
6.1 Virtue Ethics	150
6.1.1 Theory of the Moral Virtues	152
6.1.2 Theory of Human Goodness	155
6.1.3 Theory of Right Acts	157

6.2 The Empirical Reliability of Virtue Ethics	158
6.2.1 Prediction about Human Goodness	158
6.2.2 Prediction about the Possession of the Moral Virtues	160
6.3 The Theoretical Suppositions of Virtue Ethics	163
6.3.1 Vicky's Society	163
6.3.2 Revising Virtue Ethics	164
6.3.3 Theoretical Presuppositions	166
6.4 The Moral Realist Explanation of Virtue Ethics	168
6.4.1 Constructivist Explanation	168
6.4.2 No-Miracle Argument for Virtue Ethics	169
7. In Defending the Abductive Argument (Part 3) -a case of deontology?-	172
7.1 Naturalism and Deontology	172
7.1.1 The Accommodation Problem	173
7.1.2 The Methodological Problem	175
7.1.3 Prospect for Naturalistic Deontology	178
7.2 Kamm-Style Deontological Theory	180
7.2.1 Case-Based Initial Judgements	180
7.2.2 Assessing Principles	182
7.2.3 How a Principle is Discovered	182
7.2.4 Killing and Letting Die	184
7.3 The Empirical Reliability of Deontology	184
7.3.1 Cases People have Never Thought About	185
7.3.2 Prediction about Our Brains	187
7.4 The Theoretical Presuppositions of Deontology	192
7.4.1 Danielle's Society	193
7.4.2 Revising Deontology	194
7.4.3 Theoretical Presuppositions	196
7.5 The Realist Explanation of Deontology?	198
7.5.1 Constructivist Explanation	198
7.5.2 No-Miracle Argument for Deontology	198
7.5.3 Difficulty of Defending the Mind-Independence Thesis	200
8. Two Kinds of Objection against the Abductive Argument	205
8.1 Summary of Chapters V, VI and VII	205
8.2 Empirical Objections and Philosophical Objections	207
9. The Abductive Argument and Empirical Research on Moral Judgements	210
9.1 Social Psychology Undermining the Abductive Argument	210
9.2 Haidt on the Social Intuitionist Model	211
9.2.1 The Rationalist and the Social Intuitionist Models	212
9.2.2 Some Empirical Findings for the Social Intuitionist Model	213
9.3 What Might the Social Intuitionist Model Imply?	216
9.4 Lawyers Defend her Case on Reason	217

9.5 Lay People and Expert Moral Theorists	221
9.6 How Normative Ethicists Build Up Their Theories	223
9.6.1 Hooker's Consequentialism	224
9.6.2 Theoretical Presuppositions of Hooker's Theory	227
10. Philosophical Objections against the Abductive Argument	231
10.1 What is the Status of the Argument?	231
10.1.1 Two Arguments about the Status of the Abductive Argument	231
10.1.2 The Compatibility of Different Normative Theories	235
10.1.3 Metaethics May be Non Neutral	237
10.2 On the Empirical Reliability of Normative Theory	240
10.2.1 Reliability of the Other Sciences?	240
10.2.2 The Non-Reductivist Answer	242
10.3 Anti-Realist Alternative Explanations	244
10.3.1 The Moral Pessimistic Induction	244
10.3.2 Some General Replies to the Pessimistic Induction	245
10.3.3 Reply from Moral Progress	246
10.3.4 Evolutionary Explanation	248
10.3.5 Reply: the Regularity between the Modal and the Natural	250
10.4 On the Normativity Objection	254
10.4.1 Morgan's Objection	254
10.4.2 Stronger Reason for Morality	257
10.4.3 Normative Theory is More Important than Noble Theory	260
Concluding Remarks	263
Bibliography	268

Introduction

Here are some important questions which we need to answer: ‘how should we live?’, ‘how ought we to act?’ and ‘what sort of person should we be?’

We may answer these questions by referring to normative theory, such as Kantian ethics, Millian utilitarianism, and Aristotelian virtue ethics. On the basis of Kantian ethics, you might think that it is wrong to break promises since the maxim of this act is not a universal law of nature which governs all rational beings. On the basis of Millian utilitarianism, you might think that it is wrong to break promises since breaking promises does not increase people’s overall happiness. On the basis of Aristotelian virtue ethics, you might think that it is wrong to break promises since the virtuous person would not act in that way.

Here is a further question about the status of these answers: what are these answers about? Are these answers about the wrongness of breaking promises which exists independently of our theorising about it? Are these answers expressions of our con-attitude toward the norm of breaking promises?

In favour of the first answer, you might think that the wrongness of breaking promises is part of the natural world, and normative theory’s answers are about a moral reality which is part of the natural world.

This answer implies the following metaphysical and semantic claims: (1) moral entities, such as the wrongness of keeping promises, are part of the natural world [metaphysical], (2) normative theory refers to moral entities which are part of the natural world [semantic]. The first is a metaphysical claim about moral reality while the second is a semantic claim about normative theory which enables us to have access to such moral reality. The second assumption does not have to be about normative theory

if the aim of this claim is to allow us to have access to the moral reality. The second claim can be about our individual moral judgements. But our characterising this semantic claim in terms of normative theory is not wholly implausible since, as we see, normative theory may play an important role in our thinking about various ethical questions.

Regardless of how we frame the semantic claim, the metaphysical claim needs to be defended if we hope to claim that normative theory or our moral judgements may successfully refer to the moral reality. So, it seems, the metaphysical claim is more important than the semantic claim in the sense that the defence of the semantic claim is not successful unless the metaphysical claim is defended.

This dissertation is a defence of the metaphysical claim that there is a moral reality which is part of the natural world. *Metaphysical ethical naturalism* is the position which holds this claim. Metaphysical ethical naturalism implies that moral entities, such as moral goodness, wrongness, justice, courage, etc., are part of the natural world, and they exist in the same way the entities investigated in the sciences exist.

As I have been doing, in this dissertation, I use the terms ‘moral’ and ‘ethical’ interchangeably.¹ So, if I use the term ‘moral entities’, it does not need to be taken as entities exclusively about obligation.

Metaphysical ethical naturalism differs from various metaethical views. First, it holds the moral realist thesis that there are mind-independent moral entities. This claim opposes various forms of moral nihilism according to which there are no such moral entities (Mackie 1977; Joyce 2001). This claim also opposes various forms of moral relativism and moral constructivism according to which moral entities are mind-dependent (Harman 1975; Rawls 1980).

¹ It is true that some writers, such as Williams (1985) are careful in distinguishing these two notions.

Second, metaphysical ethical naturalism is committed to the thesis that moral entities are part of the natural world. Because of this thesis, it opposes some forms of moral realism. For instance, metaphysical ethical naturalism opposes the view according to which moral facts are reducible to facts about the deity, such as God (Adams 1999). It also opposes some versions of non-naturalistic moral realism according to which moral entities are non-natural which are somehow different from the entities investigated by the sciences (Moore 1903).

Despite the existence of rival metaethical views, why do we believe the truth of metaphysical ethical naturalism? Here is the argument for metaphysical ethical naturalism which I defend in this dissertation:

The Basic Explanationist Argument for Metaphysical Ethical Naturalism

- (1) An entity exists if that entity is ineliminable in the best explanation of phenomena we experience.
- (2) Natural moral properties are ineliminable in the best explanation of phenomena we experience.
- (3) Therefore: natural moral properties exist.

This is a valid argument. What we should discuss is whether (1) and (2) are true, and how the conclusion of the argument will be a defence of the claim that moral entities are part of the natural world and they exist in the same way the entities investigated by the sciences exist.

In Chapter I, I give a detailed exposition of metaphysical ethical naturalism. I characterise metaphysical ethical naturalism as the position which is committed to the claim that there are mind-independent natural moral properties. Giving a detailed exposition of this claim, I explain why the existence of natural moral properties implies

that there are moral entities which are part of the natural world and that they exist in the same way the entities investigated in the sciences exist. This first chapter will be my examination of the conclusion of the argument.

In Chapter II, I start my examination of the two premises of the argument. My examination reveals that the second premise is the crucial premise on which the defender of the argument and his opponents disagree. I suggest two ways to defend the second premise. I call the first way *the singular moral explanationist argument*. I call the second way *the abductive argument for moral realism*. It seems the second way is still underdeveloped: though there was a suggestion about it, there is the lack of the further development of the suggestion. Since the abductive argument is a good argument for metaphysical ethical naturalism, in this dissertation, I add further development on the original suggestion.

The abductive argument takes the following form:

The Abductive Argument for Moral Realism

- (1) First-order ethical theory is empirically reliable.
- (2) The theory-building procedures of first-order ethical theory are not free from theoretical presuppositions.
- (3) The best explanation of (1) and (2) [which are themselves empirical phenomena] is moral realism which implies the existence of natural moral properties.
- (4) Therefore: natural moral properties are ineliminable in the best explanation of phenomena we experience [the second premise of the basic argument].

This argument will be the central topic of this dissertation.

The root of the abductive argument lies in the suggestion Richard Boyd made in his essay, 'How to be a Moral Realist'. In Chapter III, I explain how the abductive

argument works on the basis of Boyd's original suggestion. Chapter III reveals that the defence of the abductive argument requires the analogy between science and ethics: for the defence of the argument we need to describe how first-order ethical theory² can be developed in the similar empirical ways scientific theories are developed.

To defend the analogy between science and ethics, in Chapter V, VI, and VII, I describe how consequentialism, virtue ethics and deontology, which are typical examples of normative theory, can be empirically developed. To describe the analogy, I use various thought experiments in which I describe how these first-order ethical theories can be empirically developed.

In Chapter IX and X, I discuss some objections to the abductive argument. The objections can be categorised into two groups: some of them are objections on the basis of empirical findings about ethics, and some of them can be called philosophical objections which do not rely on empirical evidence.

It needs to be said that my defence of the argument is programmatic: my defence heavily relies on the thought experiments in which I describe how normative theory can be empirically developed. But, of course, thought experiments alone cannot prove that normative theory develops in the similar empirical ways science develops. It is an empirical question whether normative theory can develop in that way. So, my defence is thin in the sense the full defence of the argument requires real scientific research about ethics.

Nevertheless, my defence is significant since it clarifies what sort of empirical finding contributes to the improvement of normative theory, and, in turn, defends naturalistic moral realism. This clarification motivates us to conduct further empirical research on ethics. What I am going to give in this dissertation is a map by which we

² In this dissertation, I use the terms, 'first-order ethical theory' and 'normative theory', interchangeably.

can reach the point where we can clearly view the reality of ethics which is part of the natural world.

Chapter I

Metaphysical Ethical Naturalism

Introduction

Metaphysical ethical naturalism (naturalism, for short) claims that there is a moral reality which is part of the natural world. The implication of this claim is that moral entities, such as moral goodness, wrongness, justice, courage, etc. are part of the natural world.

Naturalism can be more formally characterised as follows:

(C) There are mind-independent *ante-rem* natural moral properties whose instantiation results in moral facts, and these moral properties are investigated by empirical ways of reasoning.

The defence of naturalism amounts to the defence of this claim. I use the term *the naturalist* who is committed to this claim.

For the defence of naturalism, the exposition of (C) is needed. In this chapter, I characterise (C) in terms of the following four claims: (MR1) there are mind-independent moral properties, (MR2) moral properties are Platonic *ante-rem* universals, (N) moral properties are natural properties, and (MN) moral inquiry can be advanced by empirical ways of reasoning.

1.1 Moral Realism

There are two claims of (C) which make (C) a *moral realist thesis*. These two claims are as follows:

(MR1) There are mind-independent moral properties.

(MR2) Moral properties are Platonic *ante-rem* universals.

Notice I use the term *moral properties* in (MR1) and (MR2). I take moral entities such as moral goodness, wrongness, justice, courage, etc., can be understood as moral properties. I give an account of moral properties when I explain (MR2) while I start to use the term *moral properties* prior to that section to avoid confusion.

1.1.1 The Mind-Independence of Moral Properties

(MR1) consists in two different theses. The first can be called *the existence thesis*: there are moral properties. The second can be called *the mind-independence thesis*: the existence of moral properties is mind-independent. The mind-independence thesis needs to be explained properly since the account of moral properties' mind-independence explains how such mind-independent moral properties can exist. So, although I explain (MR1) in general, my explanation of (MR1) will be mainly on the mind-independence thesis.

The mind-independence thesis can be explained in terms of *the ontological objectivity of moral properties*. The existence of moral goodness, wrongness, justice, courage, etc. is in an important way not dependent on our minds.

Does this imply that genuine moral properties do not have any dependence on human minds? Such implication is implausible since there are some plausible candidates for moral properties which *are* dependent on human minds. It seems that the wrongness of harming innocent children is a good candidate for moral property. But this

wrongness depends on, at least, the suffering of children and the wrongdoers' evil intentions which are features of human minds.

A better way to characterise the ontological objectivity of moral properties is this: the existence of moral properties is metaphysically or conceptually independent of the beliefs or propositions which are our evidence for it (Brink 1989, pp. 15-16). This understanding of the ontological objectivity of moral properties enables us to hold that moral properties exist independently of our minds without holding that all moral properties do not have any relation to human minds. As we have seen, the wrongness of harming innocent children at least depends on some mental states (children's suffering and wrongdoers' evil intentions). However, the wrongness of harming innocent children can be objective in the sense it exists independently of our having evidence for it, such as our recognising children's suffering and wrongdoers' evil intentions. Peter's hitting his innocent little brother is wrong even when nobody has evidence for the wrongness of Peter's act.

We can compare this view with one of the rival theories, such as ideal observer theory. According to ideal observer theory, moral facts consist in the responses of morally ideal agents. The wrongness of harming innocent children consists in ideal agents' approval of the norm which prohibits this practice. For the ideal observer theorist, the metaphysical status of moral properties is mind-dependent in the way the fact about the wrongness of harming innocent children is dependent on the response of morally ideal agents. This view is in tension with the mind-independence thesis: the proponent of the mind-independence thesis would say that the existence of moral properties does not depend on how morally ideal agents respond to cases.

Moral properties' ontological objectivity can be analogously compared with our common sense conception of science's objectivity. We think that laws postulated by

scientific theories exist independently of our having evidence for them. The law that salt dissolves in water exists independently of our having evidence for it: prior to our discovery of this law, this law existed. According to (MR1), moral properties have a similar metaphysical feature. A person's courage exists independently of our having evidence for it. Prior to our discovery of that person's courageous character, the person's courage has been already there.

1.1.2 The Epistemic Objectivity of Moral Judgements

The ontological objectivity of moral properties implies the possibility of another type of objectivity which is important in moral discourse. This objectivity is *epistemic objectivity* of moral judgements.

The epistemic objectivity of any discourse can be characterised in terms of the correctness of judgements. A judgement is epistemically objective if and only if the correctness of that judgement does not depend on any particular point of view.

There are some judgements whose correctness depends on particular points of view. Judgements about pain may be one of such judgements. Paul judges that the injection *i* is extremely painful while Sam judges that *i* is not very painful. Both Paul's and Sam's judgements can be correct: it may be true from Paul's point of view that *i* is a painful injection while it also may be true from Sam's point of view that *i* is not a very painful injection.

On the other hand, there are some judgements whose correctness may not depend on any particular point of view. Judgements in science may be one of such judgements. Two scientists, Paul and Sam, disagree on whether an elementary particle *e* has the property *p*. Our common sense conception of science tells us that both of their judgements cannot be correct. They are talking about an objective feature (*p*) of *e*, and the correctness of their judgement depends on how they are successful in describing *p*.

So, if their ways of describing p are very different, either: (1) one of them is correct and the other is wrong, or (2) both of them are wrong.

The claim that there is the epistemic objectivity of moral judgements is a suggestion that moral judgements are similar to judgements in science. The epistemic objectivity of moral judgement is underpinned by the ontological objectivity of moral properties. The correctness of a moral judgement depends on how that judgement is successful in describing the mind-independent moral reality.

This epistemic objectivity of moral judgements is not compatible with the relativist conception of moral judgements. Moral relativists would say that the correctness of moral judgements is dependent on people's approval of certain moral practices. According to this view, the correctness of the judgement, 'using physical harms for educational purposes is morally acceptable', depends on whether the majority of people in society approve this moral norm. Although the correctness of the judgement does not depend on a particular individual's viewpoint in this case, the correctness is still dependent on a particular society's viewpoint. This relativist view opposes the epistemic objectivity of moral judgement. Someone who holds the epistemic objectivity of moral judgement would claim that the correctness of the moral judgement above does not depend on the fact that the majority of people approve the practice. No matter how many people say that the suggested practice is morally permissible, the judgement is not correct if the practice does not possess moral permissibility. If the practice does not have such moral permissibility, the judgement is simply false since it does not correctly describe the moral property the practice has.

1.1.3 Moral Realism and Moral Fallibilism

Someone might think that naturalism which is committed to these strong moral realist claims is not a plausible position in ethics since if one holds the epistemic objectivity of

moral judgments in this way one cannot take an important epistemic stance, *moral fallibilism*.

According to moral fallibilism, we should think that any of our moral judgements may be mistaken. The fallibility of moral judgements enables us to keep certain tolerance in moral discussions: because we think that our moral judgements may be mistaken, we can be tolerant of different moral views (Brink 1989, pp. 92-95). The moral realist who holds the epistemic objectivity of moral judgement might not be able to be a moral fallibilist, and, in turn, cannot be tolerant of different moral views: moral fallibilism and the view that two competing moral judgements cannot be true seem to be incompatible.

I believe that it is false to suppose that moral realism which holds the epistemic objectivity of moral judgements is not compatible with moral fallibilism. Rather, it seems that the fallibility of moral judgements can be underpinned by the epistemic objectivity of moral judgements (cf. Sturgeon 1986, pp. 119-120, 127-129). Suppose Rob is a moral realist who believes that slavery is impermissible while James is also a moral realist who believes that slavery is not impermissible. Now, they can be moral fallibilists *because they are moral realists*. Even if both of them have sufficient evidence ('sufficient' from their own perspective) for their views, they should think that their views may be mistaken because of the possibility that their judgements are mistaken about the mind-independent reality of morality. Rob should think of the possibility of slavery's not having impermissibility while James should think of the possibility of slavery's having impermissibility. In this way, they can be both moral realists and moral fallibilists.

1.1.4 Moral Entities can be Platonic *Ante Rem* Universals

As I mentioned, the moral reality naturalism postulates is characterised in terms of moral properties. (MR2) further characterises moral properties in terms of Platonic *ante rem* universals: according to (MR2), if U is a moral universal that is the moral property P , then U is a component of all the facts which are a matter of some object having the property P (cf. Bird 2007a, p. 12). Postulating the existence of moral universals, the naturalist supposes that moral properties are instantiated in moral facts. Moral wrongness is instantiated in the fact that Rob broke his promise to his partner. Moral rightness is instantiated in the fact that Mary kept her promise to her partner. Since moral properties are universals, the same moral property can be instantiated in different facts. The same wrongness can be instantiated in the fact that slavery is wrong and the fact that hitting an innocent baby with an iron bar is wrong. In both cases, the same moral wrongness is instantiated.

According to (MR2), moral properties are not just universals, but they are also Platonic *ante rem* universals. The Platonic view is contrasted with the Aristotelian *in re* view of universals. According to the Platonic view, universals can exist independently of the objects in which those universals are actually instantiated. So, this view permits uninstantiated universals which have not been, are not, and will not be instantiated. The Aristotelian view does not allow uninstantiated universals. According to the Aristotelian view, universals exist if and only if they are actually instantiated in objects. This view entails the claim that genuine universals must have spatial locations. No universals exist outside of space and time (Bird 2007a *ibid.*).³

The naturalist might prefer the Platonic view to the Aristotelian on the basis of the traditional argument from perfection. He might want to explain the fact that in ethics we

³ The claim that natural properties are Platonic *ante rem* universals has some supporters. For instance, see Bird (2007a).

discuss various ethical matters in terms of ideal moral universals, such as ideal justice. By referring to such ideal justice, we can discuss how our society's settings should be changed though our society actually cannot achieve such ideal justice. He might want to explain this fact in terms of the existence of uninstantiated perfect justice.

(MR2) may not be the best thesis which characterises (C): (C) may be best characterised by either the Aristotelian view of universals or a nominalist theory of moral entities. I leave these possibilities open. What I want to claim here is that the characterisation of (C) in terms of (MR2) is possible, and we can understand moral entities which are part of the natural world as Platonic *ante rem* moral universals.

1.1.5 Moral Realism Needs Moral Cognitivism

Moral realism is typically associated with moral cognitivism. Moral cognitivism is the view that moral predicates, such as 'right', 'wrong', 'morally good', etc. are meant to refer to moral entities. Also, moral cognitivism holds that the state of mind expressed by moral judgements is belief-like cognitive states. I call these views *moral cognitivist theses*.

The moral cognitivist theses

[The Semantic Thesis]

Moral predicates refer to mind-independent moral properties.

[The Psychological Thesis]

The states of mind expressed by moral judgements are belief-like cognitive states. The cognitive states of successful moral judgements represent mind-independent moral properties.

The naturalist who is committed to (MR1) and (MR2) need to assume the truth of moral cognitivism. If moral terms were unable to refer to moral properties, and the states of

mind expressed by moral judgements were not cognitive states, it would be hard to see how the naturalist could defend (MR1) and (MR2).

Moral cognitivism is controversial. For instance, non-cognitivism which has some recent defenders opposes cognitivism (Stevenson 1944; Ayer 1946; Blackburn 1993, 1998; Gibbard 1990, 2003). According to non-cognitivism, (1) moral predicates are meant to express one's non-cognitive mental states, and (2) the states of mind expressed by moral judgements are non-cognitive states toward certain acts, states of affairs, character traits, etc. Despite the controversial state of cognitivism, I assume that cognitivism is a defensible position and the naturalist can proceed to developing the argument for his main claims without defending moral cognitivism.

1.2 Ethical Naturalism

I shall now turn to consider the naturalistic aspect of (C). According to (C), the moral reality is part of the natural world. This naturalistic aspect of (C) can be characterised by the following thesis:

(N) Moral properties are natural properties.

I call (N) *the ethical naturalist thesis*. Naturalism is characteristically naturalistic because of its commitment to this thesis.

1.2.1 Moral Properties and Other Natural Properties

A rough explanation of (N) is this: moral properties are 'natural properties of the same general sort as properties investigated by the sciences' (Sturgeon 2005, p. 92). This characterisation of moral properties roughly explains how moral properties are part of the natural world. The natural world where we humans are living is the object of scientific inquiries, and properties investigated in science are of the natural world. The

property of being negatively charged is a property of an elementary particle, which is, in turn, part of the natural world. If moral properties are of the same general sort as properties investigated by the sciences, moral properties are also part of the world in the same way other properties investigated in science are.

To give a plausible exposition of (N), we need to understand what makes a property investigated in science natural. One way to find an account of naturalness is to find common features of the properties investigated by the sciences. But this is not an easy thing to do: the properties postulated by different scientific theories seem to have very different natures. The following are the examples of natural properties: a particle's having certain spin; a country's having certain unemployment rate. Physicists measure the spin of subatomic particles by conducting experiments and observing what happens in those experiments. Sociologists investigate the unemployment rate of a country by counting the number of people in that country who are not employed though they are suitable and intending to work. Although these properties are studied in the sciences, their natures may be different. The laws between physical properties may be exceptionless while the social sciences provide us with *ceteris paribus* laws in terms of social properties. The following formulation of the law of a subatomic entity may not accept any exception: if an entity, *E*, is an instance of the electron, *E* must have the property of being negatively charged. On the contrary, the following formulation of the law of a social phenomenon may accept some exceptions: if the unemployment rate of a society is high, the rate of subjective unhappiness, the crime rate, and the level of instability will be also high. This generalisation may have exceptions: there may be some societies where the unemployment rate is high though the rate of subjective happiness, the crime rate, and the level of instability are all low. But the existence of such exceptions seem not to be a real threat to the law of unemployment if there are

enough instances where the unemployment rate is high and others rates are also high. If we hope to accept the properties investigated by physics and sociology as natural properties of the same general sort, we need to explain why both physical and sociological properties can be regarded as natural properties despite the difference in their nature.

Explanatory Relevance

One common feature the properties investigated in the sciences have is their having certain explanatory virtue. Scientists explain various phenomena of the world by postulating certain properties of the objects. An object's having certain spin explains why physicists observe a vapour trail in the experiment. The high unemployment rate of a society explains why the crime rate of that society is high. Thus, an entity's being able to explain phenomena in the world may be a sign of that entity's being a natural property.

Causal Relevance is a Sign of Naturalness

Properties investigated in science are explanatory relevant typically due to their causal relevance. An entity's having certain spin causally explains our making a particular observation. A society's having high unemployment rate causally explains why the people in that society vote for the party which emphasises the importance of increasing job opportunities. So, an entity having causal relevance to other phenomena in the world can be counted as a sign of its being explanatorily relevant, and in turn, a natural property.

The Way to Investigate Natural Properties

Another common feature the properties investigated in the sciences have is their being investigated by similar empirical methods (Copp 2003). As we have seen, both physicists and sociologists use empirical ways of reasoning. The natures of both

elementary particles and social phenomena are investigated by such empirical ways of reasoning; observation, experiment, inferences, etc.

These considerations explain the implication of the ethical naturalist thesis: moral properties are explanatorily relevant to various empirical phenomena of the world, they may be causally relevant to other facts in the world, and their natures are investigated by similar empirical ways of reasoning employed in science.

1.2.2 Reductive Naturalism and Non-Reductive Naturalism

Some philosophers who accept (N) disagree on whether natural moral properties are reducible to base natural properties. Such philosophers, called the Cornell realists, argue that moral properties are natural but irreducible *sui generis* properties (Brink 1984; Boyd 1988; 1989; Sturgeon 1998a, 2005, 2006) while Railton argues that moral properties are ultimately reducible to other natural properties (Railton 1986; 1993).

Non-reductive ethical naturalists think that there is no type-type identification of moral properties with natural properties. They think that moral properties are defined by what they do, rather than by their natural composition or structure. They claim that moral terms are classified as functional terms in the same way functionalists in the philosophy of mind classify mental terms by the functional roles of the mental (Brink 1984, 1989; cf. Timmons 1999). They also think that moral properties are irreducible since moral properties are multiply realisable. For instance, they think that the moral property 'rightness', does not have the corresponding set of natural properties only by which that moral property is realised. The reductive account of rightness, 'an act is right if and only if that act maximises the wellbeing of people', is implausible since there are many other sentences we can put in the right hand side of the biconditional. Some non-reductivists also argue that there are certain moral terms which play genuine explanatory roles in explaining the phenomena we experience, and such roles cannot be

replaced by non-moral terms. Since moral terms play such explanatory roles, they think that moral properties referred by those moral terms are irreducible to other base natural properties (Sturgeon 2005, 2006).

On the other hand, reductivists hold that there is the type-type identification between the moral and the non-moral. Reductivists claim that moral properties are reducible to base subvenient natural properties though we do not need to be eliminativists of moral properties. Rather than becoming eliminativists of moral properties, reductivists characterise their project as the vindicative reduction of moral properties by identifying base natural properties with base natural properties (Railton 1989b, p. 163; Miller 2003a, pp. 183-184). Some reductivists suggest a substantial reductive account of moral properties: Railton, for instance, suggests that moral properties are reducible to the realisation of certain interests from the social point of view (Railton 1986, pp. 191, 200).

Must metaphysical ethical naturalism hold one of these theses? The answer to this question depends on the argument the naturalist uses to defend his position. For instance, if one argues for the unique explanatory role played by moral predicates as Sturgeon does, the conclusion one defends may be sympathetic to the non-reductivist thesis. If moral predicates play unique explanatory roles which cannot be played by any other terms, moral properties predicated by moral terms seem to be not reducible to other natural properties. At this point, however, the naturalist can be agnostic about whether natural moral properties are reducible to base non-moral natural properties. As I am going to make explicit below, metaphysical ethical naturalism holds that moral inquiries are similar to scientific inquiries in the way they are conducted by empirical ways of reasoning. This implies that the nature of moral properties, which is the object of moral inquiries, is investigated *a posteriori*. Such empirical investigation may settle the issue

whether moral properties are reducible to natural properties. We might conclude that a simple act-utilitarianism is the best theory through the empirical investigation of ethics, and that moral properties are reducible to subjective happiness which is a non-moral psychological property. Or, after the empirical investigation of ethics, we might conclude that the best moral theory requires the non-reductive thesis. Given this consideration, in this dissertation, I will assume that (N) is compatible with both the reductive and the non-reductive theses.

1.2.3 Non-Reductive Naturalism and Non-Naturalism

The conclusion of the section above implies that the naturalist may be a non-reductive ethical naturalist. Someone might think that this is an implausible implication of the ethical naturalist thesis, (N). He might think that some versions of non-naturalist moral realism hold a metaphysical view which is significantly similar to non-reductive naturalism, and there is a concern about non-reductivists falling into the non-naturalist metaphysical picture.

Here are some examples of non-naturalists who might be holding a similar metaphysical view as non-reductive ethical naturalists hold. Wedgwood holds the view that normative facts are facts to which an essentially rational disposition responds. From this, Wedgwood thinks that normative facts are causally efficacious in the changes of our attitudes, including the rational revision of our beliefs (Wedgwood 2007, pp. 184-199). Shafer-Landau also accepts the explanatory relevance of moral properties (Shafer-Landau 2003, pp. 102-103). At the same time, he argues for the non-naturalness of moral properties by appealing to the idea that token moral properties which are fully realised by natural properties do not have to be identical with any set of natural properties (Shafer-Landau 2003, pp. 76-78).

What we should notice is that both Wedgwood and Shafer-Landau hold that moral properties are causally and explanatorily relevant to empirical phenomena though they also hold that moral properties are non-natural properties. Given that both of them have arguments for the non-naturalness of moral properties, does the non-reductive version of metaphysical ethical naturalism have to be one version of non-naturalism?

It seems that there is still an important disagreement between non-reductive naturalism and non-naturalism. Remember the third condition for the naturalness of moral properties I mentioned above: the naturalist may characterise (N) by claiming that moral properties are investigated in the similar empirical ways of reasoning scientists investigate other empirical phenomena in the world. The naturalist takes this claim as a genuine metaphysical claim: the essential nature of moral properties makes it possible for them to be investigated empirically. Non-naturalists resist this claim since non-naturalists are, in a nutshell, people who believe that moral inquiry is radically different from scientific inquiry. Non-naturalists would say that even though moral facts are realised by non-moral natural facts, moral facts cannot be known by the similar empirical methods scientists employ in their research. The naturalist, on the other hand, tries to defend the thesis that the nature of moral properties is investigated by the similar empirical ways of reasoning employed in science. Hence, there is still a significant disagreement between some versions of non-naturalism and non-reductive ethical naturalism. So, the naturalist does not have to be a non-naturalist even if he holds the non-reductive thesis.

1.3 Methodological Naturalism in Ethics

I have finished the exposition of the metaphysical theses of naturalism. The metaphysical theses of naturalism imply an important methodological claim:

The Methodological Naturalist Thesis

(MN) Moral inquiry can be advanced by empirical ways of reasoning.

According to (N), moral properties are natural properties. I characterise natural properties as properties which are investigated by the empirical methods employed in science. A natural implication of this view is that moral inquiry needs to be similar to scientific inquiry which employs empirical ways of reasoning.

(MN) is a species of wider methodological naturalism according to which:

philosophy does not possess a distinctive, *a priori* method able to yield substantive truths that, in principle, are not subject to any sort of empirical test. Instead, a methodological naturalist believes that philosophy should proceed *a posteriori*, in tandem with – perhaps as a particularly abstract and general part of – the broadly empirical inquiry carried on in the natural and social sciences (Railton 1993, pp. 315)

Although I write that (MN) is a species of methodological naturalism described in the quote above, (MN) does not have to imply the truth of methodological naturalism which denies any non-empirical methods (i.e., *a priori* methods) in philosophy. (MN) is specifically about methodology in ethics, and (MN) should be compatible with the thought that there are some areas of discourse where only *a priori* methods can be satisfactorily employed.

If (MN) is accepted, we expect something as follows: in order to have a plausible account of moral entities, moral goodness, justice, courage, etc. moral theorists conduct empirical investigations of those moral entities. They might see how the proposed principle of justice works in society, and revise their theory in the light of the observation they made. They might see how a person possesses the moral virtue of courage, how they act (including their making judgements) in the circumstances, and revise their theory in the light of the observation they made. Thus, (MN) has an

implication at the first-order theorising level. (MN) requires that normative theory, such as theory of justice, theory of the moral virtues, etc. is developed in the similar empirical ways scientific theories are developed.

The thought that normative theory is developed by empirical methods is not new. For instance, Aristotle's and Mill's theories seem to be dependent on the empirical investigation of human nature (Aristotle 2000; Mill 1871/2002). The content of Aristotle's theory is dependent on the content of the excellence of human beings. The content of such excellence depends on how we answer the question what we human beings are. To answer this question, we need to conduct certain empirical investigations of human beings. The content of Mill's theory is dependent on how we answer the question in which objects we human beings find more desirable pleasures. These normative theories may accept such *a posteriori* naturalism in ethics since they need some empirical investigations of human beings to ground their theories.

On the other hand, there are some first-order normative theories which explicitly employ certain non-naturalistic methods. Kant is an obvious example. For Kant, moral principles are found *a priori* in 'concepts of pure reason' (Kant 1785/1998). Ross's deontological theory also employs intuitionist methods which are not empirical (Ross 1930).

In these ways, (MN) is in accord with some normative theories while it is in tension with some other theories. I will discuss the relation between naturalism which holds (MN) and normative theory which takes non-naturalistic methods in the later chapters.

1.4 Other Naturalisms in Metaethics

Naturalism characterised by the four claims above is different from some other versions of naturalism in ethics. In this section, I consider how this particular version of naturalism differs from other naturalistic theories.

1.4.1 Foot

First, I consider how naturalism differs from Foot's naturalistic project in ethics (Foot 2001, 2002).

Foot argues that moral (or evaluative in general) questions can be settled on the basis of non-moral facts with our understanding of rules for moral terms. Through reflecting on the rules for moral terms, she thinks that we find a necessary connection between virtues, such as courage, honesty, justice, etc. and the realisation of human flourishing. For instance, if I assert that Rob, who tortured an innocent child for having fun, is a just person, I am misusing such terms, 'torture', 'just', and 'innocent'. The rule for the term, justice, does not allow us to use the term to describe the character of somebody who tortures an innocent child.

Provided that there are certain ways we should use the terms of virtue, Foot gives us an analogy between the defects of animals and the defects of human beings. Given the rules of moral terms, we may be able to say that a certain wolf is good while the other wolf is defective. If a wolf is not good at protecting its members of the species from the threat of enemies and that wolf tends to run away when an enemy is about to attack his group, that wolf may be judged as a coward wolf. In a similar way, we can say something about human defects. If Vicky is a person who constantly breaks promises, ignores agreed contracts, and distributes shared goods unfairly, we should say that Vicky is unjust. Vicky's character trait is defective as a human being since human

beings need cooperative activities to achieve various characteristic goods. The term ‘injustice’ may be used to describe such a character trait.

One feature Foot’s naturalist project and metaphysical ethical naturalism share is the way they attempt to achieve the epistemic objectivity of moral judgements. Foot’s naturalism aims to achieve epistemic objectivity by referring to some general facts about human beings. The metaphysical ethical naturalist also aims to achieve epistemic objectivity by conducting certain empirical investigations about morality. Such investigations would include the empirical investigation of human beings since morality is about human beings: morality is about how human beings should behave, live and react. Here, we see that both positions attempt to achieve the epistemic objectivity of moral judgements by conducting similar empirical investigation.

But moral epistemology Foot’s project provides is different from the epistemology metaphysical ethical naturalism provides. Although Foot’s naturalism aims to achieve epistemic objectivity by referring to facts about human beings which are known empirically, this part is not all of her moral epistemology. Her moral epistemology has another part, namely her Wittgensteinian part. Foot thinks that the understanding of the proper usage of moral terms is also required in order to have objective moral judgements. The metaphysical ethical naturalist would not agree on this. The naturalist would say that our use of moral terms could radically change when we developed our first-order ethical theory. Here is how such a radical change may happen: our moral investigation starts with background assumptions of the non-moral and the moral. With these background assumptions, we empirically investigate whether some of the moral principles we hold are plausible. Through such empirical investigations, we might improve our first-order ethical theory. Such improvement may be something as follows: in the past, our theory of justice used to say that what justice requires us to do is to

distribute welfare equally regardless of people's conditions. The improved theory of justice says that the correct account of justice should give some special priority to people who have some social disadvantages. This change in the theory of justice requires us to change our usual conception of justice. The naturalist could expect that in the future we could see more improvements in our theory of justice. Such improvements might require some radical changes in our common sense conception of justice. Such radical changes may reach the point where we conclude that justice is no longer a positive normative term. After various empirical investigations we might find that we are in fact not required to act justly as the traditional account of justice requires us to do. Foot's naturalism would not accept such a radical change of the use of moral terms while metaphysical ethical naturalism could.

We should also notice that the focus of Foot's position and naturalism are different. Foot's main concern is epistemological: she attempts to show how we can objectively accept certain moral judgements. On the other hand, the main concern of metaphysical ethical naturalism is, as the name of the position says, metaphysical. The naturalist aims to argue for the existence of moral properties that are part of the natural world. By achieving this aim, the naturalist tries to show how some moral judgements are objectively justified.

To sum up: Foot's naturalism is different from metaphysical ethical naturalism due to its Wittgensteinian aspect and its focus on moral epistemology.

1.4.2 Jackson

Another notable naturalistic approach in contemporary metaethics is Jackson's project (1998). Jackson develops a form of analytic moral naturalism. He calls his position 'analytic descriptivism'. First, Jackson emphasises the importance of conceptual analysis in our metaphysical investigation. An example Jackson gives is the issue about

physicalism. Physicalists say that the complete account of our world can be described in terms of physical properties (Jackson 1998, p. 6). Then, the question we would ask is how we locate some non-physical properties in the world, such as psychological properties which should be entailed by physical properties. Jackson says that if we are to investigate the metaphysical status of *K*-kind which is non-physical, we need to understand what our ordinary conception of *K*-kind terms is (1998, p. 31). Jackson argues that we can identify such ordinary conception through our intuitive judgements about various cases where we use these terms. Through such conceptual analysis, we arrive at 'our folk theories' which tell us what the ordinary conception of *K*-terms is.

Jackson employs this conceptual analysis in moral investigation. Jackson thinks that through conceptual analysis we can have folk theory of morality which tells us the folk meanings of such moral terms as, rightness, goodness, badness, etc. (1998, p. 118). For instance, Jackson thinks that we can reach a following *a priori* and necessarily true global supervenience thesis through our conceptual analysis of moral terms: for all w and w^* , if w and w^* are exactly alike descriptively then they are exactly alike ethically (Jackson 1998, p. 119). In this way, Jackson thinks, we can have folk morality which is the network of moral opinions, intuitions, principles and concepts. Folk morality enables us to engage in meaningful moral debates: since we have folk moral theory, we understand what other people mean by using moral terms (Jackson 1998, p. 130). Then, with our knowledge of folk morality, we can locate moral properties in the physical world. For instance, suppose we are attempting to analyse the term, 'rightness'. We start with a set of platitudes of the term, rightness. Such platitudes include the global supervenient thesis. Such platitudes also include our various intuitions about the term. These intuitions are provided by our folk theory of rightness. The set of platitudes tells

us what sorts of descriptive properties on which the moral rightness supervenes. In this way, we identify moral properties with descriptive properties.

The difference between Jackson's analytical descriptivism and metaphysical ethical naturalism lies in the former's reliance on conceptual analysis. Jackson says that once we have mature folk moral theory which is the result of our critical reflections on our folk morality, we can *analyse* moral terms into descriptive terms (1998, pp. 144-145). For instance, Jackson would say that if mature folk theory says that rightness is an act's maximising expected pleasures, we can conceptually analyse the moral term of rightness into purely psychological terms (the maximisation of pleasures). Jackson's account could maintain some changes of our use of moral terms. For instance, our use of the term, 'justice', might change when we find that the use of the term does not cohere with our platitudes about other moral terms. But metaphysical ethical naturalism demands more. Metaphysical ethical naturalism holds that even if we are given mature folk moral theory and we know descriptive content of moral terms by analysing moral terms with our knowledge of mature folk morality, there is still a possibility of the revision of moral terms. The possibility of the revision of moral terms is needed if we assume that our platitudes about morality might be radically wrong. It seems that analytic descriptivism does not allow us to radically revise our moral theory. On the other hand, the possibility of revision is implied by metaphysical ethical naturalism's *a posteriori* naturalistic project of morality.

Summary

In this chapter, I characterised metaphysical ethical naturalism in terms of (MR1), (MR2), (N) and (MN). I also compare metaphysical ethical naturalism with other naturalistic views.

Now, we need to consider how naturalism which is composed of (MR1), (MR2), (N) and (MN) can be defended. This is the question discussed in the next chapter.

Chapter II

The Explanationist Argument for Metaphysical Ethical Naturalism

Introduction

In the previous chapter, I characterised naturalism in terms of the four claims, (MR1) (there are mind-independent moral properties), (MR2) (moral properties are Platonic *ante rem* universals), (N) moral properties are natural properties, and (MN) (moral inquiry can be advanced by empirical ways of reasoning). (MN) is presented as an implication of the other three claims. So, the naturalist should primarily defend naturalism's metaphysical theses, (MR1), (MR2) and (N).

In this chapter, I look for a good argument for naturalism. I start with reviewing some recent arguments for naturalism.

2.1 Recent Work for Naturalism

In the contemporary literature, such philosophers as Brink (Brink 1984, 1989), Boyd (Boyd 1988), Railton (1986) and Sturgeon (Sturgeon 1985/1998a, 2006) give their arguments for naturalism.

I should note here that my presentation of Railton's and Brink's work will be brief while I give a detailed explanation of Boyd's and Sturgeon's arguments. This is because I develop Boyd's and Sturgeon's work in the latter chapters. This might cause the underestimation of Railton's and Brink's work. But even if this is the case, I believe that such an underestimation does not undermine my project since what I am trying to do in

this thesis is to develop a positive argument for naturalism. So even if the development of Railton's and Brink's suggestions is possible, I can simply say that Boyd's and Sturgeon's suggestions are also worth being further developed.

2.1.1 Railton's Reductive Naturalism

As I mentioned in the previous chapter, Railton attempts to defend naturalism by suggesting a reductive account of moral properties. According to Railton, we can find 'a synthetic identification of the property of moral value with a complex non-moral property' (Railton 1993, p. 317). The suggestion is that we identify moral properties with other natural properties in the same way we identify salt crystals with matrices of NaCl (ibid.).

This suggestion seems to be a good candidate for the defence of naturalism. Railton's project is to find a place for moral properties in the natural world by finding their reduction basis, and the success of this project shows in what way moral properties belong to the natural world.

According to Railton's reductive account, moral rightness is characterised from *a social point of view*: an act is morally right if and only if (1) in the state where the interests of all potentially affected individuals by that action are counted equally, (2) that action would be approved as a rational course of action to achieve people's interests (Railton 1986, pp. 190-191). Given this account of moral rightness, we are able to identify which norms are morally appropriate and which are not. The norm of fair distribution of goods may be a morally right policy since that policy would be rationally approved in the way Railton's account suggests. The explanation for why we should follow such a fair norm is this: we should adopt the norm of fair distribution since it is instrumentally a good policy to realise our various interests. Railton argues that this

account of moral values allows us to see how moral values are located in the natural world, and explains the normative role of moral values (Railton 1986, pp. 197-198).

Although Railton's project is sympathetic to the version of naturalism I am defending, his project is not the ideal one. That is because Railton's project might not defend (MR1), especially its mind-independence thesis. Although Railton says his moral realism holds that 'moral properties are objective' (Railton 1986, p. 165) in a certain way, his moral realism might not be compatible with the ontological objectivity of moral values (FitzPatrick 2008, p. 164). According to (MR1), a moral property of an object, *m*, exists regardless of whether the ideal observer judges that that object has *m*. What this implies is the ontological objectivity of moral properties: the existence of moral properties does not depend on how the ideal observer responds to moral matters. It seems that Railton's moral realism does not meet this condition. According to Railton's account, moral properties are, in an important sense, dependent on how an ideal agent rationally judges the subject matter in question. Certain social practices are morally wrong since those practices are not rationally approved by an idealised agent from a social point of view. Thus, Railton's reductivist project is not a good candidate for the defence of naturalism which holds the mind-independence thesis of moral properties. We need to look at another strategy.

2.1.2 Brink's Defence of Naturalism

Another philosopher who attempts to defend naturalism is Brink (1989). Brink attempts to defend his version of ethical naturalism according to which there are mind-independent facts about morality and those moral facts are natural facts though they are not reducible to other natural facts. Brink's position is in accord with the claims of this version of naturalism: he would accept all the metaphysical theses of naturalism (MR1), (MR2) and (N).

Brink attempts to defend his version of naturalism by providing various responses to the objections against his position. For instance, Brink argues for an externalist theory of motivation as a reply to the opponent of naturalism who argues that naturalism cannot give a plausible account of the practicality of morality. Brink also argues for his version of coherentism of moral justification as a reply to the objection that moral realism needs some sort of foundationalism of moral justification which is difficult to defend.

Brink's defence of naturalism is important, but it does not provide us with a good positive argument for naturalism. Although Brink's defence may give us some reasons to believe that common objections against naturalism can be rejected, it does not provide us with a positive reason to believe the truth of naturalism. It seems that this is what Brink intends to do (1989, p. 12)⁴. Since we are looking for a good positive argument for naturalism, Brink's suggestions may not be a good candidate.

2.2 The Basic Explanationist Argument for Naturalism

I shall now turn to examine the suggestions Boyd (1988) and Sturgeon (1985/1998a, 2006) make for naturalism. They give some suggestions for the argument I call 'the basic explanationist argument for naturalism' (the basic argument, for short). The basic argument can be presented as follows:

- (1) An entity exists if that entity is ineliminable in the best explanation of phenomena we experience.
- (2) Natural moral properties are ineliminable in the best explanation of phenomena we experience.

⁴ I am not claiming that Brink does not have any positive argument for naturalism. Brink does have a few positive arguments for naturalism. For instance, he argues that naturalistic moral realism is more loyal than antirealism to moral phenomenology. I am not going to discuss this suggestion of Brink in this dissertation since I believe that this project may not give us a strong reason to believe in naturalism.

(3) Therefore: natural moral properties exist.

One of the underlying thoughts of this argument is an analogy between science and ethics. In science, a theory which postulates theoretical entities such as scientific laws may be confirmed due to its *explanatory virtue*: we believe in the laws of nature posited in the theory because we can explain empirical phenomena by postulating the existence of those laws. The proponents try to defend the claim that *moral properties have similar explanatory virtue*: there are some empirical phenomena which are explained in terms of natural moral properties.

Unlike Brink's defence of naturalism, the basic argument is a positive argument for naturalism. The basic argument provides us with a reason to believe in moral properties' explanatory virtue, and, in turn, the existence of moral properties.

I will be defending the basic argument in this dissertation. To defend the argument, we need a detailed exposition of the argument. In the next section, I will explain the first premise of the argument.

2.3 The Explanationist Thesis

According to the first premise of the basic argument, an entity exists if that property is ineliminable in the best explanation of phenomena we experience. The implication of this premise is that an entity earns its ontological right in virtue of its explanatory power. I call this premise, 'the explanationist thesis'.

To explain the explanationist thesis, we need workable notions of (1) phenomena we experience, (2) explanation, and (3) the best explanation.

2.3.1 Phenomena We Experience

The notion, ‘phenomena we experience’, restricts our use of the explanationist thesis. Even if there is a perfect explanation of something but whose *explanandum* (a thing which gets explained) is not counted as a phenomenon we experience, the thesis does not allow us to claim that properties predicated in the explanation are real. For instance, someone might say that the supernatural power of a wizard can be explained by the fact about magical fields. The problem with this explanation is its *explanandum*. It is hard to see how we can have an experience of the wizard’s magic except by imagining such magical experience by ourselves. So, even if there is a perfect explanation of the supernatural power of a wizard in terms of magical fields, the explanationist thesis does not allow us to be realists about magical fields.

I present the thesis as a sufficient condition. We can strengthen the naturalistic aspect of the thesis by making the thesis a sufficient, and also, *necessary* condition. Some philosophers, such as Sturgeon and Miller, present the thesis as the sufficient and necessary condition (Miller 2003a, pp. 140-141; Sturgeon 2005). This is a strong naturalist thesis since this thesis excludes all entities from our list of ontology apart from entities needed to explain phenomena we experience.

It seems that the naturalist does not have to take this strong view. For instance, the naturalist should be able to become a non-naturalist about mathematical entities. The naturalist can claim that mathematical entities are not needed to explain phenomena we experience, but this does not entail the non-existence of mathematical entities. The naturalist can take this stance since his having this stance does not affect his claim that there are natural moral properties.

Then, what exactly are ‘phenomena we experience’? The phrase suggests that a phenomenon is counted as a phenomenon we experience if we encounter it by ordinary

empirical methods. Given this rough idea of the notion, I propose that phenomena we experience are phenomena we have *empirical evidence* for. Given this definition of ‘phenomena we experience’, the workable accounts of the notions of ‘evidence’ and ‘empirical methods’ need to be given.

On ‘Evidence’

The notion of evidence can be understood in terms of the confirmation of a proposition in question. Carnap called this notion of evidence, ‘the classificatory concept’ (Carnap 1983, p. 79). A piece of evidence, *e*, is good evidence for the hypothesis, *h*, just in case if *e* is added to the prior information we have it contributes positively to the confirmation of *h* (Carnap 1983, p. 80). For instance, suppose many people say that there is a cat in my garden. The testimony by others is information which confirms the proposition that there is a cat in my garden. Then, suppose that after hearing other’s testimony I myself see a cat in my garden. My seeing a cat in my garden is evidence for the proposition that there is a cat in my garden: my seeing a cat together with prior information (others’ testimony) confirms the proposition that there is a cat in my garden.

According to this conception of evidence, various things may be regarded as evidence. My thinking about the multiples of two may be evidence for the proposition that there are infinitely many natural numbers. My seeing Rob’s entering his neighbour’s house from his house may be evidence for that Rob is a thief. Now, we are looking at something which may be regarded as *empirical* evidence. My thinking about numbers may be not regarded as empirical evidence while my seeing Rob in his neighbour’s house may be regarded as empirical evidence. We need to look at more on the notion of ‘empirical’.

On 'Empirical'

I suggest that a piece of evidence is empirical if we gain it by *ordinary empirical methods*. I suggest the following as the candidates for 'ordinary empirical methods': (1) sensory experience, (2) memory, and (3) observation.

Since (1) and (2) are clear notions, I will give a brief explanation of (3). Our common sense conception of the term tells us that observations are closely related with our visual experience which is one type of sensory experience. By our eyes we perceive certain phenomena in chemical experiments, and we take our seeing those things as observation. But it also seems that observation and visual experience are not the same: observation requires a sort of immediate judgement on what we perceive while visual experience does not include such judgement. Visual experience *is* our perceiving something while observation includes immediate judgement about our perceiving something.

Given these explanations of 'evidence' and 'empirical', we can grasp what 'phenomena we experience' are. We regard something as a phenomenon we experience when ordinary empirical methods provide evidence for a proposition about it. Here is the list of examples.

Examples

(1) 'There is a table in my room' expresses the proposition about the phenomenon I experience by seeing that table in my room. My seeing that table is evidence for the proposition that there is a table in my room.

(2) 'Tom believes that he is happy' expresses the proposition about the phenomenon I experience by observing Tom's behaviour and what he says to me. Through perceiving Tom's behaviour, I immediately judge that Tom believes that he is happy. This observation confirms the proposition that Tom believes that he is happy.

(3) ‘Napoleon was defeated at the battle of Waterloo’ expresses the proposition about the phenomenon somebody directly experienced by observing the battle. Although the web of evidence may be complex, we can say that my reading a book about Napoleon is indirect empirical evidence for the proposition that Napoleon was defeated at the battle of Waterloo (the web of evidence may be something as follows: somebody observed the defeat of Napoleon, and the other person wrote a book on the basis of the observer’s testimony, and I read the book).

(4) ‘The inflation rate in Japan was low in 2009’ expresses the proposition about the phenomenon I experience by observing the economic state of Japan. I observe the currency value of Japanese yen, the total number of products in the market and people’s economic behaviours. These pieces of information I gather by ordinary empirical methods are evidence for the proposition that the inflation rate in Japan was low in 2009. These phenomena we have empirical evidence for are counted as phenomena we experience.

‘The Phenomena We Experience’ as a Wider Conception

My putting the thesis in this way differs from others’ views who endorse the thesis that an entity can earn its ontological right by its explanatory virtue. For instance, Harman seems to hold a similar view though he thinks that the *explananda* of the thesis are what we *observe*, rather than what we *experience*. He writes: ‘[scientists] need to make assumptions about certain physical facts to explain the occurrence of the observations that support a scientific theory ... [scientists’] making the observation supports the theory only because, in order to explain his making the observation, it is reasonable to assume something about the world over and above the assumptions made about the observer’s psychology’ (Harman 1977, pp. 6-7). From this, another version of the

explanationist thesis could be presented as follows: properties which are ineliminable in the best explanation of what we *observe* are real.

This version of the explanationist thesis might be problematic. As my characterisation of the thesis reveals, observation is not the only empirical method. For instance, our having certain visual perceptions may be called a genuine empirical way of knowing and the object of genuine explanation though having mere visual perceptions may not be called as an instance of genuine observation. Since visual perceptions are the object of genuine explanation, they should be included in the *explananda* of the thesis. From this consideration, it seems that we should prefer my version of the thesis to another version of the thesis which can be constructed by what Harman suggests: my version allows us to accept many plausible candidates for phenomena we experience while another version can allow us to accept only the things we observe.

2.3.2 Explanation

I shall now turn to consider the notion of explanation.

There are two views on explanation. One view is that giving an explanation is an epistemic activity. According to this view, by giving an explanation we attempt to give some epistemic reasons to believe the occurrence of empirical phenomena. We can find this view in Hempel's theory of explanation (Hempel 1965). He writes as follows:

[The] explanatory information must provide good grounds for believing that *X* did in fact occur; otherwise, that information would give us no adequate reason for saying: "That explains it – that does show why *X* occurred."

[An] adequate answer to an explanation-seeking why-question is always also a potential answer to the corresponding epistemic why-question. (Hempel 1965, p. 368)

For Hempel, to give an explanation is to give ‘good grounds’ for believing that an event in question will occur under certain circumstances. These epistemic reasons explain why the event in question occurs.

Another view is that explanation is an ontic notion. According to this view, to give an explanation is to reveal the objective aspects of the world. On this view, explanations are waiting to be discovered by us (Bird 2005b, p. 90). We can find such a view in Salmon’s theory of explanation. Salmon writes as follows:

to explain an event is to exhibit it as occupying its (nomologically necessary) place in the discernible pattern of the world

[to] give scientific explanations is to show how events ... fit into the causal structure of the world’ (Salmon 1993, pp. 81-82).

For Salmon, to give an explanation is to reveal the causal structure of the world. By explaining why an event occurs, we attempt to reveal how other events in the world are causally connected with that event in question.

Should the explanationist thesis adopt one of these views? Although the thesis does not have to choose one of these views, the thesis might be naturally fitting with the ontic conception of explanation. Ultimately, the thesis aims to defend the claim that properties predicated in explanations are real features of the world. This project seems to go with the thought that a proper explanation is the one which reveals the objective features of the world. But this does not mean that the explanationist thesis is only compatible with the ontic conception of explanation. The thesis may be compatible with an epistemic view of explanation: if a given epistemic view of explanation holds a semantic story which explains the relation between predicates in explanations and objective features of the world, this view of explanation is compatible with the explanationist thesis.

These considerations resolve Railton's concern about the explanationist thesis. Railton thinks that realists' reliance on the explanatory power of the defence of their positions is problematic. Railton thinks that anti-realists might be able to accept explanations as best without accepting realists' metaphysical commitments by holding a non-ontic theory of explanation (Railton 1989a, pp. 224, 230-231). This concern can be resolved once we are clear about the underlying theory of explanation the explanationist thesis implies. Explanations employed in the thesis should be understood as either ontic explanations or epistemic explanations with a semantic theory which explains the relation between predicates and objective features of the world. So, if an anti-realist accepts an explanation in which a moral property is predicated, that anti-realist needs to accept the explanation as the one which reveals the metaphysical relation between that the entity predicated in the explanation and other parts of the world.

Although I mentioned that the explanationist thesis may be compatible with both the ontic and epistemic views of explanation, I assume that the thesis implies the ontic conception of explanation in this dissertation.

Are all Ontic Explanations Causal?

Some philosophers who employ the ontic conception of explanation suppose that to give an explanation of an event is to give a causal history of that event. The quote from Salmon above indicates that he is sympathetic to this view. Lewis also holds this view. He writes: 'to explain an event is to provide some information about its causal history' (Lewis 1987, p. 185).

Some proponents of the explanationist thesis also endorse the view that to give an explanation is to give a causal explanation of it. For instance, Harman argues that moral facts are explanatorily irrelevant to observations since they are not causally relevant. Harman thinks that other entities may be explanatorily relevant since, ultimately, they

are causally relevant to our making observations due to their causal impacts on our perceptual apparatus (Harman 1977, pp. 7-8). If we follow Harman, the question we should ask in this discussion would be what the *causal* explanations of phenomena we experience are.

This characterisation of the explanationist thesis may be problematic. There are some entities which are not causally relevant but still apparently explanatorily relevant in an ontic sense. For instance, some laws which are postulated in science are explanatorily relevant. The laws of inheritance explain why certain biological phenomena obtain. The important point we should notice here is that this explanation is not a causal explanation though this reveals an important aspect of the world: this explanation reveals the law-like relation between certain phenomena in the world. The law itself does not cause biological phenomena, but it explains why certain empirical phenomena obtain (Sayre-McCord 1988, p. 266).

Given this consideration, I take it that the explanationist thesis should adopt the following view on explanation: an *explanan* [something which explains] explains an *explanandum* in virtue of a determinate objective relation between them which is part of the world (cf. Kim 1993a, p. 229). The nature of the relation depends on what kind of relation these two have: explanatory relations may be causal, may be the identification relations or may be the law-like relations of the occurrence of two distinct events.

This characterisation of the explanationist thesis implies that the naturalist who employs the thesis may assume that a moral property predicated in an explanation may be reducible to its base natural properties. An explanation which predicates a moral property may be the one which reveals the identification between the moral fact and its base natural fact. So, whether the argument implies the Cornell realists' non-reductive thesis or Railton's reductive thesis depends on the nature of explanations moral facts

give. Thus, though the argument is typically considered as a defence of non-reductive ethical properties, I take it that the success of the basic argument does not necessarily imply the irreducibility of moral properties.

2.3.3 The Best Explanation

Next, I shall turn to the notion of ‘the best explanation’. The notion indicates the comparison of competing explanations: we compare one explanation with another explanation, and judge that one of them is better than the other. Then, in what way is the best explanation better than other rival explanations?⁵

We can adopt Thagard’s account of the best explanation to explain this point (Thagard 1978). Thagard develops an account of the best explanation on the basis of the theory choice procedures in science. The criteria Thagard suggests are: (1) consilience, (2) simplicity, and (3) analogy (Thagard 1978, p. 79).

Consilience is a criterion by which we measure how much a suggested theory explains. Thagard says that a theory is consilient ‘if it explains at least two classes of facts’ (ibid.). We compare competing theories by examining how much these theories explain. If a theory explains more than other theories do, that theory can be chosen as a better theory. We choose Darwin’s theory of evolution since the theory explains more observational results than the creationist theory does.

Simplicity is another explanatory virtue the best explanatory theory should have. Simplicity is about ‘the size and nature’ of auxiliary hypotheses a suggested theory needs (Thagard 1978, p. 86). We can see that Lavoisier’s theory is simpler than the phlogiston theory since the auxiliary hypotheses needed by the former is in various ways simpler than the latter. Though phlogiston theory gives us an explanation of

⁵ I leave the following possibility open: a hypothesis which best explains given evidence may be only the hypothesis which properly explains evidence while other rival hypotheses do not actually explain evidence. This line is developed by Bird (2005b, 2007b).

combustion, the theory needs many assumptions which need to be defended separately. On the other hand, there is another theory which explains combustion in terms of the combination of the substance with oxygen. This theory needs less controversial assumptions than the phlogiston theory does. That is why we accept the later theory while rejecting the phlogiston theory (Thagard 1978, p. 87).

Analogy is also a virtue the best explanatory theory should have. Thagard writes, ‘the explanatory value of the hypothesis of evolution by means of natural selection is enhanced by the familiarity of the process of artificial selection’ (Thagard 1978, p. 91). Two different entities, *A* and *B*, share various common features, such as their having features of *P*, *Q* and *R*. *A* has another aspect, *S*, and *A*’s having *S* explains why *A* has *P*, *Q* and *R*. In this case, we may expect that *B*’s having *S* is a good explanation of why *B* has *P*, *Q* and *R*: we can have an analogous explanation of *A*’s having *P*, *Q*, *R* and *S*, and *B*’s having *P*, *Q*, *R* and *S*. Obviously we cannot conclude that *B* has *S* from the analogy. But, the analogy between *A* and *B* would strengthen ‘the value of the explanation of *P*, *Q*, and *R* in *A* by *S*’ (Thagard 1978, p. 90).

I shall add one more explanatory virtue to our list. A suggested theory is regarded as a good theory if that theory fits with background beliefs which are empirically well supported. We can call this virtue ‘coherence’ (Lipton 2004, pp. 122-123). Suppose the phenomenon *p* can be explained by both hypotheses *A* and *B*. While *A*’s theoretical assumptions fits with many background assumptions, *B* fits with just a few of them. In this case, we might have a reason to prefer *A* to *B* since *A*’s theoretical assumptions are compatible with many background assumptions which are already empirically confirmed.

As Thagard says (Thagard 1978, p. 79), these explanatory virtues are not necessary or sufficient conditions for the best explanation. An explanation cannot be counted as

the best simply by the fact that explanation has one of these virtues. For instance, we should not achieve consilience at the expense of simplicity (Thagard 1978, p. 89). We choose one theory as the best theory if that theory has certain degrees of the explanatory virtues listed above. We should also expect that in some cases we cannot accept choosing one theory as the best explanatory theory. In some cases, two competing theories may be equally good by possessing the equal degrees of the explanatory virtues. In other cases, suggested theories are equally poor in possessing the explanatory virtues. In these cases, we need to conduct further investigations of the subject matter.

2.3.4 Inference to the Best Explanation and Realism

I have introduced the following notions employed in the explanationist thesis: (1) phenomena we experience, (2) explanation, and (3) the best explanation. According to the explanationist thesis, properties ineliminable in the best explanation of phenomena we experience *exist*.

In order to see why an entity earns its ontological right by its explanatory virtue, it is important to understand the notion of ‘Inference to the Best Explanation’ (IBE, for short).

IBE is a model of our inferential practice. According to IBE, when we make an inference we try to give an explanation which best explains information we are given (Lipton 2004). Suppose I put a block of ice in a freezer one hour ago but it has now melted. I observe that the plug of the freezer is properly connected. From this, I infer that there is something wrong with the mechanics of the freezer, such as that one of the wires is cut. According to IBE, what I do when I make this inference is that I try to give an inference which best explains the evidence I am given. In this case, I infer that the freezer’s having a mechanical problem best explains why the ice in it melts despite the fact that the freezer is properly plugged in.

As I mentioned, IBE is a model of our inferential practice. So, discussions concerning IBE are typically epistemological. For instance, the proponents of IBE argue that we are *justified* in believing an inference which best explains given information. The opponents of IBE might attack this claim by arguing that explanatory virtue is not the sufficient justification of inference.

Employing IBE, proponents of the explanationist thesis argue for the metaphysical right of entities predicated in explanation. They claim that as far as an inference is the best explanation of what we experience, the inference is a *true* one, and entities posited *exist*.

We should suppose that the metaphysical right of entities defended by IBE here is ontological objectivity as I discuss in the previous chapter. We are here assuming that explanations employed in IBE are ontic entities. Explanations employed in IBE are waiting to be discovered. This implies that entities predicated in these explanations are also waiting to be discovered though they have certain metaphysical relations with other parts of the world. Thus, the entities predicated in IBE are mind-independent in the sense the existence of them does not depend on whether we have evidence for it. This indicates that the basic argument which employs the explanationist thesis is a good argument for naturalism which holds the mind-independence thesis of moral properties: unlike the argument Railton gives, the basic argument may provide us with reason to believe in the mind-independence of moral properties.

Here are some examples of how the existence of entities posited in explanations is defended by IBE.

Examples of How IBE Defend the Existence of Entities

(1) My seeing a vapour trail in a cloud chamber under certain circumstances is best explained by the fact that a proton passed through the chamber. From this, we could claim that there is an entity ‘proton’ which goes in the cloud chamber (Harman 1977).

(2) The sudden increase of prices we see in our country is best explained by the fact that our country is in the state of inflation. From this, we could claim that the economic property of inflation is instantiated by the current state of our country.

(3) The life cycle of the periodical cicada, an insect whose two subspecies spend 13 years and 17 years respectively underground in larval form, is explained by the fact that prime periods minimise their encounters with predators. From this, we could claim that there are such mathematical entities, in this case, the mathematical property of primeness (cf. Field 1989; Baker 2005; Bangu 2008).

These three examples take the following form: an inference explains an empirical phenomenon by referring to an entity. In the first case, my seeing a vapour trail in a chamber is best explained in terms of the movement of a proton. Since the postulation of the movement of a proton best explains what we experience, the existence of that proton is defended. The first case is a defence of a physical entity while the second and the third cases are defences of social and mathematical entities, respectively.

2.3.5 The Explanationist thesis and Naturalism

I have finished the exposition of the first premise (i.e. the explanationist thesis) of the argument. The naturalist needs to assume the truth of the first premise. There are two reasons why the naturalist is entitled to assume the truth of the explanationist thesis.

The first reason is simple: although there are notable opponents of it (c.f. van Fraassen 1980, 1989 etc.), there are also some defenders of the explanationist thesis and

the naturalist can assume that the thesis is a defensible position (c.f. Boyd 1980; Psillos 1999; Lipton 2003, etc.).

The second reason is more philosophically interesting: the naturalist is entitled to assume the truth of the explanationist thesis since some opponents of naturalism also need the thesis. Below, I describe how some opponents of naturalism appeal to the explanationist thesis for the defence of their positions.

First, non-naturalist moral realists might need the explanationist thesis. Smith mentions this possibility (1994, p. 187). He writes as follows:

the empirical fact that moral argument tends to elicit the agreement of our fellows gives us reason to believe that there will be a convergence of our desires under conditions of full rationality. For the best explanation of that tendency is our convergence upon a set of extremely unobvious *a priori* moral truths (Smith, *ibid.*).

What Smith presents here is a possibility of employing the explanationist thesis in favour of non-naturalistic rationalist moral realism. The suggestion is this: the empirical phenomenon that we have many agreements on moral matters is best explained by the fact that there will be a convergence of our rationalised desires, and this fact implies *a priori* moral truths. This suggestion is an instance of employing the explanationist thesis. The convergence of our rationalised desires which implies *a priori* moral truths is defended in virtue of its explanatory capability.

Second, moral nihilists or error theorists defend their claim on the basis of the explanationist thesis. Mackie famously argued that there are no objective moral values. One of the reasons of his nihilist conclusion is that there are many moral disagreements which cannot be rationally resolved (1977). The underlying thought is, again, the explanationist thesis: the empirical phenomenon that there are many disagreements on moral matters is best explained by the fact that there are no objective moral values. The

nihilist's claim that there are no objective moral values is defended in virtue of that hypothesis's explanatory capability.

It is interesting to see that both Smith and Mackie appeal to certain empirical facts about morality. Perhaps we could see their disagreement as a disagreement on an empirical matter: Smith might claim that people actually resolve many moral disputes while Mackie might claim that there are some unresolvable moral disputes people do not resolve. But the important point we should note here is rather this: both Smith and Mackie give cases how opponents of naturalism employ the explanationist thesis. Smith describes how the proponent of a priori moral truths could defend his thesis by employing the explanationist thesis. Mackie describes how a moral nihilist defends his nihilist thesis of moral values by employing the explanationist thesis. This is an advantage for the naturalist who endorses the basic argument: he does not have to fully defend the first premise of the argument since many of his opponents also need the premise.

The fact that some opponents of naturalism employ the explanationist thesis makes the disagreement between the naturalist and his opponents clear. While the naturalist claims that natural moral properties are needed in the best explanation of phenomena we experience, the opponents of naturalism deny this claim. So, for the defence of naturalism, the defence of the second premise of the basic argument is crucial.

2.4 Two Ways to Defend the Second Premise

I shall now turn to consider how the second premise of the basic argument can be defended. The exposition of the first premise gives us a rough idea of the second premise. According to the second premise, there are empirical phenomena which can be explained by postulating moral properties, and explanations which posit moral

properties are counted as the best possessing certain degrees of the explanatory virtues. As I explained, the second premise of the basic argument is crucial: the disagreement between the naturalist and his opponents is mainly on this premise. How can we defend the second premise?

2.4.1 The Singular Argument and the Abductive Argument

In the contemporary literature, it is thought that one way to defend the second premise is to offer so called, ‘moral explanations’. This line of argument is originally suggested by Sturgeon and his suggestion stimulated lively discussions (1985/1998a). I call this line of argument ‘the singular moral explanationist argument’ (the singular argument, for short).

It seems to me, though, there is another way to defend the second premise. I call this second way ‘the abductive argument for moral realism’ (the abductive argument, for short). Boyd presented this line of argument in his influential paper, ‘How to be a Moral Realist’ (1988).

Perhaps these two ways can be analogously compared with two versions of the argument for scientific realism (cf. Boyd 2002).

One version can be called ‘local explanationism’. According to local explanationism, there are some cases scientists can choose one of empirically equivalent, but competing scientific theories as actual in virtue of extra-theoretical virtues, something other than their empirical successes, such as their explanatory capabilities. For instance, there might be a case where one phenomenon observed by physicists can be equally explained by two hypotheses, *A* and *B*. The local explanationist might say that *A* which is not only capable of explaining the empirical phenomenon but also has more explanatory virtues than *B* can be chosen as an actual hypothesis, and we can accept the existence of the theoretical entity *A* posits.

Another version can be called the ‘abductive strategy’. According to the abductive argument, scientific realism itself is a scientific hypothesis which best explains the empirical success and the theory-dependent features of science. This version does not appeal to the explanatory virtues of some individual theories or hypotheses. Rather, this version appeals to the explanatory virtues of the hypothesis that scientific realism is true. The proponent of this version would argue that the explanation in terms of scientific realism is better than the explanation in terms of various anti-realist positions, such as instrumentalism, constructive empiricism or constructivism.

Two ways to defend the second premise of the basic argument can be seen as analogous to these two versions of the argument for scientific realism.

According to the singular argument, there are empirical phenomena best explained by the assumption that there are some putative moral properties, such as injustice, cruelty and courage. The explanatory virtues of the explanations which refer to these putative moral properties provide us with a reason to believe that these moral properties best explain phenomena we experience.

According to the abductive argument, moral realism is a scientific hypothesis which best explains observable features of normative theory. Moral realism implies the existence of moral properties. So, the existence of moral properties is part of the best explanation of phenomena we experience.

The two arguments can be presented as follows:

The Singular Argument

- (1) There are some empirical phenomena best explained in terms of putative natural moral properties.
- (2) Therefore: natural moral properties are ineliminable in the best explanation of phenomena we experience [the second premise of the basic argument].

The Abductive Argument

- (1) First-order ethical theory is empirically reliable.
- (2) The theory-building procedures of first-order ethical theory are not free from theoretical presuppositions.
- (3) The best explanation of (1) and (2) [which are themselves empirical phenomena] is moral realism which implies the existence of natural moral properties.
- (4) Therefore: natural moral properties are ineliminable in the best explanation of phenomena we experience [the second premise of the basic argument].

These arguments' conclusions are the second premise of the basic argument which needs to be defended.

There are several differences between the singular argument and the abductive argument. First, the singular argument appeals to the explanatory virtues of moral hypotheses about putative moral properties, such as justice, cruelty and courage. On the other hand, the abductive argument does not appeal to the explanatory virtues of individual moral hypotheses, rather it appeals to the explanatory virtues of the hypothesis that moral realism is true. Second, to defend the singular argument, we need to find some empirical phenomena best explained in terms of putative moral properties. On the other hand, to defend the abductive argument, we need to appeal to certain empirical features of normative theory.

2.4.2 The Absence of the Discussion on the Abductive Argument

Although it is apparent that the two ways to defend the second premise are different in these ways, it seems that the distinction between them is not properly recognised in the literature. That is partly because the abductive argument has not been clearly articulated and has not been differentiated from the singular argument. Boyd's essay is often mentioned as a paper which supports the basic argument, but main discussions of the

papers which mention Boyd's essay tend to focus on the singular argument (cf. Darwall et al. 1992; Morgan 2006; Rea 2006). Consequently, there are not many discussions on the abductive argument.

It is not true that Boyd's paper has been unfairly neglected. The situation is opposite: Boyd's paper stimulated lively discussions. As we will see more details in the later chapter, Boyd's essay has been discussed by many philosophers. Nevertheless, there is little discussion on how one of the suggestions Boyd makes in his essay contributes to defending the basic argument.

The naturalist should change this state for various reasons. First, by developing the abductive argument, the naturalist may have one positive argument for his position which has not been properly recognised. If the naturalist succeeds in defending this new positive argument, his position will be more attractive. Second, by developing the abductive argument, the naturalist may have a good resource for replying to various objections against his position. Neglecting the abductive argument might be underestimating the resources to meet well known objections in the literature against the basic argument. Perhaps the naturalist may be able to give good replies to these objections on the basis of the abductive argument.

Now, the naturalist is given two choices for the defence of his position. The first choice is to develop the defence of the singular explanation. The second choice is to develop the defence of the abductive argument.

In this dissertation, I will investigate whether the second one is a good choice. To pursue the possibility of the second choice, what I will do in the rest of this chapter is as follows: despite that I will defend the abductive argument in this dissertation, I will briefly explain how the singular argument works. I then list the objections raised against the singular argument. Listing the objections against the singular argument allows us to

see what the general problems the naturalist needs to answer are. Then, in the next chapter, I explain the abductive argument in its detail and discuss how the abductive argument can provide a resource for the replies to these objections.

2.5 Singular Moral Explanationist Argument

Sturgeon is the principal defender of the singular argument (Sturgeon 1985/1998a, 2006). Sturgeon suggests several types of moral explanations. For instance, Sturgeon gives some cases in which moral facts about character traits explain the formation of moral beliefs. One such case is this: Hitler's character trait explains why we have the moral belief that Hitler was morally depraved. Another type of moral explanation Sturgeon uses is cases in which moral facts explain certain historical facts. Sturgeon suggests that the fact that chattel slavery in a few countries was much worse than previous forms of slavery explains why vigorous and reasonably widespread moral opposition to slavery arose for the first time in the eighteenth and nineteenth centuries primarily in Britain, France, and in French and English speaking North America (cf. Miller 1985, p. 527).

The success of Sturgeon's proposal implies that natural moral properties are ineliminable in the best explanation of phenomena we experience.

First, the *explananda* of the explanations above are empirical phenomena we acquire by ordinary empirical methods. The *explananda* of the explanations above are action, people's belief and some changes in society. These are phenomena we can count as phenomena we experience: we can *observe* these phenomena.

Second, moral explanations Sturgeon suggests are all ontic explanations. In the examples Sturgeon gives, moral properties play causal roles. In the Hitler example, the reason why the wrongness of Hitler explains people's belief is that the wrongness of

Hitler is causally relevant to his action and people's belief. Hitler's moral character causes genocide in Europe, and this causes people's belief that Hitler is morally evil. This causal explanation reveals the objective relation between Hitler's moral character and the formation of people's belief. This part of Sturgeon's suggestion supports the thesis that moral properties are mind-independent natural properties. Causal moral properties can be regarded as natural properties: as we see in Chapter I, a property's being causal is the sign of that property's being part of the natural world. Also, ontological moral explanations imply the mind-independence of moral properties: the objective features of the world revealed in those ontological moral explanations exist regardless of whether we have evidence for them. Even if we are not aware of Hitler's moral character, the objective causal relation between Hitler's character and his action exists.

Third, moral explanations may be counted as the best explanation. Sturgeon mentions how moral explanations may be better than alternative explanations which do not refer to moral properties (1998a, pp. 196-7). Sturgeon argues that moral explanations are better than alternative explanations since they explain more pieces of evidence than alternative explanations do. From this, we might be able to develop the idea that moral explanations have the explanatory virtues of the best explanation, such as consilience. Once we develop this idea, we can defend the claim that moral properties are ineliminable in the best explanation of phenomena we experience.

These considerations show that the success of Sturgeon's proposal implies the second premise of the singular argument.

2.6 Objections Against the Singular Argument

I shall now turn to consider some objections against the singular argument. These objections may be seen as general objections against naturalism defended on the basis of the basic argument.

2.6.1 The Epiphenomenalist Objection

The moral epiphenomenalist believes that moral properties are not causal entities. With this assumption, he would argue as follows: what causally explain Sturgeon's examples are non-moral facts on which moral facts supervene, and moral facts do not causally explain the *explananda* in the examples (Harman 1986, p. 63; Harman and Thomson 1996; Thomson 1997). For instance, the epiphenomenalist would argue that what causes Hitler's action and people's belief about him is the non-moral facts of Hitler on which his evilness supervenes. These non-moral facts include facts about Hitler's psychology, his behavioural tendency, his having certain beliefs, etc. These non-moral facts cause Hitler's action and people's belief about him while the evilness of Hitler's character is not causally relevant.

This objection is a challenge to the idea that moral properties are explanatorily relevant due to their causal relevance.

2.6.2 The Alternative Explanation Objection

Someone might think that moral explanations are not the best explanation and there are non-moral explanations which better explain the empirical phenomena Sturgeon appeals to (Leiter 2001). Someone might claim that people's moral belief about Hitler is best explained by some non-moral facts, not by the moral fact that Hitler's character was evil. This is a simple but important objection since many people might be inclined to explain

the phenomena Sturgeon uses in terms of facts about human psychology and evolution, rather than the existence of moral properties.

This objection is a challenge to the idea that moral explanations can have certain degrees of the explanatory virtues and they can be counted as the best.

2.6.3 The Semantic Objection

Some anti-realists (Blackburn 1993; Sinclair 2011) might argue that even if we assume that moral explanations are the best, it is not sufficient to support the second premise of the argument. They might provide us with a story of how anti-realists can accept moral explanations as the best without accepting the metaphysical commitment of moral realism. They might say that the moral explanation of people's belief in terms of Hitler's moral character is better than other alternative explanations, but the acceptance of this explanation does not have to imply that Hitler's moral character plays a causal role in producing people's belief.

This objection may be taken as a challenge to the inference from the premises to the conclusion of the basic argument. Unlike the defender of the basic argument assumes, the proponent of this objection would claim that the moral realist conclusion does not follow from the premises of the basic argument.

2.6.4 Moral Pessimistic Induction

Someone might think that there is a concern about the singular argument which is analogous to the pessimistic induction against scientific realism.

To give his examples of moral explanations, Sturgeon uses our putative conceptions of moral properties. When Sturgeon gives the moral explanation of Hitler's action and our belief about him, he employs our putative conception of moral depravity. Interestingly though, Sturgeon also mentions that the correct account of moral properties should be given by the best normative theory (1985/1998a, p. 194). His claim

is that the correct account of moral depravity should be given by the best normative theory, not by our putative conception. This may raise the following question: does the singular argument satisfactorily defend the existence of moral properties whose account is given by our putative conceptions of them? The answer is 'yes' if we have reason to think that our putative conceptions of moral properties are close enough to the description of the best normative theory. The answer may be 'no' if we expect a radical revision of our putative conceptions of moral properties in the future in the process of developing our normative theory.

It seems that the naturalist who employs the singular argument might have to say 'no' to this question. This is due to the possibility of the moral pessimistic induction. As a methodological naturalist in ethics, the naturalist should prepare for such radical revision of our putative conceptions of moral properties. Then, it will be unclear whether their ontological rights are still strong: in the similar way that the scientists used to believe the phlogiston theory as the best explanatory theory, perhaps we are holding our putative normative theory as our best explanatory theory though we will discard it in the future.

This objection is another challenge to the inference from the premises to the conclusion of the basic argument. The proponent of this objection holds that even if moral properties posited by our best normative theory best explain certain empirical phenomena, there is a possibility of the radical refutation of our best normative theory which implies the non-existence of those moral properties.

2.6.5 The Normativity Objection

There is a general objection to naturalistic moral realism: naturalistic moral realism which sees moral facts as a species of natural facts cannot provide us with the proper normative force of morality. Suppose there is a fire in the hotel you are staying and you

will die unless you jump into the canal. In this situation, it may be obvious that you ought to jump. Assuming that it is true that you ought to jump into the canal in this situation, the proponent of the objection claims that this normative fact could not possibly be the same as some merely natural fact, such as that your jumping into the canal saves your life which is invaluable. Such causal fact may explain why it is the fact that you ought to jump, but the causal fact and the normative fact cannot be possibly the same (cf. Parfit 2011b, pp.326-327).

One important implication of this objection is this: even if the argument for naturalism provides various reasons for the existence of natural moral properties, the argument does not provide us with any reason to follow moral rules. The singular argument might provide us with a reason to believe in the existence of moral depravity, but the argument does not provide us with the moral rule that we ought not to be morally depraved: the argument shows us the causal relation between people's being morally depraved and how moral depraved individuals would act in certain circumstances, but it alone does not encourage us not to be depraved.

These objections can be regarded as the general problems of the basic argument. The basic argument cannot be fully defended unless the naturalist gives replies to these objections.

Rather than discussing how these objections can be met on the basis of the singular argument, in the next chapter, I describe how the naturalist can reply to these objections on the basis of the abductive argument.

Summary of the Chapter

In this chapter, I looked for a good argument for naturalism. First, I reviewed some suggestions for naturalism, the suggestions made by Railton and Brink. Second, I gave

special attention to the basic argument suggested by Boyd and Sturgeon which employs IBE. An underlying thought of the basic argument is an analogy between science and ethics: in the same way science explains empirical phenomena ethics can also explain empirical phenomena. To explain the basic argument, first, the exposition of the first premise was given. The exposition shows: (1) the defender of the argument needs to appeal to some empirical phenomena we acquire by ordinary empirical methods, (2) explanations defended are ontic explanations which may be causal or non-causal, (3) the defender of the argument needs to claim that a suggested explanation has certain degrees of the explanatory virtues as the best explanation, and (4) the first premise may be accepted as true since even some opponents of naturalism need the premise. The exposition of the first premise tells us what needs to be claimed for the defence of the second premise of the argument: it needs to be claimed that there are empirical phenomena which can be best explained in terms of the existence of natural moral properties. I then moved on to explaining the second premise of the argument. I distinguished two ways to defend the second premise, the singular argument and the abductive argument. I claimed that the singular argument had been much discussed while the abductive argument had not been enough discussed in the literature. Finally, I briefly explained how the singular argument works and the objections against it. The objections raised against the singular argument can be regarded as general objections against naturalism defended on the basis of the basic argument.

On the basis of the exposition of the basic argument I gave in this chapter, I start my investigation of how the second premise of the basic argument can be defended by the abductive argument in the next chapter.

Chapter III

The Boydian Abductive Argument for Moral Realism

Introduction

In the previous chapter, the basic explanationist argument for naturalism was introduced.

The basic argument is this:

The Basic Explanationist Argument for Naturalism

(1) An entity exists if that entity is ineliminable in the best explanation of phenomena we experience.

(2) Natural moral properties are ineliminable in the best explanation of phenomena we experience.

(3) Therefore: natural moral properties exist.

Assuming the truth of (1), how can the naturalist defend the second premise of the argument? As I indicated in the previous chapter, the abductive argument for moral realism is one way to defend it.

In this chapter, I elucidate the abductive argument and consider how the argument works. I also describe how we can have replies to the objections against naturalism on the basis of the abductive argument.

The abductive argument is not my invention. The root of the abductive argument lies in Richard Boyd's essay, 'How to be a Moral Realist' (1988). I start my elucidation of the argument with explaining how Boyd argues for moral realism.

3.1 Boyd's Suggestion in 'How to be a Moral Realist'

In 'How to be a Moral Realist', Boyd suggests that a defence of moral realism analogous to the defence of scientific realism is possible. Boyd writes as follows:

What I want to do in this essay is to explore the ways in which recent developments in realist philosophy of science, together with related "naturalistic" developments in epistemology and philosophy of language, can be employed in the articulation and defense of moral realism (Boyd 1988, p. 182)

Here Boyd is suggesting that an argument for moral realism analogous to the argument for scientific realism is possible. To see how an analogous argument for moral realism works, I first elucidate how the argument for scientific realism works.

3.2 Boyd's Argument for Scientific Realism

Boyd gives an *abductive argument* for scientific realism (Boyd 1988, pp. 188-192). The argument takes the following form:

The Abductive Argument for Scientific Realism

- (1) Scientific theories are empirically reliable.
- (2) The theory-building procedures of science are not free from theoretical presuppositions.
- (3) Therefore: scientific realism is true.

The warrant for the conclusion is that it is the best explanation of the two premises: the truth of scientific realism best explains the empirical success of scientific theories produced by theory-dependent methods. This argument appeals to empirical facts about science [(1) and (2)], and provides a scientific realist explanation as a scientific hypothesis (Boyd 2002).

3.2.1 Scientific Realist Theses

The claim that scientific realism is a scientific hypothesis is somewhat puzzling: scientific realism is a philosophical position and it is difficult to take it in the way we take a typical hypothesis in science. In order to grasp the claim that the truth of scientific realism is a hypothesis which best explains the two empirical premises of the argument, the content of scientific realism needs to be given. Boyd gives the following explanation of scientific realism:

Scientific realism is the doctrine that scientific theories should be understood as putative descriptions of real phenomena, that ordinary scientific methods constitute a reliable procedure for obtaining and improving (approximate) knowledge of the real phenomena which scientific theories describe, and that the reality described by scientific theories is largely independent of our theorizing (Boyd 1988, p. 181).

Scientific realism as here formulated comprises three theses.

1. **Semantic Thesis:** Scientific theories are capable of referring to the theory-independent entities of the world, including unobservable theoretical entities.
2. **Epistemological Thesis:** Methods employed in science are reliable in producing approximate knowledge about the theory-independent phenomena of the world.
3. **Metaphysical Thesis:** Theoretical entities (electrons, protons, energy levels, reaction mechanisms, etc.) posited in scientific theories exist independently of our theorising of them.

Believing scientific realism amounts to believing in these scientific realist theses.

3.2.2 Approximate Truth

Scientific realist theses have important relations with first-order scientific theories (e.g., theories of physics, chemistry, biology, etc.). According to the realist theses: (1) first-

order scientific theories are capable of referring to mind-independent theoretical entities, (2) the methods in science produce those theories which provide us with approximate knowledge about the real phenomena of the world, and (3) there are mind-independent entities posited in those theories. From this, we can understand that the core part of the scientific realist theses can be characterised as a view that first-order scientific theories are *approximately true*.

Roughly, a theory is approximately true if its description of the world is similar to the actual world in its most central or relevant features (Psillos 1999, p. 103). At the same time, as the notion indicates, an approximately true theory is not an exactly true theory. Thus, an approximately true theory may have some errors in its theoretical description of the world.

Although the account above roughly explains the notion of approximate truth, it is not an informative account: the account above does not tell us how we distinguish approximately true theories from theories which are not. Thus, we need a more sophisticated account which allows us to know which theories are approximately true.

Note such an account does not have to be a formal semantic theory of approximate truth: we are just seeking a workable notion of approximate truth which can be employed in the defence of the scientific realist explanation. Such a notion should enable us to see why the best explanation of the two premises of the abductive argument is the approximate truth of scientific theories which implies the existence of theoretical entities (cf. Psillos 1999, p. 278).

To give a workable notion of approximate truth, Boyd uses the following historical example:

[S]eventeenth-century corpuscular chemistry did provide the basis for the development of modern chemistry in a way that earlier quasi-animistic ‘renaissance naturalism’ in

chemistry could not. Early corpuscular theory was right that the chemical properties of substances are determined by the fundamental properties of stable ‘corpuscles’; it was wrong about almost everything else, but what it got right was enough to point chemistry in a fruitful direction (Boyd 1988, p. 208).

Boyd claims the seventeenth-century corpuscular theory can be regarded as approximately true due to its capability of producing more accurate theories in virtue of some truths the theory has. The classic corpuscular theory held certain errors, such as that the corpuscular is the fundamental entity of materials. But the theory also held important true propositions, such as that the nature of materials is dependent on the combination of corpuscles. The true propositions the corpuscular theory held enabled the scientists to produce further theories which more accurately describe the world: the eighteenth-century chemistry provides us with more detailed description of the chemical properties of the matter. Boyd claims that those true propositions which become the basis of further theoretical development make the theory approximately true. From this, we can have a following condition for a scientific theory to be approximately true.

The Approximate Truth of a Scientific Theory

A scientific theory is approximately true if and only if the theory’s theoretical description is sufficiently similar to the actual world for those theoretical descriptions to enable scientists to produce further theories, which theories are in turn more similar to the actual description of the world.

Provided this account of approximate truth, we can now see the main part of the abductive argument: science is best explained by the hypothesis that scientific theories provide a description of the world which is relatively similar to the reality. The description scientific theories provide allows scientists to construct further more accurate theories because of the true propositions these theories contain. Thus, the

abductive defence of scientific realism requires the gradual growth of scientific knowledge: our knowledge of the world provided by scientific theories gradually gets close to the true description of the world.

3.2.3 Empirical Reliability

Then, how does the proponent of the abductive argument defend the approximate truth of scientific theories? The proponent of the argument appeals to empirical facts about science: scientific theories are empirically reliable and the ways they are conducted are theory-dependent. The defender of the argument claims that these general facts about science are best explained in terms of the approximate truth of scientific theories.

It may be obvious that scientific theories which posit theoretical entities are empirically reliable. We can see the empirical success of scientific theories in their predictive power. An astronomical theory predicts when and where a big comet can be seen by postulating certain astronomical laws. A chemical theory predicts what happens if I put water in an acid liquid by postulating certain qualities of water and of that acid liquid. A subatomic theory predicts what we will observe in the certain circumstances by postulating unobservable entities, such as atoms, electrons, quarks, leptons, etc.

The important point we should notice here is that successful predictions are made on the basis of the descriptions of the theoretical entities scientific theories posit. For instance, a chemical theory gives a correct prediction by describing how chemical entities would behave under the certain circumstances.

If a theory provides an accurate prediction by referring to theoretical entities, the success of the prediction gives us a reason to believe the truth of that theory's theoretical description. From this, one might argue that the best explanation of the empirical success of scientific theories is the (approximate) truth of those theories:

accurate predictions are made on the basis of the assumption theoretical entities scientific theories posit, so these theoretical entities must exist.

Scientific anti-realists would not be persuaded by this argument. For instance, the instrumentalist could give us the following argument in favour of their anti-realist thesis: the instrumentalist appeals to the evidential indistinguishability thesis according to which there is no empirical (or observational) ground to compare the existing total science with an alternative total science whose theoretical description differs from the theoretical description the existing science provides. It is logically possible to construct a body of alternative theories which are compatible with our observations. So, the empirical success of scientific theories alone cannot decide which body of theories is nearer to the truth. This implies that the empirical reliability of a theory does not require the truth of that theory.

Scientific realists need to respond to this anti-realist challenge. The second premise of the argument plays an important role in the response to this challenge.

3.2.4 Theoretical Presuppositions

The second premise of the argument is that the theory-building procedures of science are not free from theoretical presuppositions. ‘Theoretical presuppositions’ are our considerations which refer to theoretical entities scientific theories postulate. This second premise is also a general fact about science: without having certain considerations about theoretical entities posited by background scientific theories, scientists cannot do their job: without referring to certain theoretical entities, scientists cannot suggest hypotheses, cannot test hypotheses, and cannot revise old theories in the light of new empirical findings. Boyd writes on this point as follows:

These [theory-dependent] features of scientific methodology are *entirely* general. Not only measurement and detection procedures but all aspects of scientific methodology –

principles of experimental design, choices of research problems, standards for the assessment of experimental evidence, principles governing theory choice, and rules for the use of theoretical language – are highly dependent upon current theoretical commitments. No aspect of scientific method involves the ‘presupposition-free’ testing of individual laws or theories (Boyd 1988, pp. 189-190).

Here, I present the four theory-dependent features of science which play an important role in the realist explanation of science.

Hypotheses Presuppose Background Assumptions and Theories

Scientists make hypotheses on the basis of various background theories shared in their community. For instance, the theory of neutrinos was suggested partly based on the theory of energy conservation. Also, the theory was suggested based on other theories of subatomic particles such as the theory of neutrons, the theory of protons, and so forth. Without assuming the existence of these entities, the theory of neutrino could not have been suggested.

Also, in the actual scientific research, only some hypotheses are suggested and tested. It is not the case that scientists test all possible hypotheses which can be constructed from the existing theories. Furthermore, theories which actually get tested are the ones which are relatively similar to the existing theories (Boyd 1980, p. 619). So, scientists select just a few hypotheses from infinitely possible hypotheses.

Central Issues Depend on the Theoretical Context

Research programmes in science are suggested to investigate certain issues. The theory of neutrinos was introduced in order to explain some phenomena observed in beta decay. Scientists thought that the explanation of the phenomena in beta decay was important since such an explanation would be fruitful in advancing other subatomic theories. Here, their judgement of the fruitfulness of a suggested research programme depends on the

theories they hold. If their background theories are different, the explanation of beta decay might not be very important for the scientists.

The Standard of Confirmation Depends on Background Theories

The standard of confirmation is also not free from theoretical presuppositions. Suppose a scientist predicts that we will see a vapour trail in a flask under a particular circumstance. He makes this observation on the basis of the electron theory postulating how an electron behaves under the specified circumstance. Perhaps we can see such vapour trail in a flask under the circumstance the scientist specifies, and we can confirm the electron theory on the basis of our having this observation. But our taking this observation as evidence for the theory is dependent on the background theories we hold. Our seeing a path in a flask is taken as evidence for the electron theory since according to background theories other theoretical entities would not cause a path in a flask under the specified circumstance. Unless we hold these background theories, we cannot take our seeing a path in a flask under the specified circumstance as evidence for the electron theory.

There is the Mutual Relation between Old Theories and New Revised Theories

There is mutual relationship between methods, new findings and revised theories. Such mutual relationship enables scientists to revise their old theories and build up their new theories. For instance, the improvement of the technology of instruments (such as the invention of a microscope) may enable scientists to revise the account of certain theoretical entities. To revise their accounts of theoretical entities, scientists need to take certain theoretical considerations based on the existing theories.

These are the examples of the theory-dependent feature of science. These theory-dependent methods produce empirically reliable theories. These theory-dependent features of science play a key role in the defence of the realist explanation of science.

3.2.5 Realist Explanation

Above, I described some empirical aspects of science. The proponent of the argument asks us to consider the best explanation of these empirical aspects of science.

As the second premise says, the ways scientific theories are produced are highly theory-dependent. But theories produced by such theory-dependent methods are empirically reliable. What is the explanation for this? Scientific realists claim that the answer is the approximate truth of scientific theories. Since the theoretical description scientific theories postulate is relatively similar to the reality of the world, theories produced by the theory-dependent methods are empirically reliable.

The strength of the realist explanation can be seen if we compare this realist explanation with an alternative explanation. The alternative explanation assumes that scientific theories are not about the mind-independent entities of the world. If we assume this, we might have to also assume that the empirical success of science is a sort of *miracle*; although the theoretical description of the world scientific theories provide is not about the actual description of the world, all the predictions they make through speaking of theoretical entities miraculously turn out to be accurate (Putnam 1975, p. 73). The realist explanation is better than such an explanation in terms of a miracle. So, the realist concludes, the realist explanation is the best.

This realist explanation is a good reply to the instrumentalist challenge. Only the realist understanding of science can explain why theory-dependent methods are capable of producing empirically reliable theories. In response to this, the instrumentalist could take an operationalist interpretation of theoretical considerations. The operationalist claims that the use of theoretical terms can be rationally reconstructed by 'treating it as having an analytic operational definition in terms of laboratory procedures and instrumentation' (Boyd 2002). The suggestion is that the account of theoretical terms

can be given by how scientists use these terms in actual laboratory procedures. Such a project is still problematic. We expect that the account of theoretical terms would be revised by further theoretical developments. The possibility of such revision does not cohere with the operationalist thesis that we can give an analytic definition of a theoretical term in terms of how the words are used in laboratory procedures.

The realist explanation also rejects the evidential indistinguishability thesis on which the instrumentalist argument relies. In response to the evidential indistinguishability thesis, the proponent of the realist explanation would say that in fact we could compare the existing theoretical tradition and an alternative total science on the empirical ground. All background theories which contribute to the development of the theory have been empirically tested and all observational evidence confirms those background assumptions as true. So the theory which is from the current theoretical tradition gets more 'indirect' empirical evidence than the theory which is from a total science whose theoretical considerations are radically different from the theoretical description the current sciences provide (Boyd 1983, pp. 66-67). So, the evidential indistinguishability could be rejected on the empirical ground.

The realist explanation is also better than the constructivist explanation. According to constructivism, the reality of the world is defined or constructed by scientific theories which are the rational construction of our reasoning. Constructivists typically appeal to the theory-dependent methods of science: various hypotheses in science are suggested on the basis of numerous background assumptions, and those hypotheses are tested by theory-dependent methods. Such theory-dependent features of science can be explained by constructivism according to which the reality scientific theories attempt to describe is our rational construction. In response to this, the realist could argue as follows: the constructivist conceptions of science and the world cannot provide a good explanation

of the empirical reliability of science. It is highly implausible to claim that the empirical success of science, such as the regular success of certain technologies (airplanes, mobile phones, laptops, etc.) is explained in terms of constructivism. If all the generalisations and laws on which those technological successes rely are the construction of our reasoning, it is hard to explain the stable successes of those technological products. Boyd writes: '[it] cannot be that the explanation for the fact that airplanes, whose design rests upon enormously sophisticated theory, do not often crash is that the paradigm *defines* the concept of an airplane in terms of crash-resistance' (Boyd 1983, p. 66).

The realist explanation of science reveals what is wrong with the constructivist explanation of the theory-dependent features of science. The realist explanation tells us that background assumptions and theories are approximately true, and that is why theory-dependent methods in science rather contribute to the accumulation of approximately true theories.

In these ways, the realist explanation provides responses to various anti-realist challenges against scientific realism.

3.2.6 Philosophical Package

Still, some anti-realists might think that the abductive defence of scientific realism is just question-begging. The objection is called *the circularity objection*. The objection goes as follows:

- (1) Some anti-realists are sceptical about the reliability of IBE as a guide to truth (cf. Van Fraassen 1980, 1989).
- (2) What the abductive argument gives is an inference to the best explanation that the best explanation of some empirical facts of science is the approximate truth of scientific theories.

(3) Therefore: the abductive argument does not persuade anti-realists who are sceptical about the reliability of inference to the best explanation as a guide to truth.

There are some reasons why some anti-realists are sceptical about the reliability of IBE as a guide to truth. For instance, following Hume's sceptical attitude toward the legitimacy of induction as a guide to truth, some anti-realists think that an inference to the best explanation may not be true since it is logically possible that that inference turns out to be false. For those people, Boyd's argument is viciously circular since what Boyd does is to defend an IBE by using IBE reasoning. Since those anti-realists are sceptical about the reliability of IBE as a guide to truth, they would not accept Boyd's IBE as good.

In response to this objection, first, Boyd admits that his abductive argument is circular as some anti-realists insist. However, Boyd does not admit the question-begging of the realist explanation. Boyd claims that if one accepts the realist explanation, one can also have *the realist package* which is a cluster of good philosophical theories. Further, he claims that the realist package is more plausible than the theory package anti-realists need to adopt. Because of the plausibility and the superiority of the realist package, Boyd argues, the circularity objection can be rejected (Boyd 1988, pp. 216-217; 1990, pp. 387-388).

Below, I present three suggestions Boyd make as the content of the scientific realist philosophical package. The theories in the realist philosophical package explain the plausibility of the realist theory-package.

(a) The Rejection of Foundationalism and the Defence of Naturalistic Epistemology

To explain science in terms of the approximate truth of scientific theories, we need to assume science's being cumulative by successive approximations to the reality. The epistemological implication of this conception of science is that scientific knowledge

gradually grows cumulatively by successive approximation to the truth improving existing beliefs.

This epistemological model of scientific knowledge requires the rejection of foundationalism of scientific knowledge. The foundationalist claims that all knowledge is grounded in ‘an *a priori* specifiable core of foundational beliefs’ and the principles of justifiable inferences are ultimately reducible to inferential principles which can be shown *a priori* to be rational’ (Boyd 1988, p. 191). Foundationalism may face a difficulty to give a plausible account of perceptual knowledge. It seems that the reliability of our perception is radically contingent. A proper account of perceptual knowledge must address the contingency of the reliability of our senses. The rejection of foundationalism could avoid the difficulty of accounting perceptual knowledge which does not have any *a priori* epistemological foundations.

(b) The Rejection of the Humean Conception of Causation

According to the realist explanation of science, theoretical considerations (e.g. the proton has such and such properties which have certain causal relations with other entities) play various important roles in the actual development of science. Boyd claims that such roles played by theoretical considerations cannot be explained by the Humean reductive conception of causation. According to the Humean theory of causation, causal entities referred in scientific theories are fundamentally reducible to non-causal entities. This implies that causal terms have definitions in terms of non-causal terms (Boyd 1988, pp. 193-194).

The proponent of the realist explanation can take an alternative theory of causation. Boyd suggests that there is a perfectly reasonable theory of causation which allows irreducible causal entities (Shoemaker 1980). Boyd claims that such a non-reductive

theory of causation fits with the actual role played by theoretical considerations in the development of science.

(c) The Homeostatic Externalist Semantic Theory of Natural Kind Terms

The realist conception of science requires the rejection of defining natural kinds in terms of nominal essences, as Locke famously does in his essay (Locke 1700/1979, IV, iii, 25). That is precisely because that the approximate truth of scientific theories requires, at least, a reasonable correspondence between the use of theoretical terms and real entities of the world. The realist conception enables us to adopt an externalist semantic theory, such as the causal theory of reference developed by Kripke and Putnam (Putnam 1979; Kripke 1980). Such an externalist semantic theory of natural kinds is, by its own light, better than an internalist theory given some arguments against it, such as the argument from the twin-earth scenario. Boyd suggests his version of an externalist semantic theory of natural kind terms according to which the definitions of natural kind terms are given non-analytically in terms of the homeostatic property cluster which regulates the use of natural kind terms (Boyd 1988, pp. 194-199).

In response to the circularity objection, Boyd argues that these theories are available only if we accept a realist conception of science, and anti-realists who do not accept the realist conception of science cannot have these theories. As we have seen, these theories are *good* theories: anti-foundationalist epistemology well fits with the actual growth of scientific knowledge, the irreducible theory of causation well fits with how theoretical considerations play important roles in science, and the externalist semantic theory well fits with our intuitions about how we define natural kind terms. The goodness of these theories is a threat to anti-realists: anti-realists who do not accept the realist explanation of science cannot adopt these good theories.

Another aspect of the argument from the philosophical package is its superiority to the anti-realist philosophical package. The theories in the anti-realist package are not just simply false. But they are somehow difficult theories to be accepted. Since the anti-realist explanation of scientific theories require us to hold that inference to the best explanation is not the legitimate way to track the truth, the anti-realist might have to have a sceptical epistemological theory. It may be difficult to be a sceptic of any inductive knowledge even on the anti-realist ground. Even anti-realists hope to admit the empirical reliability of scientific theories which are constructed by inductive reasoning. But if anti-realists deny the legitimacy of inductive reasoning, it may be hard for them to accept the empirical reliability of scientific theories which they hope to accept (Boyd 1990). This makes the realist explanation of scientific theories superior to the anti-realist explanation.

3.3 Analogous Argument for Moral Realism

Above, I outlined how Boyd's argument for scientific realism works. There are two steps in Boyd's argument. The first is the abductive defence of the scientific realist explanation according to which the best explanation of the combination of the two empirical premises about science is the approximate truth of scientific theories. This first step is the core part of the argument: the argument provides us with a positive reason to believe in scientific realism. The second is the suggestion about the realist philosophical package. The suggestion is that the realist can have the realist philosophical package which provides a reply to the circularity objection against the realist explanation. This part of the argument can be a supplementary part of the whole argument: the second step makes the abductive defence of scientific realism more strong.

Boyd suggests that an analogous argument for moral realism is possible. The suggestion is this: (1) the truth of moral realism (a scientific hypothesis) best explains ethics, and (2) the moral realist package which is composed of various theories is available once we accept the realist explanation of ethics. (1) can be seen as the main part while (2) is a part which makes (1) persuasive.

3.3.1 Abductive Argument for Moral Realism

The abductive argument for moral realism takes the following form.

The Abductive Argument for Moral Realism

- (1) First-order ethical theory is empirically reliable.
- (2) The theory-building procedures of first-order ethical theory are not free from theoretical presuppositions.
- (3) The best explanation of (1) and (2) [which are themselves empirical phenomena] is moral realism which implies the existence of natural moral properties.
- (4) Therefore: natural moral properties are ineliminable in the best explanation of phenomena we experience [the second premise of the basic argument].

In the presentation of the argument for scientific realism, the following three theses characterise scientific realism: the semantic thesis, the epistemological thesis and the metaphysical thesis. We have also seen that these realist theses have some relations with first-order scientific theories, and the core part of them can be characterised in terms of the approximate truth of those theories.

In the same way, the defender of the abductive argument for moral realism can claim that the core part of moral realism can be characterised in terms of the approximate truth of first-order ethical theory. Having said that, the defender of the

argument can claim that the two empirical premises of the argument are best explained by the approximate truth of normative theory.

The defender of the argument needs a first-order ethical theory: just having a few intuitively plausible moral judgements is not sufficient for running the argument. To see the plausibility of the analogous argument for moral realism, we need to have a theory which is a body of beliefs including the ones which specify how the development of that theory should be conducted. Then, we need to look at certain empirical features of that theory and see if the best explanation of those features would be the approximate truth of the theory (Boyd 1988, p. 202).

To run the argument, Boyd uses his version of consequentialism, as an example normative theory. Boyd's homeostatic consequentialism holds the following principal propositions (Boyd 1988, p. 203):

- (1) An act is right iff the acceptance of that act's code in society best enhances ethically important human goods.
- (2) Ethically important human goods are the satisfaction of important human needs.
- (3) Important human needs include the need for love, friendship, intellectual and artistic appreciation and expression, and the need to engage in cooperative efforts.
- (4) Important human needs are investigated by the relevant sciences, such as sociology, psychology, biology and medicine.

With this normative theory, Boyd defends the abductive argument.

3.3.2 The Approximate Truth of First-Order Ethical Theory

Boyd claims that the approximate truth of homeostatic consequentialism is the best explanation of certain empirical features of it. How do we understand the approximate truth of normative theory in general? Boyd gives the following account of the

approximate truth of normative theory that is analogous to the account he gives in the scientific case.

The Approximate Truth of First-Order Ethical Theory

A first-order ethical theory is approximately true iff that theory's theoretical description is sufficiently similar to the moral reality in the way the theory's theoretical description enables moral theorists to produce a further theory whose theoretical description is more similar to the moral reality than the previous one (cf. Boyd 1988, pp. 201, 207).

In the scientific case, some examples from the history of science explain why, for instance, the old theory of the atom can be regarded as approximately true due to its ability to enable scientists to conduct further empirical investigations of subatomic particles (remember the story of the seventeenth-century corpuscular theory). Boyd attempts to do a similar thing in the moral case. Boyd argues that an old moral theory based on the theistic view can be regarded as approximately true from the perspective of his consequentialism. Here is what he writes:

As a matter of fact, the majority of people have probably always believed in some sort of theistic foundations of morals: moral laws are God's laws; the psychological capacities which underlie moral practice are a reflection of God's design; etc. According to the homeostatic consequentialism ... moral facts are mere natural facts. Therefore ... most people have always had profoundly mistaken moral beliefs. How then can it be claimed that our background beliefs have been relevantly approximately true? (Boyd 1988, p. 208)

I reply that – assuming that people have typically held theistic beliefs of the sort in question – it does follow from homeostatic consequentialism that they have been in that respect very wrong indeed. But being wrong in that respect does not preclude their moral

judgments having been relatively reliable reflections of facts about the homeostatic cluster of fundamental human goods (Boyd 1988, p. 208)

From the point of view either of evolutionary theory or of basic human psychology it is hardly accidental that we are able to recognize many of our own and others' fundamental needs. Moreover, it is probably not accidental from an evolutionary point of view that we were able to recognize some features of the homeostasis of these needs. Our initial relevantly approximate accurate beliefs about the good may well have been produced by generally reliable psychological and perceptual mechanisms and thus may have been clear instances of knowledge (Boyd 1988, p. 209)

Boyd is claiming here that people's theistic moral beliefs contain some truths though they also contain significant errors (e.g. 'moral laws are God's laws'), and that people's beliefs can be regarded as approximately true due to their having certain truths.

Why can people's beliefs be regarded as approximately true despite the fact that they contain certain errors as well? In order to fully elucidate Boyd's suggestion, let us have a more expanded story of theistic morality and see the content of the theistic moral theory people used to hold.

We can assume that the theistic moral theory holds following propositions.

Theistic Moral Theory

- (1) A person's life goes well iff that person's life is in accordance with the will of God.
- (2) An act is right iff that act is in accordance with the will of God.
- (3) Compassionate acts are morally right.

The theistic theory is not exactly true since its basic claim about human goodness is wrong. The Boydian consequentialist would say that human goodness consists in the satisfaction of important human needs, not in the will of God. Then, is the theistic theory radically false? It is not. Some moral propositions about human goodness the

theistic theory holds are in fact true. The theistic theory holds the proposition that compassionate acts are morally right. From the perspective of Boydian consequentialism, this proposition is true since being compassionate toward people in need contributes to the satisfaction of important human needs. The theistic theory might hold other moral propositions from the Bible. Those propositions might include; ‘killing an innocent person is morally unacceptable’, ‘stealing is morally unacceptable’. These moral propositions are in fact near the truth in the light of Boydian consequentialism since the prohibition of these practices may contribute to the satisfaction of important human needs.

Now, we should ask: is the theistic moral theory approximately true from the perspective of homeostatic consequentialism? We may say ‘yes’ to this question and be optimistic about the further development of the theory. We can expect that a theory can be developed on the basis of the true moral propositions it holds. Also, we can expect that the errors the theory contains may not prevent the development of the theory. The identification of wellbeing with the accordance with the will of God is certainly an error from the perspective of homeostatic consequentialism, but this may not prevent the further development of the theory. After all, people’s conception of God is somebody who ultimately hopes for the happiness of people. So, even if people seek moral norms which are in accord with the will of God, these moral norms should be the ones which enable people to realise important human needs. So, we can regard this theory as an approximately true moral theory.

The notion of the approximate truth of the theistic theory can be clearly presented when we consider a following very different moral theory. Suppose that people in a different possible world hold *demon moral theory*. This demon moral theory holds following propositions.

Demon Moral Theory

- (1) A person's life goes well iff that person's life is in accordance with the will of the Evil Demon.
- (2) An act is right iff that act is in accordance with the will of the Evil Demon.
- (3) Dishonest acts are morally right.

In a similar way the theistic theory is, the demon theory is wrong about the fundamental nature of human goodness. The proposition that human goodness consists in the will of the Evil Demon is false from the perspective of Boydian consequentialism. Then, does the demon theory contain some truths as the theistic theory does? It seems not. Other moral propositions the demon theory holds seem to be radically false. The proposition, 'dishonest acts are morally right', is radically false from the perspective of Boydian consequentialism since by keeping such a practice we would highly likely diminish the satisfaction of important human needs. The Boydian consequentialist would say that the demon moral theory is not near the truth at all since the theory holds wholly inadequate moral propositions from the Boydian consequentialist perspective.

An important contrast we can see between the theistic theory and the demon theory is this: there is no hope of the further empirical development of the theory. The background assumptions of this theory seem to be not capable of producing correct moral norms from the perspective of homeostatic consequentialism. The evil demon seems to be someone who does not hope for the realisation of humans' important needs. So, people's seeking the norms which are in accord with the will of the evil demon does not produce any moral principles which enable people to realise their important human needs.

What do we learn from these stories of the theistic and the demon moral theories? From these two cases, we learn what sort of normative theory can be regarded as

approximately true in the light of Boydian consequentialism. A theory is approximately true if that theory contains sufficiently many true propositions to allow the further empirical development of the theory. A theory is radically false if that theory does not contain any true proposition which is needed for the further empirical development of that theory. A theory cannot be regarded as approximately true if that theory contains significant errors which prevent the further development of the theory.

We are now given the account of the approximate truth of first-order ethical theory from the perspective of Boydian consequentialism. Next, let us see the empirical features of homeostatic consequentialism which are explained by the approximate truth of it.

3.3.3 The Empirical Reliability of First-Order Ethical Theory

Boyd claims that observation plays the same role in moral theorising as the role it plays in science (Boyd 1988, pp. 206-207). This claim can be regarded as the claim that normative theory is empirically reliable and the empirical reliability of normative theory is confirmed by observation. Consider what role observation plays in science.

Observation is a way to confirm a theory. Typically, a theory is confirmed when an observation confirms the prediction that theory makes. So, the role observation plays in science is the confirmation of the prediction a suggested theory makes. Boyd is claiming that the same role is played by observation in moral theorising: the prediction normative theory makes can be confirmed by observations. Thus, what Boyd is essentially saying is this: his consequentialism is empirically reliable (capable of making accurate predictions) and observations confirm the empirical reliability of his consequentialism.

Here are two issues in this suggestion. The first issue is an empirical issue. If a moral hypothesis, *M*, provides us with an prediction that we will make the observation,

O, in the circumstances, *C*, and we, instead of observing *O*, observe *P*, this shows that *M* is not empirically reliable. In this way, scientists might confirm that first-order ethical theory is not empirically reliable. Whether first-order ethical theory is empirically reliable in this sense is an empirical matter and ultimately this should be settled by scientists.

The second issue is whether first-order ethical theory is, *in principle*, capable of being assessed by observation in the same way a hypothesis about neutrino is. Some philosophers would say that in principle observation does not play any role in assessing first-order ethical theory.

Boyd is optimistic about these two issues. Boyd claims that, at least in assessing his sample first-order ethical, observation should work in the same way it works in assessing other scientific theories. Boyd also claims that observation should show that his sample first-order theory is reasonably empirically reliable.

How does Boyd defend his optimism here? First, Boyd claims that moral properties his consequentialism presupposes are similar to the properties studied in psychology, history and social science.⁶ Since observation plays an important role in the inquiries of these social sciences, Boyd thinks, observation should play the same important role in moral inquiry. Second, Boyd mentions that ‘self-observation’ is also a proper form of observation, and this form of observation may also work in moral theory in the same way it works in the human sciences (Boyd 1988, p. 206) . Third, Boyd claims that we can observe that people who follow the consequentialist moral principles reliably satisfy important human needs than people who do not follow the consequentialist moral principles (1988, pp. 203-204, cf. 2003a, 2003b).

⁶ Boyd *does* include history here (1988, p. 206).

The first two claims Boyd makes is essentially just a suggestion that ethics and the special sciences are analogous while the third claim is more significant. The third claim suggests a way observations confirm his consequentialism. This third claim can be regarded as a core part of Boyd's suggestion that homeostatic consequentialism is empirically reliable, and consequentialism's empirical reliability is confirmed by observation.

3.3.4 Theoretical Presuppositions of First-Order Ethical Theory

Boyd also claims that it is possible to assimilate the ways normative theory is developed to the theory-dependent ways scientific theories are developed. Boyd claims:

it would be possible for the moral realist to respond [to the constructivist challenge] by assimilating the role of moral intuitions and reflective equilibrium to the role of scientific intuitions and theory-dependent methodological factors in the realist account of scientific knowledge (Boyd 1988, p. 206)

In the early part of this chapter, the four important theory-dependent features of scientific theories are presented. The suggestion here is that the ways first-order ethical theory is developed which use moral intuitions and the method of reflective equilibrium have those theory-dependent features we can find in science (Boyd 1988, p. 208).

What Boyd needs to do is to describe some theoretical features of his consequentialism which can be analogous to the theory-dependent features of science. In his essay, Boyd does not fully explain how his consequentialism could have those four theory-dependent features. Instead, he indicates some general remarks about the theory-dependency of first-order ethical theory. He indicates how society's situations influence both scientific and moral investigations. He writes as follows:

It is a commonplace in the history of science that major advances often depend on appropriate social conditions, technological advances, and prior scientific discoveries.

Thus, for example, much of eighteenth-century physics and chemistry was possible only because there had developed (a) the social conditions in which work in the physical sciences was economically supported, (b) a technology sufficiently advanced to make the relevant instrumentation possible, and (c) the theoretical legacy of seventeenth-century Newtonian physics and corpuscular chemistry (Boyd 1988, p. 204).

Then, Boyd describes some theory-dependent features of moral inquiry:

Knowledge of fundamental human goods and their homeostasis represents basic knowledge about human psychology and social potential. Much of this knowledge is genuinely *experimental* knowledge and the relevant experiments are ('naturally' occurred) political and social experiments whose occurrence and whose interpretation [depend] both on 'external' factors and upon the current state of our moral understanding. Thus, for example, we would not have been able to explore the dimensions of our needs for artistic expression and appreciation had not social and technological developments made possible cultures in which, for some classes at least, there was the leisure to produce and consume art. We would not have understood the role of political democracy in the homeostasis of the good had the conditions not arisen in which the first limited democracies developed. Only after the moral insights gained from the first democratic experiments were in hand, were we equipped to see the depth of the moral peculiarity of slavery. Only since the establishment of the first socialist societies are we even beginning to obtain the data necessary to assess the role of egalitarian social practices in fostering the good (Boyd 1988, pp. 204-205).

In the quote above, Boyd indicates how moral inquiry depends on our background assumptions of morality. Let us see the example of slavery. Boyd says that we can understand the wrongness of slavery since we have certain background assumptions, such as assumptions about political democracy. In the quote he does not clearly explain how our moral judgement that slavery is wrong depends on the assumption about

political democracy. But what he has in mind may be something as follows: now, we have the intuition that slavery is morally wrong. Boyd would say that such intuition is radically dependent on various non-moral beliefs which are now part of our common sense conception of the world. We now see the implausibility of slavery, perhaps without having any reflection, since we also know the importance of giving all people the opportunity to participate in politics. Since we know that democracy is important in the enhancement of people's wellbeing, we can judge that slavery is wrong. This may be a good example of the theory-dependent features of ethics which are analogous to the ways science is conducted.

In the previous section and this section, I have explained how Boyd attempts to describe the empirical reliability and the theory-dependent features of normative theory. Many, including myself, might feel that Boyd's attempt is not satisfactory. I will be discussing the incompleteness of Boyd's attempt later. Since we want to see the overall picture of Boyd's suggestion, I continue presenting Boyd's argument.

3.3.5 Moral Realist Explanation

Assuming that Boydian consequentialism is empirically reliable and the ways it develops are theory-dependent, we may be able to defend Boyd's claim that these empirical features of ethics can be best explained by the approximate truth of homeostatic consequentialism.

If we assume two empirical premises about Boyd's consequentialism, the explanation of them in terms of the approximate truth of consequentialism is a natural choice. The approximate truth of consequentialism explains why consequentialist moral principles produced on the basis of various background moral assumptions are empirically reliable. By saying, 'a moral principle is empirically reliable', I mean that people reliably realise certain important human needs by following that moral principle.

Background assumptions are approximately true in the sense they accurately represent the mechanism about people's realising important human needs. Since these background assumptions are approximately true, we are capable of producing further moral principles on the basis of these background assumptions which more accurately describe the mind-independent moral reality (which is about the mechanism of people's realising important human needs).

As we see an alternative explanation in terms of a miracle in the scientific case, we can also see an alternative explanation of two empirical facts about Boyd's theory. The alternative explanation can be presented as follows: it will be a mystery why we are able to satisfy important human needs by following consequentialist moral principles if we assume that consequentialism is not approximately true. The only explanation we can have is the one in terms of a miracle: although consequentialism is not about the mind-independent moral reality, consequentialism miraculously provides us with empirically reliable moral principles. Obviously, the explanation in terms of a miracle is worse than the explanation in terms of the approximate truth of consequentialism.

In a similar way the scientific realist explanation becomes a reply to some anti-realist interpretations of science, this moral realist explanation is supposed to be a reply to one anti-realist interpretation of ethics. Some people claim that normative theory's employing the theory-dependent methods is explained by anti-realist constructivism. More particularly, they claim that the method of reflective equilibrium is not compatible with moral realism: the method is to find moral principles which cohere with our moral judgements and these moral principles are not supposed to be representing such moral reality (cf. Rawls 1980; Korsgaard 2003; Street 2008). In response to this, Boyd writes as follows:

The extent of the potential for rebuttals of this sort can best be recognized if we consider the objection that the role of reflective equilibrium in moral reasoning dictates a constructivist rather than a realist conception of morals. The moral realist might reply that the dialectical interplay of observations, theory, and methodology which, according to the realist, constitutes the *discovery* procedure for scientific inquiry *just is* the method of reflective equilibrium, so that the prevalence of that method in moral reasoning cannot *by itself* dictate a non-realist conception of morals (Boyd 1988, p. 200).

In this quote, what Boyd claims is summarised as follows:

- (1) The argument for scientific realism shows that science best fits with anti-foundationalism of epistemology which holds that the methods employed in science is a sort of the method of reflective equilibrium
- (2) The fact one type of inquiry employs the method of reflective equilibrium does not necessarily imply the anti-realist interpretation of that inquiry [(1)].
- (3) Therefore: the fact that moral inquiry employs the method of reflective equilibrium does not necessarily imply the anti-realist constructivist interpretation of ethics [(1), (2)].

The implication of this reply is this: the constructivist is wrong about the explanation of the method of reflective equilibrium. It is perfectly reasonable to assume that the method of reflective equilibrium is a discovery procedure in a similar way the theory-dependent theory building procedures of science are.

In the scientific case, we can give a scientific realist interpretation of science's theory-dependent methods since they produce empirically reliable theories. Provided that homeostatic consequentialism is empirically reliable, the realist can complete his reply to constructivism as follows: the constructivist cannot explain the empirical reliability of first-order ethical theory. If moral reality is the construction of our reasoning about moral matters, we cannot explain why we do in fact obtain certain

goods by following moral principles. Presumably we will obtain certain goods by following moral principles even if we are not aware of those principles. The constructivist cannot explain such a case while the realist can give a clear explanation of such a case by assuming the existence of moral reality. We should also notice that such empirically reliable principles are produced by theory-dependent methods. The explanation for this is that these theory-dependent methods are reliable in producing approximately true moral principles. Otherwise, it will be a miracle why such theory-dependent methods can produce empirically reliable principles. So, the constructivist is wrong about his explanation of the methods in ethics.

The Conclusion of the Argument Implies the Existence of Natural Moral Properties

The abductive argument tells us that the best explanation of the two premises is moral realism. Are moral properties, whose existence is implied by moral realism, mind-independent natural properties? To support the second premise of the basic argument, the naturalist needs to say ‘yes’ to this question.

It seems that moral properties implied here are mind-independent natural properties. This is due to the empirical premises of the argument. The acceptance of the two premises requires us to hold the view that ethical inquiry is analogously similar to scientific inquiry. We should also remember that Boyd tries to defend the analogy between ethics and some social sciences. This implies that moral properties posited by Boyd’s theory are investigated *a posteriori*. If the way the theory is developed is a similar empirical way science is developed, moral properties investigated need to be the object of empirical investigation. Such properties should be natural properties since those properties are the object of empirical investigation. So, the conclusion of the argument supports the second premise of the basic argument in the following way: the approximate truth of first-order ethical theory which posits *natural moral properties* is

the best explanation of the two empirical premises of first-order ethical theory (phenomena we experience).

3.3.6 Moral Realist Philosophical Package

I shall now turn to consider another aspect of Boyd's argument. Boyd suggests that if the abductive defence of moral realism which employs Boyd's normative theory is accepted, various philosophical theories can be also accepted (pp. 199, 210).

This suggestion is analogous to the suggestion about the scientific realist package: in a similar way scientific realists can have the realist philosophical theories, there are various philosophical theories we can have once we accept the realist explanation of ethics. We can call this analogous group of philosophical theories *the moral realist philosophical package*.

What sort of theories can the moral realist have? Below I list some of such theories Boyd proposes. These theories can provide us with replies to various objections against moral realism.

(a) *The Externalist Semantic Theory of Moral Terms*

Against the thought that if moral properties are natural properties the definitions of moral terms must be analytic, Boyd suggests that the externalist semantic theory enables us to adopt the view that even if moral properties are natural properties we can give synthetic definitions of moral terms. With his consequentialist theory which employs a theory of wellbeing (the satisfaction of important human needs) as its value theory, Boyd argues that the homeostatic property cluster which satisfies important human needs regulate our use of moral terms, and moral terms are defined in terms of that homeostatic property cluster (Boyd 1988, pp. 209-212).

This theory explains how moral terms get their meanings in terms of the causal relation between the use of moral terms and the homeostatic property cluster. This can

be a reply to the ‘open question argument’ according to which the definitions of moral terms in terms of non-moral natural properties cannot close the question, ‘are these natural properties really good?’ (Moore 1903). Boyd’s theory could tell us how the question will be closed. Boyd would argue that naturalistic moral realists are attempting to give synthetic-necessary definitions of moral terms in the same way scientists can give us synthetic necessary-definitions of natural kind terms. In the same way the definition of water in terms of its chemical composition is not open, the definitions of moral terms may be not open.

(b) *The Metaphysical Theory that Moral Goodness is the Homeostatic Property*

Cluster

The semantic theory above goes hand in hand with the metaphysical theory according to which moral goodness is a homeostatic property cluster which satisfies important human needs. Such a metaphysical theory explains how moral properties fit with other natural properties in the world. Like other natural kinds, moral properties are explanatorily relevant to various things. By increasing the states of affairs which are morally good, we are able to satisfy important human needs. We can control moral states of affairs in the same way, for instance, we can control some economic states of affairs which are causally relevant to various parts of our lives.

This theory may answers metaphysical challenges to moral realism, such as Mackie’s metaphysical queerness challenge. According to this challenge, it is difficult to accept the existence of moral properties since if they exist they must be very strange entities which do not have any similarities with other properties in the world. In response to this challenge, Boyd would argue that moral properties are not strange entities since they are metaphysically on a par with natural kinds.

(c) *Moral Judgement, Reason for Action and Motivation*

From the perspective of Boyd's consequentialism, we can assume that consequentialist moral knowledge is primarily about states of affairs which contribute to the satisfaction of important human needs. From knowledge about good states of affairs, we can gain knowledge about right acts: one particular act is right since it enhances morally good states of affairs.

This picture of moral knowledge gives us an explanation of the relation between moral judgement, reason for action and motivation.

First, someone's judgement that φ -ing is morally right provides a reason to φ since φ -ing is the way to satisfy certain human needs. The link between one's judgement and reason for action is not logical necessity, but the link is still strong: one's moral judgement generally gives a reason to follow the moral norms since that is the way to satisfy important human needs.

Second, the relation between moral judgement and motivation is given as follows: the capability of imagining oneself in the situation of others is important to recognise which acts are morally right or wrong. People are typically motivated not to φ if they believe that not φ -ing in the circumstance is required to get rid of others' suffering since they have sympathy with those who get affected by φ -ing. Again, the relation between one's judgement that not to φ is morally required and one's being motivated not to φ is not logical. Perhaps it is rightly so since we can imagine someone who is capable of making correct moral judgements though he is indifferent to acting morally (cf. Brink 1984). But Boyd's theory can explain why there is a close link between the two: people who can make correct moral judgements are people who are capable of being motivated to act in accordance with their moral judgements.

These explanations provide us with an answer to one objection against moral realism. The objection is this: moral realism cannot give a proper account of the relation between moral judgement, reason for action and motivation. The response is this: the relations between moral judgement, reason for action and motivation are logical as some suppose, but there are close relations between them as the explanation above describes.

These are theories we can have once we accept the moral realist explanation of Boyd's consequentialism.

3.4 The Abductive Argument and the General Objections against Naturalism

I have finished describing the overall picture of Boyd's argument for moral realism. Boyd claims that scientific realism and moral realism can be analogously defended. First, Boyd gives abductive arguments for both scientific and moral realisms which appeal to certain empirical features of science and ethics. Second, Boyd provides us with theory-packages which are composed of various philosophical theories. These packages are meant to strengthen the abductive arguments: the availability of philosophical packages may be a reply to some objections against both scientific and moral realist explanations.

I now turn to the question of whether Boyd's argument can provide us with good replies to the objections against naturalism.

In the previous chapter, we saw the five objections against the basic argument. These five objections can be regarded as the general problems with naturalism defended on the basis of the basic argument. There are some attempts to reply to these objections on the basis of the singular argument (cf. Sturgeon 1998b; 2006; Loeb 2005; Cuneo

2006). Instead of reviewing these attempts, in this section, I will consider how the abductive argument could provide us with good replies to these objections. In this section, I will not fully develop these replies. The full replies will be available once the abductive argument is developed in a plausible way. In this section, I merely describe how the development of the abductive argument could provide us with good replies to these objections. This description motivates us to develop the abductive argument further.

On the Epiphenomenalist Objection

The epiphenomenalist objection is this: moral properties are not causal properties and the entities which play causal roles in Sturgeon's examples are non-moral properties on which moral properties supervene. From this, the epiphenomenalist concludes that the proponent of the singular argument is not entitled to claim that moral properties are part of the best explanation of phenomena we experience.

On the basis of the abductive argument, the naturalist might argue as follows: the target of the epiphenomenalist objection is singular moral explanations which refer to some particular moral properties, such as moral goodness, courage, injustice, depravity, etc. For instance, against the moral explanation, 'Hitler's depravity explains his action and people's belief about him', the epiphenomenalist would say that what causally explains Hitler's action and people's belief are non-moral facts about Hitler, not the moral fact which supervenes on the non-moral. Facing this challenge, the naturalist can say that he does not have to defend particular instances of singular moral explanations such as the one above. All he has to do is this: he needs to defend the claim that the moral realist explanation in terms of the approximate truth of normative theory is the best explanation of empirical facts about normative theory. In this way, the epiphenomenalist challenge can be avoided.

On the Alternative Explanation Objection

The alternative explanation objection is this: moral explanations Sturgeon suggests are not the best explanations of the empirical phenomena in question. This objection can take the following analogous form against the abductive argument: the best explanation of the conjunction of the two premises of the abductive argument is not the explanation in terms of moral realism.

The defence of the abductive argument is a direct answer to this objection. We have already seen why the moral realist explanation is better than an alternative explanation which does not assume the approximate truth of normative theory. So, the full defence of the abductive argument will be a full reply to this objection.

But we should expect that this argument can be strengthened since the analogous objection can be made against the realist explanation of scientific realism. Van Fraassen famously argues that empirical facts about science can be best explained in terms of the assumption that science is an activity which aims to achieve empirical adequacy (1980). We should expect an analogous objection against the moral realist explanation of normative theory.

On The Semantic Objection

The semantic objection is this: anti-realists can accept Sturgeon-type singular moral explanations without accepting the moral realist metaphysical thesis. This objection can take the following analogous form against the abductive argument: anti-realists can accept the realist explanation of two empirical premises about normative theory without accepting the moral realist metaphysical thesis.

On the basis of the abductive argument, the naturalist might argue as follows: the analogous semantic objection against the abductive argument is not available since the realist explanation of normative theory does not allow us to have an anti-realist

semantic theory. Remember the relation between the abductive defence of moral realism and the suggestion about the moral realist philosophical package. One can have the moral realist philosophical package if one accepts the realist explanation of normative theory. An important implication of this claim is this: if one accepts the realist explanation in terms of the approximate truth of normative theory, one cannot have the anti-realist philosophical package. So, if one accepts that empirical premises of normative theory are best explained by the approximate truth of it, one cannot accept an anti-realist semantic theory, such as a non-cognitivist theory. If one thinks that one's normative theory is approximately true in the sense it describes the moral reality accurately, one should have a realist semantic theory which explains the relation between the use of moral terms predicated in normative theory and the reality of morality.

On the Moral Pessimistic Induction

The moral pessimistic induction is this: in a similar way the old scientific theories were the best explanatory theory of the time though they are now regarded as radically false, our best current normative theory may be regarded as false in the future.

The naturalist has a reply to this concern on the basis of the abductive argument. The abductive argument provides us with a reason to believe in the approximate truth of Boyd's consequentialism. The approximate truth of Boyd's consequentialism implies that the background assumptions of consequentialism are approximately true. This realist explanation of the background assumptions of consequentialism may be a reply to the pessimistic induction: the background assumptions of consequentialism which have been inherited from the old consequentialist theory are approximately true and the pessimistic induction is wrong about the explanation of these background consequentialist assumptions.

On the Normativity Objection

The normativity objection is this: the singular argument cannot preserve the normative force of morality. More specifically, the proponent of this objection would say that the singular argument alone does not provide us with moral norms while it only provides how moral properties relate to other properties in the world: the description of the metaphysical relations between moral properties and other natural properties does not provide us with moral norms which encourage us to value those moral properties.

One of the philosophical theories in Boyd's philosophical package provides us with a reply to this objection. The abductive defence of moral realism on the basis of Boyd's consequentialism provides a theory of moral reason. Given the fact about important human needs, we have indeed reason to keep our moral practices since that is the best way to satisfy these needs.

Above I have described how the naturalist could reply to the general objections against the basic argument on the basis of the abductive argument. I have claimed that the epiphenomenalist objection and the semantic objection can be rejected on the basis of the abductive argument. This means that when the naturalist defends his position by the abductive argument, the naturalist does not have to answer these two objections. I have also claimed that the alternative explanation objection can be rejected once we fully develop the abductive argument and clearly show the explanatory virtue of the moral realist explanation. This means that if the naturalist fully defends the abductive argument, the naturalist can have a full reply to this objection. I also have also described how the naturalist can have replies to the moral pessimistic induction and the normativity objection on the basis of the abductive argument.

So, the summary of the examination above is this: the epiphenomenalist objection and the semantic objection can be rejected on the basis of the abductive argument. Other

objections may be rejected if we fully develop the abductive defence of moral realism. We need to see if the full defence of the abductive argument can really provide us with plausible replies to these three objections against naturalism.

Obviously the replies I give above are very brief. Since the successes of the replies to the alternative explanation objection, the moral pessimistic induction and the normativity objection depend on the successful development of the abductive argument, I will discuss these objections in Chapter X.

Also, we should notice that the abductive argument is a new development of moral realist work. Since the argument is new, it provides us with some new insights into the debates concerning moral realism. For instance, the abductive argument has a premise about the empirical reliability of normative theory. Even moral realists do not often appeal to the empirical reliability of normative theory in the defence of moral realism. This may be a weakness: for the abductive defence of moral realism, one needs to defend the empirical reliability of normative theory. But once one defends certain sort of empirical reliability of normative theory successfully, this will be a new weapon for the defence of moral realism.

These considerations show that the defence of the abductive argument may provide us with good replies to the general objections against naturalism. So, the naturalist should pursue the possibility of the full defence of this argument.

3.5 Some Defects of Boyd's Suggestion

I have been describing how Boyd's suggestion works and how the argument he gives may provide us with a good argumentative resource for naturalistic moral realists. But Boyd's original suggestion has some defects. For the full defence of the abductive

argument, these defects need to be fixed. In this section, I will turn to consider such defects of Boyd's original suggestion.

The Status of the Argument

Boyd gives his argument on the basis of his version of consequentialism, and argues that expected empirical facts about his consequentialism are best explained in terms of the approximate truth of the theory. Boyd says that even when we employ other first-order theories, we should also be able to run the argument. He writes:

It is, moreover, pretty clear that a variety of plausible alternative conceptions of the foundations of morals satisfy the constraints we are discussing. If I am successful here in mounting a plausible defence of moral realism, given the substantive conception I will propose, then it is quite likely that the very powerful semantic and epistemic resources of recent realist philosophy of science could be effectively employed to defend moral realism on the basis of many of the alternative conceptions. I leave it to the defenders of alternative conceptions to explore these possibilities. The defense of moral realism offered here is to be thought of as (the outline of) a 'worked example' of the application of the general strategy proposed ...

I suggest here ... that the same sort of defense can be formulated on the basis of any of the other plausible competing moral theories. Thus, if the arguments I offer are correct, there is a reason to believe that the defender of any of the currently plausible general moral theories should defend her theory on a realist understanding of its content and should herself be a moral realist (Boyd 1988, pp. 202, 222).

What Boyd is saying here makes his original suggestion defective: it is simply an open question whether a similar abductive defence of moral realism can be given if different normative theories are employed.

To resolve this defect, we may simply try to run the argument by employing different normative theories. But this strategy invites another tricky issue. If the argument is run by different normative theories, are we required to hold that all different

normative theories are approximately true? This cannot be right, but this question needs to be answered. Otherwise, the status of the argument will remain unclear.

In response to this question, Boyd might say that the naturalist should be a consequentialist since this is a natural position he can take. Boyd writes as follows:

Many naturalist moral realists have also advocated some version or other of consequentialism as the substantive naturalist moral theory to which they are committed. Indeed, although nothing like entailment between these positions obtains, the idea that moral questions are questions about how we can help each other flourish seems central to contemporary naturalist moral realism. In a certain sense, some version of consequentialism seems to be the *natural* position for naturalist moral realists (Boyd 2003a, pp. 505-506).

But, as Boyd rightly indicates in the quote above, there should be no entailment between the abductive defence of naturalism and the acceptance of consequentialism at this point. The abductive defence of moral realism employing Boyd's consequentialism does not say anything about other normative theories.

Boyd's consequentialist flavour invites another question. What Boyd says in the quotation above seems to be suggesting that the position the proponent of the abductive argument should take is consequentialism. This implication surely makes the abductive argument less persuasive. Consequentialism is certainly controversial, and its opponents may think that the abductive defence of moral realism is not persuasive if it requires the acceptance of consequentialism.

Thus, this defect of Boyd's suggestion invites rather a difficult issue concerning the status of the argument. The naturalist needs to think how he responds to this issue.

The Problem of the Empirical Reliability of Normative Theory

There is a problem with Boyd's description of the empirical reliability of normative theory. It seems that what Boyd describes is the empirical reliability of *relevant social sciences*, not of first-order ethical theory. Boyd frequently writes that his

consequentialism is reliable since it enables us to satisfy important human needs. Obviously, such reliability is important for Boyd's consequentialism since the aim of it is to provide moral codes that by following we can satisfy important human needs. But if this is all about the reliability of his consequentialism, his description of this reliability as the reliability of consequentialism becomes problematic. According to Boyd, important human needs are investigated by the relevant social sciences (Boyd 1988, p. 203). If this is the case, the ways we best satisfy these needs would be provided by those relevant social sciences, not by first-order ethical theory. If so, we should attribute such reliability to those relevant scientific theories, not to moral theory. The conclusion is this: Boyd's presentation of the empirical reliability of first-order theory is not the right one for the first premise of the abductive argument.

The full defence of the abductive argument needs to give a more proper description of the empirical reliability of normative theory.

The Problem of the Theory-Ladeness of Normative Theory

There is also a problem with the way Boyd describes the theory-dependent features of normative theory.

In order to describe the theory-dependent features of his consequentialism, Boyd describes how our belief about democracy and slavery is formed. This example is supposed to show that our moral theorising concerning slavery depends on our knowledge of the moral importance of democracy. But Boyd's presentation does not clearly show a sort of theory-dependency we see in the scientific case. In the scientific case, there are four theory-dependent features: hypotheses presuppose background assumptions and theories, central issues depend on the theoretical context, the standard of confirmation depends on background theories, and there is the mutual relation between old theories and new revised theories. Although Boyd is right on that the ways

science and ethics are developed are theory-dependent, Boyd has not yet defended that these ways are exactly analogous.

In addition to this problem, there is a further issue we need to consider. Boyd attempts to make an analogy between the methods in science and the method of reflective equilibrium which is a standard method in ethics. But the method of reflective equilibrium is not the only method in ethics. For instance, Kamm indicates that her methodology differs from the method of reflective equilibrium. Kamm put more reliability on our initial judgements than the method of reflective equilibrium requires (Kamm 2007). Also, a version of act-utilitarian might not be compatible with the method of reflective equilibrium. Such theory might hold that Tom ought not to do *p*-ing since *p*-ing brings the best outcome though the principle of that act cannot be supported by the method of reflective equilibrium. Singer's consequentialist theory may be an example of such a theory (Singer 1972).

This poses the following question: is it plausible to hold that the theory-building procedures of science and ethics are analogous on the basis of the analogy between the methods employed in science and the method of reflective equilibrium? This question is related to the first issue I raised in this section. Different normative theories may employ different methods.

Summary of the Chapter

The conclusion of this chapter is this: Boyd's suggestion is good for naturalism, but the full defence of the argument Boyd suggests needs more work.

Boyd's suggestion is certainly a good one for naturalism since it contains a new argument for naturalism which has not been properly recognised before. We have also

seen that on the basis of Boyd's suggestion we may be able to have good replies to some objections against naturalism.

But we have also seen some defects of Boyd's suggestion. It is not clear what the status of Boyd's argument is. Also, there is a worry about Boyd's failing in describing the right kind of empirical reliability of normative theory. Boyd's reliance on the method of reflective equilibrium as a standard method of ethics may be also problematic.

These two conclusions motivate us to see the further development of the abductive defence of moral realism along the line Boyd suggests. I will do this job in the rest of this dissertation. Before I start this job, in the next chapter, I sum up what I have achieved so far and consider how the abductive defence of moral realism can be developed further.

Chapter IV

Prospect for the Defence of the Abductive Argument

Introduction

In this chapter, I sum up what I have achieved in the previous chapters, and lay out how the abductive defence of moral realism I outlined in the previous chapter can be further developed.

4.1 The Summary of the Previous Three Chapters

Chapter I

The aim of Chapter I was to articulate a philosophical position which fits with the assumption that there is a moral reality which is part of the natural world. I presented metaphysical ethical naturalism (naturalism, for short) as a position which fits with this general assumption. Naturalism holds the following theses: (MR1) there are mind-independent moral properties, (MR2) moral properties are Platonic *ante-rem* universals, (N) moral properties are natural properties, and (H) moral inquiry can be advanced by empirical ways of reasoning.

Chapter II

The aim of Chapter II was to find a good argument for naturalism. Through reviewing some recent work for naturalism, I suggested that the basic explanationist argument (the basic argument, for short) is a good argument for naturalism. In explaining the basic argument, I claimed that there are two ways to defend the basic argument: the first is the singular moral explanationist argument (the singular argument, for short) and the second is the abductive argument for moral realism (the abductive argument, for short).

I also claimed that the abductive argument had not been discussed enough in the literature, and there was a need to examine whether the abductive argument could be defended.

Chapter III

The aim of Chapter III was to elucidate the abductive argument on the basis of Boyd's original suggestion. My elucidation showed that the abductive is a good positive argument for naturalism. The elucidation also showed that the naturalist could have replies to the general objections against naturalism on the basis of the abductive argument. I also revealed some defects of Boyd's original suggestion. I claimed that to defend the abductive argument these defects need to be resolved.

There are the following significant points revealed in the previous chapters.

(1) The possibility of the abductive argument needs to be examined. The abductive argument might be a positive argument for naturalism which has not been discussed enough in the literature. Since Boyd's original suggestion has some defects, necessary supplementations need to be given for taking the full potential of the abductive argument;

(2) The development of the abductive argument might provide us with good replies to the objections against naturalism;

Then, how do we develop the abductive defence of moral realism analogous to the argument for scientific realism? To consider this point, we need to consider how the defects of Boyd's original suggestions can be resolved.

4.2 The Abductive Argument as a Placeholder Argument

One of the defects of Boyd's suggestion revealed in the previous chapter was this: it was not clear what the status of the abductive argument is. Boyd mentions the possibility of the abductive defence of moral realism on the basis of different normative theories. But this suggestion invites another tricky question: if the argument is run by different normative theories, are we required to believe in the (approximate) truths of those different theories?

In response to this question, I suggest that we should first accept Boyd's initial suggestion that the abductive argument may be defended on the basis of different normative theories. I suggest that the abductive argument should be understood as a *placeholder argument*: once we were given a specific successful first-order ethical theory, the argument could provide reasons to believe the approximate truth of that theory, and, consequently, the existence of natural moral properties posited in that theory.

As I indicated in the previous chapter, it is simply an open question whether the argument can be run when different normative theories are employed. This situation encourages us to *anyway* run the argument by employing different major normative theories. If the argument is run successfully employing different theories, such a success gives us more reasons to believe the truth of naturalistic moral realism since this shows that the argument works even when different first-order theories are employed. Also, the attempt of running the argument by employing different normative ethical theories is important to see the effect of the argument. If the argument can be run when we employ only some particular normative ethical theories, it may be thought that the argument supports naturalistic moral realism only when those particular normative theories are regarded as plausible theories.

So, in the next three chapters, I shall attempt to run the argument by employing three sample normative ethical theories: a rule consequentialist theory, an Aristotelian virtue ethical theory, and a Kamm-style common sense deontological theory.

But, obviously, my suggestion does not really answer the worry initially presented. What would be the implication of the abductive argument if we managed to run the argument by employing different normative ethical theories? Would all three theories be regarded as true moral theories? This couldn't be right, but then what should we think? My answer to this question at this point is this: at this point it is an open question whether the argument can be run by different normative theories. So, we do not really have to be concerned about this issue at this point. We should be concerned about this issue once we succeed in running the argument by different normative theories.

Since I ultimately argue that it is possible to run the argument by different normative theories, I will be discussing this issue in detail in Chapter X where I discuss various objections against the abductive argument.

4.3 On the Empirical Reliability of Normative Theory

Given the strategy above, I will try to run the argument by employing different normative theories. In running the argument, there are some issues we need to resolve.

The first issue we need to resolve lies in the way Boyd describes the empirical reliability of normative theory. In the previous chapter I claimed the reliability of normative theory Boyd was appealing to should be attributed to relevant social scientific theories, not normative theory.

This assessment of Boyd's suggestion leads us to the following general concern about empirical reliability for first-order ethical theory: perhaps first-order ethical theory is, *in principle*, not empirically reliable and there is no point of seeking such a

virtue. The concern is that it is not clear whether there is any such empirical reliability of moral theories which is confirmed by observation since there is an assumption that moral theories' primary aim is not to achieve such empirical reliability. For instance, Shafer-Landau says that moral principles are not 'inductive generalisations' (2007, p. 211), and continues as follows:

Unlike any of the recognized sciences, [moral] truths are normative truths that direct, guide, and evaluate, rather than (in the first instance) predict the course of future events or explain what has already occurred. Moral truths provide justifying reasons that are often ignored. Physics and geology and hydrology don't do that (Shafer-Landau 2007, p. 211).

Here, Shafer-Landau is saying that moral principles, such as 'killing an innocent person is wrong', are not meant to have any empirical implications for the world. The moral principle above provides us with a certain practical guide, such as 'we ought not to kill an innocent person'. It seems that this principle does not predict anything.

Shafer-Landau is right on the point that moral principles are normative in the sense that they have action-guiding nature. But moral principles' being normative does not need to exclude their being empirically reliable. Some ethical naturalists mention how moral principles could provide certain empirical implications (Brink 1989; Sturgeon 1998a; Boyd 2003b, a).

One thing we should learn from these ethical naturalists is that we should not think that a single moral principle alone can provide us with an observable prediction.

Although a single moral principle does not provide any empirical prediction, once the principle gets the support from certain auxiliary moral or non-moral propositions, the principle may be able to make certain observational predictions. This move should be accepted since even a single scientific theory is not capable of providing any

observational prediction if that theory is not given auxiliary hypotheses (Sturgeon 1998a, pp. 182-183; 2006, p. 241).

The following example shows how a moral principle makes a prediction with some auxiliary propositions. Suppose a consequentialist theory holds the following propositions:

- (1) An act is right if and only if that act enhances human flourishing.
- (2) A state is enhancing human flourishing if that state enhances basic human needs.
- (3) Allowing the organ trade without any restriction is not right.

(1) is an act-utilitarian claim about rightness. (2) is a theory of human flourishing. (3) is a substantial moral principle which prohibits free organ trade. Now, we can make a prediction on the basis of (1), (2) and (3):

- (4) Allowing the organ trade without any restriction does not enhance human flourishing (prediction).

Since (4) is derived from (3) with the auxiliary propositions (1) and (2), the truth of (4) may be evidence for (3) in the same way the confirmation of the prediction derived from a theory of physics may be evidence for that theory. Boyd does not clearly show how his consequentialist moral principles provide predictions in this way, but we can work on this by ourselves.

A sceptic of the empirical reliability of normative theory might further argue as follows: perhaps the above is a good example of how normative theory provides a prediction. But it is hard to believe that this prediction is confirmed: we can easily find some exceptions. These exceptions always disconfirm the empirical generalisations of normative theory.

The naturalist can concede that the empirical generalisations normative theory provides are not exceptionless universal generalisations. But it is controversial whether *ceteris paribus* laws which allow exceptions are not genuine laws. Indeed, the laws in the special sciences, such as sociology, psychology, medicine and biology, allow some exceptions. Relying on the plausibility of the claim that *ceteris paribus* laws are genuine, the naturalist could say that the empirical generalisations normative theory provides allows exceptions but such empirical generalisations are as genuine as the laws the special sciences provide.

Importantly, the special sciences' capability of providing *ceteris paribus* laws which enjoy certain empirical successes can be evidence for the approximate truth of the special sciences. The empirical generalisations in terms of viruses allow some exceptions: a law that a virus v causes a disease d allows exceptions (i.e. a person who has v may not get d though many people who have v usually get d). But it is hard to hold that the existence of some exceptions is evidence for the radical falsity of the theory of v which provides the law of v concerning d . Rather, the fact that many people who have v get d confirms at least the approximate truth of the theory. That is because the approximate truth of the theory explains the empirical success of the law of v though the success of the theory is not exceptionless. Since what the naturalist wants to make is an analogous claim in the moral case, it is enough for the naturalist to claim that normative theory provides *ceteris paribus* empirical generalisations.

Another sceptic about the empirical reliability of normative theory might argue as follows: it is typically the case that scientific realists appeal to science's capability of making novel predictions in their defence of scientific realism (cf. Musgrave 1988). According to a standard account of novel prediction, a predicted fact is a novel fact for a theory if it was not used to construct that theory – where a fact is used to construct a

theory if it figures in the premises from which that theory was deduced (Musgrave 1988, p. 232). The defender of the abductive argument also needs to appeal to normative theory's capability of making novel predictions. But it is hard to see how normative theory provides such novel prediction. Take (4), for instance. (4) cannot be a novel prediction since the premise about the enhancement of human flourishing is an important premise of the sample consequentialist theory.

In response to this worry, again, the naturalist can appeal to the current debate on the status of novel predictions. It has been a classic debate whether prediction more strongly supports a theory than accommodation does (cf. Whewell 1840; Mill 1843). It may be true that normative theory's capability of making novel predictions will be strong evidence for moral realism, but it is not necessary for the defence of moral realism. More importantly, there needs to be a further argument against the claim that accommodation alone cannot provide enough empirical reliability which is needed for the abductive defence of that theory. Thus, it seems to me, the naturalist does not have to be concerned too much about normative theory's capability of making novel predictions.

These considerations show that the notion of the empirical reliability of first-order ethical theory is not as implausible as some people such as Shafer-Landau might think.

However, there is a further issue the naturalist has to be concerned about: whether normative theory is really empirically reliable. I cannot conduct real empirical research in this dissertation to empirically confirm the reliability of normative theory. So, to defend the argument, I need to assume that social sciences can confirm the empirical reliability of normative theory. In order to make my assumption plausible, in running the argument by different normative theories, I am going to describe some empirical facts which constitute the reliability of those theories and which are not wholly

empirically implausible. What I mean here is that I try to suggest empirical facts which are likely to be confirmed by social scientists. After I describe these possible empirical facts with the assumption that social scientists confirm them, in chapter X I discuss the issue whether we should attribute empirical reliability to normative theory, rather than to relevant social sciences.

4.4 On the Different Methods of Ethics

The second issue we need to consider in running the argument is about Boyd's suggestion concerning the theory-dependent features of moral theorising. I indicated in the previous chapter that Boyd did not satisfactorily show the exact analogy between the theory-dependent features of science and the method of reflective equilibrium in ethics. I also mentioned that it is problematic to make the analogy between science and ethics with the assumption that the method of reflective equilibrium is the standard method of ethics. It was due to the fact that some moral theorists simply do not take the method of reflective equilibrium as a plausible method of ethics.

One thing we can say to this issue is this: we are going to run the argument by employing different normative theories and this issue will be naturally resolved since we will be seeing how different normative theories which employ different methods are similar to science. More specifically, in running the argument we will be seeing whether the second premise is compatible with different normative theories.

But, again, this is an empirical issue whether normative theory is developed in the similar holistic ways science is developed. Again, I cannot do real empirical research on this point in this dissertation. So, what I am going to do is this: I attempt to describe how relatively simple normative theories are developed. For this purpose, I use some thought experiments in which we imagine how normative theories are developed. In

giving these thought experiments, I consider how different normative theories can have similar theory-dependent features science has.

My responses to the issues concerning the empirical reliability and the theory-dependency of normative theory make my defence of the argument somehow thin. For the defence of the two empirical premises of the abductive argument, what I need is real empirical research on normative theory. But what I will give instead of such empirical research are thought experiments. Obviously, thought experiments cannot be substitutions of empirical evidence for the two premises. Nevertheless, I suppose that giving thought experiments can be at least a start of the defence of the argument. By giving these thought experiments, I can at least describe what sort of empirical finding can be evidence for the empirical reliability of normative theory. Also, I can at least describe the analogous theory-building procedures of science and ethics which will be important part of the abductive defence of moral realism. Thus, my giving thought experiments may be a guide for the empirical development of normative theory which will be important part of the defence of the abductive argument for moral realism. Thus, I suppose my argumentative strategy will be a contribution to the abductive defence of moral realism though it relies on thought experiments.

4.5 On the Moral Realist Philosophical Package

I would also like to discuss some issues on Boyd's suggestion about the moral realist philosophical package.

Although I have been claiming that Boyd's suggestion has not been discussed enough in the literature, it is simply false that Boyd's essay has been unfairly neglected. The situation is opposite: Boyd's essay has stimulated lively discussions in the literature.

Nevertheless, I still claim that Boyd's suggestion about the abductive defence of moral realism has not been clearly articulated and discussed enough.

Remember Boyd's suggestion about the moral realist package. Boyd claims that if the moral realist explanation on the basis of Boyd's consequentialism is accepted, various philosophical theories for moral realism become available. These philosophical theories provide us with replies to various objections against moral realism.

Concerning this suggestion, there are several issues we should consider.

- (1) Are the theories in the package plausible by their own light?
- (2) Are these theories persuasive enough to motivate anti-realists to accept the moral realist explanation?
- (3) Is it true that we can have analogous theory-packages when we defend the abductive argument on the basis of different normative theories?

I said that Boyd's essay has in fact stimulated lively discussions in the literature. These discussions are on (1). Particularly, there are many discussions on whether Boyd's semantic theory is a plausible theory⁷. For instance, Horgan and Timmons give their argument against Boyd's semantic theory on the basis of the Moral Twin Earth thought experiment (Horgan and Timmons 1991, 1992a, b). There are many reactions to Horgan's and Timmons's argument, and the issue is unsettled in the literature (Brink 2001; Viggian 2008; Lawrence, Margolis and Dawson 1999; Rubin 2008b).

Should I also discuss whether Boyd's semantic theory is defensible as these philosophers do for the defence of naturalism? I will not discuss Boyd's semantic theory as these philosophers do since it is not clear to me whether the defence of Boyd's semantic theory alone can be a strong defence of naturalism. As presented in the first chapter, naturalism is an essentially metaphysical thesis: naturalism holds that there are

⁷ Rubin discusses Boyd's metaphysical theory and argues against it (2008a).

mind-independent moral properties which are part of the natural world. It may be true that without having a plausible semantic theory which explains how moral terms get their meanings by the mind-independent moral properties, the defence of naturalism cannot be completed. Nevertheless, the naturalist always needs extra work in addition to the success of moral realist semantics since a moral realist semantic theory does not entail a moral realist metaphysical thesis (cf. Kahane Forthcoming). Famously, Mackie argues that the function of moral discourse is to state facts about objective moral values. This is a semantic claim which is in favour of realism while this undermines non-cognitivism. But Mackie defends his irrealism about moral facts with this semantic claim (1977). What this reveals is that the defence of a semantic theory which may support realism is not sufficient to defend realism. Since we are looking for an argument which defends naturalism's metaphysical claims, our having a mere semantic theory is not enough for the defence of naturalism. Indeed, the defence of Boydian semantic theory *needs* the thesis that there are mind-independent moral properties which are part of the world. Perhaps the real situation we are in is this: for the defence of Boydian semantic theory we need to defend the metaphysical thesis that there are mind-independent natural moral properties.

Now, I shall turn to consider the question (2). The consideration of (2) may strengthen the realist explanation in the analogous way the scientific realist explanation is strengthened by the scientific realist package. By considering (2) we might have a following argument which strengthens the moral realist explanation: the content of the moral realist package is plausible while the content of the moral anti-realist package is implausible; therefore we should accept the moral realist explanation which enables us to have the moral realist package.

The reflection on (1) partly answers (2). If there are some reasons to believe that the philosophical theories in the moral realist package are implausible, the package does not persuade someone to accept the realist explanation if that person is not persuaded by the realist explanation. The reflection on (2) also requires a comparison between the philosophical package the moral realist holds and the one the anti-realist holds.

I am not going to discuss this issue simply because the discussion on this issue is beyond the limit of this dissertation. I am going to leave this issue for the future research.

By the similar reason, I am not going to discuss (3). The discussion on (3) includes the examination of the content of the theory-package we take on the basis of, for instance, an example virtue ethical theory. Again, I will leave this issue for the future research.

Summary of the Chapter

This short chapter summed up what I achieved in the previous chapters and outlined what I would be doing in the following chapters. I also indicated the assumptions I would be holding in the defence of the abductive argument.

On the basis of the outline I gave in this chapter, I will start to run the abductive argument by employing different normative theories. The next three chapters will be the trial of Boyd's suggestion that the abductive defence of naturalism can be given on the basis of different normative theories. What I will do in these three chapters is to make an analogy between science and ethics: relying on thought experiments in which I describe empirical reliability of these normative theories and the theory-dependent ways they are developed, I will give the abductive defence of naturalism analogous to the defence of scientific realism.

Chapter V

In Defending the Abductive Argument (Part 1)

– a case of consequentialism –

Introduction

In this chapter, I will run the abductive argument by employing a sample consequentialist theory. The structure of this chapter is as follows; first, I give a sample consequentialist theory. Second, I give some thought experiments to describe (1) the empirical reliability of consequentialism, and (2) how consequentialism is developed in the analogous way science is conducted. This part is for the two empirical premises of the argument (‘first-order ethical theory is empirically reliable’ and ‘the theory-building procedures of first order ethical theory are not free from theoretical presuppositions’). Third, I give the moral realist explanation of the empirical premises about consequentialism.

5.1 Consequentialism

In this section, I construct an example consequentialist theory. The example theory is composed of following parts:

1. *Theory of Right Acts*: an act is right iff it conforms to a rule the general acceptance of which by people would have consequences at least as good as any alternative rule.
2. *Theory of Moral Goodness*: moral goodness can be characterised in terms of wellbeing. Wellbeing is characterised in terms of the satisfaction of vital needs. The states of affairs, character traits, institutions and policies are morally good if they contribute to achieving wellbeing.

The consequentialist theory presented here is a rule consequentialist one. The theory also holds that an act is right if we *expect* that following certain rules of act enhance overall wellbeing. From these assumptions, the theory holds that a rule of our conduct is morally right if we expect that by following that rule we produce wellbeing as much as any alternative rule.

In this chapter, I use the term, ‘consequentialism’, to refer to this particular example theory of rule consequentialism.

5.1.1 Theory of Right Acts

Consequentialism holds that an act is right if and only if we expect people’s following the general rule of that act contributes to the instantiation of moral goodness as much as any alternative rule. The underlying view of this theory is that moral goodness is prior to moral rightness: consequentialism explains the rightness of an act in terms of the goodness of that act. The rightness of keeping promises is explained in terms of the goodness of that act: keeping promises is generally good for creating trust between people, achieving common goals through cooperative work, etc. That is the reason why one’s keeping a promise is right.

Holding this theory of right acts, consequentialism needs to explain: (1) what moral goodness is, and (2) why we should act in the ways our acts enhance moral goodness. The theory of wellbeing explains what moral goodness is and why we ought to achieve it.

5.1.2 Theory of Wellbeing

According to consequentialism, moral goodness can be characterised in terms of wellbeing. Consequentialism holds the following view on wellbeing:

Wellbeing, as the satisfaction of needs

The wellbeing of sentient beings consists in the satisfaction of the needs sentient beings have (cf. Boyd 1988, p. 203).

According to this theory of wellbeing, one's life goes well if one satisfies certain needs one has. One's life goes badly if one does not satisfy these needs. Since this theory characterises wellbeing in terms of the satisfaction of certain needs, the theory should have an account of the notion of needs.

For this purpose, I borrow Wiggins's suggestion about the notion of needs.

According to Wiggins, there are two senses of the word 'needs'. One is the instrumental sense of needs: a subject x needs y if and only if x aims to achieve z , and y is necessary for achieving z (Wiggins 1991, pp. 7-9).

This account explains the basic structure of the notion: this account explains many cases where we appeal to the notion of needs. For example, Rob's need to get the train which reaches Cardiff at 3pm can be explained in terms of his aiming to get Cardiff at 3pm.

But this account alone cannot explain which needs are essential for wellbeing. It seems that all needs are not essential for wellbeing. It is not clear whether Rob's need to get Cardiff at 3pm is essential for his or others' wellbeing. If this need is essential for somebody's wellbeing, there must be a further explanation of the significance of Rob's getting Cardiff at 3pm. Thus, a more fundamental sense of the notion is required.

According to Wiggins, another sense of the term is absolute or categorical. The suggestion is as follows: x absolutely needs y only if x will be seriously harmed without

y (Wiggins 1991, p. 14; 2005, p. 33). The notion of ‘being seriously harmed’ is understood in the following way: x is seriously harmed if and only if x ’s continuous survival in a normal way as a member of the species is in peril. Such needs may be called as ‘vital needs’. The examples of vital needs are as follows: human beings need to have appropriate foods since they cannot sustain their lives without them. Human beings need appropriate clothes since their physical and mental aspects are seriously harmed without them. Human beings need minimum freedom of choice since the mental aspect of human beings is seriously harmed without it.

Given this understanding of the notion of vital needs, I modify the main claim of the theory of wellbeing as follows:

Wellbeing as the Satisfaction of Vital Needs

The wellbeing of sentient beings consists in the satisfaction of vital needs.

I have given some obvious examples of the vital needs human beings have. But these are not the all. How the other vital needs are known? The answer is that we can know vital needs from the relevant scientific theories together with the account of vital needs.

Boyd advocates a similar view. He writes as follows:

There are a number of important human goods, things which satisfy important human needs. Some of these needs are physical or medical. Others are psychological or social; these (probably) include the need for love and friendship, the need to engage in cooperative efforts, the need to exercise control over one’s own life, the need for intellectual and artistic appreciation and expression, the need for physical reaction, etc. the question of just which important human needs there are is a potentially difficult and complex empirical question (Boyd 1988, p. 203).

Boyd’s term, ‘important needs’, is synonymous with the term, ‘vital needs’. According to this suggestion, we can know vital needs through gaining certain knowledge of the

relevant sciences together with the account of vital needs. We know that children need to be vaccinated against certain diseases through knowing about those diseases on the basis of the medical sciences.

The notion of vital needs explains how we should compare the moral better-ness of two states of affairs. The theory holds that the satisfaction of vital needs is more morally important than the satisfaction of non-vital needs: a state of affair, x , is morally better than a state of affairs, y , if, other things being equal, in x more vital needs are satisfied than vital needs satisfied in y even if more non-vital needs are satisfied in y than non-vital needs satisfied in x .

Now, the normativity of consequentialism can be explained. Consequentialism requires us to act in the ways we satisfy vital needs. We should act in these ways since our lives will be seriously harmed if we do not satisfy our vital needs.

Given that moral goodness is characterised in terms of wellbeing and wellbeing is characterised in terms of the satisfaction of vital needs, we can know which states of affairs, character traits, institutions, and policies are morally good. Our disposition to keep promises is morally good since having such a disposition enhances wellbeing by causing mutual trusts between people. Maintaining just distribution is morally good since this practice contributes to people's wellbeing through satisfying people's sense of fairness. The prohibition of slavery is morally good since the prohibition of slavery enhances people's wellbeing by avoiding states in which slaves' vital needs are heavily diminished. The prohibition of unnecessary animal hunting is morally good since this policy contributes to the realisation of the wellbeing of some non-human sentient beings.

The underlying view is that the realisation of wellbeing is intrinsically valuable while various practices, such as keeping promises, maintaining just distribution, the

prohibition of slavery, etc., are morally good in their relation to wellbeing (cf. Korsgaard 1983).

5.2 The Empirical Reliability of Consequentialism

To run the abductive argument by employing consequentialism, the following points need to be explained: (1) the empirical reliability of consequentialism, (2) the theory-dependent ways consequentialism is developed, and (3) the moral realist explanation of (1) and (2). As I mentioned, I am going to increase the plausibility of (1) and (2) by giving some thought experiments. In this section, I shall explain (1).

In the previous chapter, a few points were made concerning the empirical reliability of normative theory.

First, against the doubt about the empirical reliability of normative theory, I insisted that a moral principle can provide observable predictions when relevant auxiliary moral and non-moral propositions are given. On this idea, I shall describe how consequentialism can provide empirical predictions.

Second, against the doubt about the exactness of predictions normative theory provides, I insisted that empirical generalisations normative theory provides do not have to be exceptionless generalisations. What first-order theory should provide are *ceteris paribus* laws in the similar way the special sciences provide such laws.

Third, I mentioned the debate concerning the epistemological status of prediction and accommodation and insisted that for the defence of the abductive argument we might not need to show that normative theory is capable of making novel predictions.

Bearing these points in mind, I shall describe how consequentialism can provide empirical predictions.

5.2.1 Prediction about People's Wellbeing

According to consequentialism, there is a close relation between the obtainment of morally good states of affairs and people's achieving wellbeing. From this, consequentialism can provide the prediction about people's wellbeing: if people follow the consequentialist moral principles, they achieve certain amount of wellbeing.

Consequentialist moral principles provide such empirical generalisation as follows. Take the moral principle that the prohibition of slavery is morally wrong. Here is how this principle together with relevant auxiliary propositions provides a prediction.

(1) A state of affairs is morally good if and only if that state enhances wellbeing (theory of moral goodness).

(2) The prohibition of slavery is morally good (specific moral principle).

(1) is a thesis about the value of states of affairs while (2) is a specific moral principle about slavery. From these two propositions, the following prediction can be made:

(P1) If slavery is prohibited, people generally enhance their wellbeing (observable prediction).

The truth of (P1) confirms (2) while the falsity of (P1) disconfirms (2).

We can have more predictions from other consequentialist moral principles. We can expect that by maintaining the practice of keeping promises we enhance wellbeing.

We can expect that by maintaining just distribution of goods we enhance wellbeing.

Then, the question is whether we could possibly *observe* the enhancement of wellbeing.

5.2.2 Subjective Measures of Happiness

There are a few ways to observe people's enhancing wellbeing. One way to measure wellbeing is by subjective measures of happiness.

By subjective measures of happiness, we measure people's beliefs about their happiness based on people's direct reports about their lives. People are asked such questions as, 'all things considered, how satisfied are you with your life as a whole these days?' (World Values Survey 2005), 'taken all together, how would you say things are these days? Would you say that you are very happy, pretty happy, or not too happy?' (cf. Kahneman and Krueger 2006, p. 6). Rob is regarded as *subjectively happier* than Tom if Rob's answers to these questions are positive while Tom's answers to these questions are negative. Given the fact that employing such a method is getting popular in various fields⁸ and there are some arguments for the reliability of such method, I assume that such method is reliable and people's subjective judgements about their lives can be reliably known by social scientists (Diener and Seligman 2004; Kahneman et al. 2004b; Kahneman et al. 2004a; Angner 2011).

It seems that subjective happiness is the indicator of people's wellbeing. Rob's positive answer to the life satisfaction question is the indicator of his satisfying his vital needs: his positive answer itself is part of his satisfying psychological vital need while it also reflects his satisfying other vital needs, such as having good family and friends, making positive efforts for his life-long projects, etc.

Given the idea that subjective happiness is the indicator of people's wellbeing, we can see how (P1) can be at least partly confirmed by observing people's answers to the life satisfaction question. Suppose that there are two societies. At $t1$, in both societies, slavery is accepted. At $t1$, the amounts of people's subjective happiness in both societies are similar. In both societies, some people answer very positively to the life satisfaction question while many slaves' answers are negative. Then, suppose at $t2$, later than $t1$, in

⁸ For instance, Kahneman and Krueger Kahneman, D. and Krueger, A. B. 2006. Developments in the Measurement of Subjective Well-Being *Journal of Economic Perspectives* 20(1), pp. 3-24. reports that in mainly economic journals more than one hundred papers were published analysing data on self-reported life satisfaction or happiness from 2001 to 2005.

one society slavery is prohibited and there are no slaves, and in another society slavery is still accepted. At t_2 , the amounts of people's subjective happiness in two societies are different. In the society where slavery is prohibited, there is the increase of the total amount of subjective happiness due to the fact that many ex-slaves give positive answers to the question. In the society where slavery is still accepted, there is no significant difference in the amounts of subjective happiness between t_1 and t_2 . The implication of this story is that the observation of people's subjective happiness at t_1 and t_2 confirms (P1).

We can set up similar social experiments to assess other moral principles' predictions. We can observe how people answer to the life satisfaction question in the following cases: one group of people keep promises while another group of people do not care about keeping promises, in one society goods are fairly distributed while in another society goods are given exclusively to one particular group, etc.

It is an empirical matter how people answer to the life satisfaction question in these cases. But it is conceivable that people's answer to the life satisfaction question will be positive if the consequentialist norms are internalised in their society.

5.2.3 Objective Measures of Happiness

Since subjective measures of happiness can assess people's wellbeing, it is natural to think of objective measures of happiness which also assess people's wellbeing without relying on how people feel about their lives.

Life expectancy may be an objective measure of people's wellbeing. The high life expectancy of a society is a reflection of people's normal continuous survival which is part of their wellbeing. In an opposite way, suicide rates can be regarded as the indicator of people's not satisfying vital needs. If the suicide rate of a society is high, this

indicates people's not satisfying some vital needs, such as psychological and sociological vital needs.

By using these empirical methods, we can confirm or disconfirm the predictions consequentialism provides. If the moral principles consequentialism provides are true, we should be able to satisfy our vital needs by following those moral principles. The satisfaction of our vital needs is reflected in the subjective and objective measures of happiness.

Someone might object as follows: what the above scenarios describe is not the reliability of consequentialism, but of relevant scientific theories. This is the same objection I raised against the way Boyd describes the reliability of his version of consequentialism.

I believe that this objection can be better answered on the basis of what I present here than the answer one could provide on the basis of Boyd's presentation of his consequentialism. The general idea I would like to generate is this: the empirical predictions suggested can be made only by normative theory since the predictions are about the relation between moral properties and other non-moral properties. Only normative theory can point out what moral properties are.

I will not fully develop this line of reply here since the objection can be regarded as a general objection to the idea of the empirical reliability of normative theory. This objection will be revisited in Chapter X.

Summary of the Section

In this section, I have described what sort of empirical generalisation consequentialism can provide. My answer is that consequentialism can provide the empirical generalisation of the relation between people's following moral principles and people's wellbeing. I have suggested that both subjective and objective measures can be the

indicator of people's wellbeing. By employing these measures, social scientists can observe the relation between morally good states of affairs and people's wellbeing.

Perhaps it is not surprising that we can test consequentialist moral principles in this way. Consequentialism is primarily concerned with the consequence of the act, or the acceptance of the general rules of acts in question. So once we are given a theory of value which tells us which states of affairs are morally valuable, we should be able to empirically test a suggested principle by observing whether the good consequences arise when the principle is employed.

Someone might wonder whether we could possibly test some basic propositions of the theory of moral goodness, such as, 'a state of affairs is morally good just in case that state of affairs enhances people's wellbeing'. Can we empirically test the plausibility of this proposition?

I take this as the question whether any statement which tells us some sort of normativity can be empirically tested against the world. In one sense, statements which express some sort of normativity *can* be tested against the world, if these statements express a sort of hypothetical normativity. For instance, we can test whether the following claim is true or false against the world: it is good for Rob to take the medicine to cure his illness. This claim is true if Rob's taking the medicine really cures his illness. The medicine's capability of curing Rob's illness is empirically testable. But the question is not about the hypothetical normativity of wellbeing. The question is about the testability of the moral normativity of wellbeing: can we test the following claim, 'it is good to achieve wellbeing (period)'?

I leave this question open for the following two reasons. First, in Chapter X, I discuss what sort of normativity naturalism can provide on the basis of the abductive argument. Second, I think that the empirical reliability described above is enough to

generate the moral realist explanation of consequentialism. Thus, at this point, I leave this question open.

5.3 The Theoretical Presuppositions of Consequentialism

I now turn to consider the question about theory-dependent features of consequentialism, specifically whether they exist and if so whether their role would be analogous to the theory-dependent features of science. The theory-dependent features I need to describe are: (1) a (moral) hypothesis is suggested based on background moral assumptions, (2) a (moral) hypothesis is suggested as a possible answer to a question which is from the theoretical tradition, (3) the standard of confirmation employed in the procedure is dependent on background (moral) assumptions, and (4) there is the mutual relation between old moral principles and revised moral principles.

As I mentioned in the previous chapter, the question whether there are such theory-dependent features of normative theory is an empirical question. Social scientists settle this issue. Thus, the full defence of the second premise of the argument needs the empirical investigation of consequentialism.

To describe these theory-dependent features of consequentialism, I attempt to consider how the sample theory would be developed and revised. For this purpose, I give a thought experiment in which people accept the sample consequentialist theory and try to develop their theory.

5.3.1 Carol's Society

Carol, who is a consequentialist moral theorist, lives in a society whose inhabitants employ consequentialism as a plausible theory. In addition to the basic propositions I presented above, the people in Carol's society hold the following particular moral principles.

Specific Moral Principles

- a. Maintaining persons' free choices is morally good in so far as their choices do not significantly diminish others' wellbeing
- b. Having good relationships within family is morally good
- c. The elimination of tensions among people is morally good
- d. Maintaining certain just distribution is morally good
- e. Maintaining the practice of revenge is morally good

All of these specific moral principles are meant to achieve the consequentialist theoretical end: achieving maximum expected wellbeing.

The last moral principle the people in Carol's society hold is that maintaining the practice of revenge is morally good. Note that in this society there is no legal institution which systematically gives people punishment. The people in Carol's society believe that if Rob's beloved daughter is killed by Tom, and Tom did not have any justifiable reason to kill Rob's daughter, Rob's killing is morally right since the act is an instance of revenge.

There are a few reasons why the practice of revenge is regarded as morally good and acts of revenge are right in Carol's society. First, as we do, the people in Carol's society have special emotional attachments to their own family. If a family member is suddenly killed with no good reason, people will seriously suffer from it, and they might have a strong desire to avenge the family member who is killed. The death of the beloved comes as a terrible shock to the people who lose their beloved, and if these people are not able to avenge the death, they will suffer for the whole of their lives. Such people might not be able to live good lives since the grudges they have against the murderer are deep and this causes the problems in their lives. For those people, to avenge the tragic death is good not only for the immediate satisfaction of their desires,

but for the realisation of other vital needs such as the mental need of recovering from terrible shock which cannot be satisfied if they are not allowed to avenge the tragic death.

There is another reason why the people in Carol's society believe that revenge is morally good. The practice of revenge is effective to terrify people who want to seriously harm others, such as to commit murder. If one kills somebody without any good reason, one has to run a great risk. The family members of the person killed try to avenge the death of their beloved on the murderer. The murderer is targeted by those avengers for the whole of his life. Keeping the practice is effective to prevent some future crimes and, in this way, contributes to the enhancement of wellbeing.

5.3.2 Revising Consequentialism

The people in Carol's society follow the consequentialist moral principles, including the principle about revenge. Then, the social scientists in Carol's society observe the following phenomena:

- (a) People's achieving certain amount of subjective happiness;
- (b) The realisation of good relations within family members;
- (c) People's certain hesitation to commit murder due to the existence of the practice of revenge;
- (d) Distrust in society;
- (e) Tensions between different families;

(a), (b) and (c) support the plausibility of the moral principles. (a) confirms the moral principles since (a) shows that people's wellbeing is reliably enhanced by people's following the moral principles. (b) also supports the moral principles: according to one of the background moral principles, having good relations within family is essential for

wellbeing. (b) shows that people's following the moral principles enhances people's having good relations within family. (c) also supports the moral principles: the decrease of the number of murders obviously contributes to the wellbeing of people in many ways. It should be noted that the social scientists discovered that the practice of revenge also contributes to (a), (b) and (c). The people who conducted revenge are feeling a certain amount of subjective happiness. The family who conducted revenge have established a strong bond within them. The practice of revenge is certainly terrifying people.

But (d) and (e) are problematic. (d) and (e) may not be compatible with some of the consequentialist moral principles. What are causes of (d) and (e)? The social scientists in Carol's society discovered that the main source of (d) and (e) is the practice of revenge. When the people formally accept the practice, the people whose beloved are killed by unjustifiable murder actively start to avenge their beloved on the criminals. Some people kill others in the name of revenge. Such killings cause serious tensions between people. In some cases, family members of the criminals try to protect their own family members. In such a case, a serious tension between two family groups appears. Once such a tension is established, it exists for long time. The social scientists in Carol's society observe that sometimes one act of revenge causes a long history of conflict between some groups of people. Such a long conflict dramatically diminishes people's wellbeing in various ways. The psychologists in Carol's society also find that people in such a conflict cannot live good lives since they tend to lose their control and cannot stop harbouring grudges against the opponent. Obviously, being in such a state is problematic for people's wellbeing.

Carol considers as follows: allowing the practice of revenge is morally better than not taking any action to unjustifiable murders. The social scientists show that the total

amount of wellbeing people achieve in a society where revenge is allowed is higher than the total amount of wellbeing people achieve in a society where people are not allowed to do anything towards unjustifiable murders. But the social scientists also observe that allowing the practice of revenge is not able to stop the harbouring of grudges. Such a state should be avoided since having such a state in society dramatically diminishes people's wellbeing. One of the moral principles also says that the elimination of such tensions is morally good.

Given these considerations, Carol thinks that having a proper legal system which gives criminals appropriate punishment is an alternative way to maintain just distribution. By having a certain legal system, people whose family members are killed can still satisfy their psychological needs. Criminals get plausible punishments. Having a proper legal system might also eliminate the existing tensions originally caused by the practice of revenge.

Given this consideration, Carol proposes as follows:

- (1) Maintaining the practice of revenge is not morally appropriate.
- (2) Having a plausible legal system is morally good.

Now, let us see how Carol revises consequentialism.

Right Acts

The basic principle of the theory remains the same. The theory still keeps the basic consequentialist assumption that rightness of an act depends on the outcome of the general rule of that act. But the content of the theory has changed. The theory used to hold that it is right to avenge the tragic death of the beloved. The theory now says that it is not right to directly avenge the tragic death of the beloved while it is right to appeal to a plausible legal institution for the proper punishment of the crime.

Wellbeing

The basic principle of the theory remains the same. The theory says that wellbeing is composed of the realisation of needs, and it is the object which ought to be pursued. The theory's another normative claim that vital needs are morally superior to non-vital needs also remains unrevised.

Some parts of the theory of wellbeing change.

(1) The moral principle about revenge is radically revised. The new theory says that maintaining the practice of revenge is not morally good despite the fact that the theory used to say that the practice is morally good. The theory now says that a legal system's giving criminals appropriate punishment is a morally good way to avenge one's beloved's tragic murder.

(2) Some modifications are made on the principles of liberty and just distribution.

According to the principle of liberty, maintaining people's free choices is good in so far as it does not diminish others' wellbeing. This principle implies that Tom does not have the freedom to kill Rob's daughter even if Tom strongly wants to do so: such a general acceptance of this act dramatically diminishes people's wellbeing. The liberty principle, however, may not imply that after Tom killed Rob's daughter Tom's freedom should be restricted. The liberty principle alone cannot say anything about Tom's freedom if Tom's life does not diminish other people's vital needs, though he did kill Rob's daughter. It used to be the case that Tom should be frightened by Rob's attempt of revenge. But, again, this does not imply that Tom's freedom ought to be restricted in certain ways. Now, the principle of punishment by a legal system says that Tom's freedom is strictly restricted even if this is the case that Tom's acts do not diminish other people's vital needs now. Due to the fact that Tom dramatically diminished the

vital needs of Rob's beloved daughter and Rob himself, Tom is going to be given a proper punishment.

The principle concerning just distribution is also revised. According to the principle of just distribution, it used to be the case that giving Rob an opportunity of revenge is an instance of just distribution. Now the principle says that giving Rob an opportunity of revenge is not a proper instance of just distribution. Rather giving Rob an opportunity to appeal to court is a proper instance of just distribution.

(3) Other moral principles remain the same. Even some principles revised above still keep their basic theoretical commitments. For instance, the principle of just distribution says that maintaining just distribution in society is basically morally good though there are some cases where we need to be sensitive to how some opportunities are distributed.

5.3.3 Theoretical Presuppositions

In the scientific case, theoretical considerations play various important roles.

Postulating the existence of theoretical entities, such as atoms, genes, viruses, and so on, scientists propose hypotheses, set up experiments and make observations in those experiments. In the previous chapter I listed the four theory-dependent features which can be seen in the theory-building procedures of science. Below I describe some theoretical features in Carol's theorising which can be taken as analogous to the scientific ones.

Hypotheses Presuppose Background Assumptions and Theories

The way Carol proposes her moral hypotheses depends on the theory of right acts. The theory of right acts provides the fundamental moral principle of consequentialism: an act is right if and only if we expect that the acceptance of the general rule of that act produces the maximum expected value. Carol attempts to find moral principles which enable us to better achieve wellbeing. When Carol suggests that a proper legal body's

giving criminal appropriate punishment is morally good, she relies on the principle of right acts. She suggests the hypothesis since she assumes that a practice which enhances wellbeing is morally good, and an act that practice requires is right.

Carol's theorising also depends on the theory of wellbeing. According to the theory, a state of affairs which diminishes the satisfaction of people's vital needs is morally not good. Carol's theorising relies on this assumption. She proposes the moral principle of punishment to avoid states of affairs which diminish the realisation of people's vital needs.

Central Issues Depend on the Theoretical Context

One of the central issues in normative theorising in Carol's society is about how just distribution should be conducted. This is due to the assumption that maintaining just distribution in general contributes to the enhancement of wellbeing, but theorists do wonder how such just distribution should be conducted. Since this is one of the central issues in her community, Carol is able to revise the just distribution principle given that maintaining the practice of revenge is not a good instance of just distribution.

The Standard of Confirmation Depends on Background Theories

The observations, (a), (b) and (c) confirm the consequentialist moral principles while (d) and (e) are problematic. This judgement is also dependent on background consequentialist assumptions. On one hand, (a), (b) and (c) confirm the moral principles since there is the general assumption that the obtainment of morally good states of affairs is relevant to the enhancement of people's wellbeing. One's having certain amount of subjective happiness, having good relations within family and not being murdered with no good reason all consist in one's wellbeing. On the other hand, (d) and (e) disconfirm the moral principle about revenge since there is the general assumption that the obtainment of morally good states of affairs is not relevant to the realisation of

states which diminish people's wellbeing. Tensions between people and distrust in society both diminish people's wellbeing.

There is the Mutual Relation between Old Moral Principles and Revised Moral Principles

Carol's revision theory also shows the mutual relation between old moral principles and revised moral principles. Carol revises the two moral principles of liberty and just distribution. Her revision is based on the assumption the moral principles of liberty of just distribution are basically correct. From this assumption, Carol makes some modifications on both principles.

All of these theory-dependent features are seen in the thought experiment I give. Since the premise, 'the theory-building procedures of first-order ethical theory is not free from theoretical-presuppositions', is an empirical premise, I am not entitled to say that the above considerations show the truth of the premise. Nevertheless, these considerations do describe what sort of theoretical features of consequentialism can be analogous to the theory-dependent features of science. And, it is not wholly inadequate to assume that once moral theorists are under the appropriate circumstances with full social sciences, they might have these theory-dependent features as I described.

5.4 The Moral Realist Explanation of Consequentialism

Above, I described how consequentialism could be empirically reliable and how its theory-building procedures could be analogous to the theory-dependent features of science. Now let us assume these two empirical premises. Then, we are asked: what is the best explanation of these two empirical premises about consequentialism? The proponent of the abductive argument argues that the approximate truth of consequentialism best explains these two empirical premises.

5.4.1 Constructivist Explanation

The second premise of the argument is typically explained in terms of constructivism, rather than moral realism. The premise says that the theory-building procedures of consequentialism are not free from theoretical presuppositions. The constructivist would say that such theory-dependent features are explained by anti-realist constructivism. He would say that the way Carol suggests her hypothesis shows that this procedure is meant to achieve the coherence between our moral intuitions, and the procedure is not meant to discover external moral facts. This procedure could find some moral principles which underlie our moral intuitions. But these moral principles are the reflection of our internal moral intuitions, not the reflection of moral facts which are independent of our reasoning of them.

5.4.2 No-Miracle Argument for Consequentialism

In response to the constructivist explanation, the naturalist (who is a moral realist) would say that in order to give a plausible explanation of the premise about the theory-building procedures of consequentialism, we need to see how the premise is explained in conjunction with the other premise, namely that consequentialism is empirically reliable. The theory building procedures of consequentialism is theory-dependent, but consequentialism is also empirically reliable. Consequentialism is capable of making predictions, and, we are assuming here, that these predictions are empirically confirmed by the social scientists. Consequentialist moral principles provide the empirical generalisation that when morally good states of affairs, character traits, policies, and institutions obtain, people achieve a certain amount of wellbeing. This prediction is made on the basis of the assumption about moral properties consequentialism posits. Why is the empirical prediction made by this particular theoretical tradition accurate? This can be explained in terms of the approximate truth of consequentialism. As

consequentialism posits, there are real moral properties certain states of affairs, character traits and policies possess which are relevant to the enhancement of wellbeing. This is the reason why the theory is capable of providing predictions about people's wellbeing by referring to those moral properties. If there are no such moral properties as consequentialism posits, it is hard to explain why consequentialism's theory-dependent methods are capable of producing empirically reliable moral principles. Also, we may expect that the development of consequentialism, such as the revision of the revenge principle, leads to improvements in the empirical reliability of consequentialism. We can expect that if people follow Carol's revised moral principles they achieve more wellbeing than they used to achieve by following the revenge principle. The only alternative explanation for the empirical success of consequentialism would be the one in terms of a miracle. The miracle explanation would be something as follows: although there is no genuine relation between moral properties and the enhancement of wellbeing, we can miraculously achieve wellbeing by following the consequentialist moral principles. Obviously, the realist explanation is better than the miracle explanation: the assumption of a miracle is hard to defend and the realist explanation which does not have this assumption possesses the explanatory virtue of simplicity.

Does the approximate truth of consequentialism imply the existence of mind-independent natural moral properties? It seems so.

First, the approximate truth of consequentialism implies that the theoretical description consequentialism provides are relatively similar to the reality of morality. The implication is that there are such moral goods as the prohibition of slavery, just distribution, a legal body's giving appropriate punishment, etc.

Second, these properties seem to be mind-independent. The following example shows this point: the moral goodness of the prohibition of slavery is determined not by

our having evidence for it, but by the relation the prohibition has with people's wellbeing. The prohibition of slavery does enhance people's wellbeing, regardless of whether the importance of the policy is recognised by people. Some empirical facts are supposed to support this assumption. For instance, the observation of people's enhancing wellbeing by employing the policy of the abolition of slavery confirms that there is a law-like or causal relation between people's enhancing wellbeing and the abolition of slavery.

Third, moral properties posited by consequentialism seem to be natural properties. The revision procedure Carol conducts shows this point. The account of the moral goodness of just distribution is modified because of some empirical findings. Given these findings, Carol modifies the account of just distribution. Although she does not set up a 'social' experiment, she finds some problems of the account in a sort of social experiment. She finds that the application of the current account of just distribution causes some problems where this account is employed as a plausible moral principle. Given this empirical result, she modifies her account of just distribution. This procedure shows that the goodness of just distribution is an object of experimental and theoretical investigations, and, in turn, shows that the nature of the goodness of just distribution is investigated *a posteriori*. Thus, the goodness of just distribution can be regarded as a natural property which is the object of empirical investigation.

Hence, the approximate truth of consequentialism implies the existence of natural moral properties. This supports the second premise of the basic explanationist argument: the existence of natural moral properties is ineliminable in the best explanation of phenomena we experience.

Someone might wonder if the combination of the two empirical premises about consequentialism could be better explained in terms of anti-realist grounds than the

realist explanation. Again, this objection can be regarded as a general objection to the realist explanation of first-order ethical theory. So, I shall discuss this objection in Chapter X in which I discuss some objections to the abductive argument.

Summary of the Chapter

In this section, I have run the abductive argument by using a sample consequentialist moral theory. I have shown that the argument could be run when we were given full social sciences which support the two empirical premises of the argument, and the realist explanation would be better than the explanation in terms of a miracle.

Having examined how well the argument works for a more general version of consequentialism than that considered by Boyd, I shall now turn to the question of whether we could run the argument by using different normative theories. In the next chapter, I investigate whether the argument could be run if a sample virtue ethical theory is employed, and in the following chapter I investigate the argument could be run if a sample theory of deontology is employed.

Chapter VI

In Defending the Abductive Argument (Part 2)

- a case of virtue ethics –

Introduction

In the previous chapter, I investigated how the abductive argument could be run when a sample consequentialist theory is employed. Leaving aside some objections which I shall discuss in later chapters, I concluded that the abductive argument could be run when we employed consequentialism as our sample theory.

Does this imply that the abductive argument could be run only if our first-order theory is consequentialism? What would be the case if our best theory was non-consequentialist theory?

To answer this question, I shall investigate how far the abductive argument could go. I investigate whether the argument could be run when I employed different normative theories. The success of this project implies that even if our first-order ethical theory was non-consequentialism, the abductive argument would give us a reason to believe the truth of moral realism and, in turn, naturalism. In this chapter, I shall consider how the abductive argument could be run if a sample theory of *virtue ethics* was employed.

6.1 Virtue Ethics

As a sample virtue ethical theory, I construct a neo-Aristotelian virtue theory based on the theories developed by Foot and Hursthouse (Hursthouse 1999; Foot 2001, 2002). In

this chapter I use the term, ‘virtue ethics’, to refer to this particular version of virtue ethical theory.

The sample virtue ethical theory is composed of the following parts.

Theory of the Moral Virtues: The moral virtues are the excellence of the will of a person. The possession of the moral virtues benefits the possessor in the way the possessor gains characteristic goods for human beings.

Theory of Human Goodness: Human goodness consists in the life characteristically lived by a person who is good qua human being. The moral virtues make the possessor good qua human being.

Theory of Right Acts: Right acts are the acts which are characteristically performed by the virtuous person in the circumstances.

The sample theory is a neo-Aristotelian virtue ethical theory which holds the view that the virtues have a special relation with human goodness or *eudaimonia*. According to this view, one’s life goes well if one is achieving the right ends which are characteristically good for human beings (Foot 2001, pp. 96-97). To give an account of human goodness, the theory refers to human nature. The theory’s reference to human nature makes the theory a form of Aristotelian naturalism which is based on the theory of human nature (Hursthouse 1999, p. 192).

This approach is different from ‘agent-based virtue theory’ developed by Slote (2001). Agent-based theory is similar to neo-Aristotelian theory since both of them focus on persons’ inner traits. But agent-based theory is different from neo-Aristotelian theory. Agent-based theory gives an account of right acts purely in virtue of the motives, dispositions and inner life of moral individuals without mentioning the notion of human goodness or *eudaimonia*. According to agent-based theory, the motives, dispositions

and inner life of moral individuals are fundamental, so these notions explain what an *eudaimonic* life is, not the other way round (2001, pp. 6-7). On the other hand, in the Aristotelian framework, the motives, dispositions and inner life of moral individuals are not prior to the notion of human goodness. There is no hierarchy between them. Thus, the sample Aristotelian theory is structurally different from Slote's agent-based theory.

As a normative ethical theory, the sample theory should explain two things. The theory should explain what the moral virtues are. Also, the theory should explain why we ought to be virtuous. Particularly, the theory should claim that we ought to be virtuous since the moral virtues themselves give us the ultimate reason to be virtuous. If the theory says that we ought to be virtuous since being virtuous is the best way to maximise the desired outcome, the theory is a virtue-focused, but, consequentialist theory, not a virtue ethical theory (Crisp 2010, p. 24). This point is particularly important since we are seeking the possibility of running the abductive argument by employing a non-consequentialist theory. The theories of the moral virtues and human goodness explain this point.

6.1.1 Theory of the Moral Virtues

According to the theory of the moral virtues, a virtue is a person's disposition to act in certain ways, and by acting in such ways the person gains certain benefits (Foot 2002, pp. 2-3). This account is ambiguous. Someone might think that there are some dispositions which are beneficial for the possessor though they are hardly called moral virtues. For instance, my capability of running fast seems to be a disposition which gives me certain benefits. But we think that such a disposition is not a moral virtue. Rather such a disposition seems to be one of physical strength. In a similar way, my good memory is a disposition which gives me certain benefits. But, again, we do not think that such a disposition is a moral virtue. Rather such a disposition seems to be one

of mental strength. Thus, if we define the moral virtues as dispositions which benefits the possessor, the definition remains ambiguous (Foot 2002, pp. 3-4).

The Excellence of the Will

To avoid this ambiguity, the theory explains another aspect of the moral virtues.

According to the theory, the moral virtues are *the excellence of the will* (Foot 2002 *ibid*).

Here, 'will' should be understood in a wider way: human will includes various features of our dispositions which may be the object of moral assessment.

First, a person's having appropriate intentions are counted as a part of the excellence of his will (Foot 2002, p. 4). Tom's intention to be generous is counted as a part of the excellence of his will, and his having that intention is a sign of his generosity. On the other hand, Tom's giving his poor friends some money is not regarded as a generous act if Tom does not have a voluntary intention to be generous and he is forced to take such an action.

Second, a person's appropriate emotional reactions toward the situations are counted as a part of the excellence of his will. Looking at a person who is in trouble, a strong desire to support that person comes up in Tom's mind. Tom's having such a strong desire is part of the excellence of his will, and it is a sign of his benevolence. On the other hand, Rick does not have any sympathy with the person in trouble despite the fact that Rick understands that the person needs his help. Rick's indifference is a sign of his lack of the virtue of benevolence.

Third, a person's capability of recognising reasons for certain action is counted as a part of the excellence of his will. The courageous person is able to see the reason why a courageous act is needed in the circumstances (Hursthouse 1999, p. 207). If we ask the courageous person why he acts in that way, he is able to explain the reason why such an act is morally demanded. On the other hand, if he lacks this capability and acts

courageously having no understanding of why such an act is needed, this may be a sign of his lack of a proper virtue of courage. In short, a virtuous person is somebody who can respond to appropriate reasons.

Fourth, a person's willingness to achieve proper ends is counted as a part of the excellence of his will. Tom and Rick both know that James, one of their friends, is in trouble and they should help him though helping James costs a lot. If Tom has a will to help James despite the difficulty, Tom's willingness to achieve this end is counted as part of the excellence of his will, and Tom's having this willingness is a sign of his virtue. On the other hand, if Rick does not have a will to help James though he knows how he can help James, Rick's lack of the willingness to help James is part of the badness of his will (Foot 2002, p. 6).

These features of a person can be part of the excellence of that person's will. As the explanations of these features describe, they are aspects of a person which are the object of moral assessment. A person's moral virtues are characterised in terms of these features of the person.

The Doctrine of the Mean

The theory also holds 'the doctrine of the mean' which explains an interesting feature of the moral virtues. According to the doctrine, the moral virtues are composed of having proper emotional reactions and taking proper actions, in the right time, about the right things, towards the right people, for the right end and in the right way (cf.

Aristotle:1106b20-22; Crisp 2006, p. 159). So, for instance, a truly courageous person is somebody who can take a brave act in the right time, about the right things, towards the right people, for the right end and in the right way. On the other hand, a person who is not truly courageous might take a brave act for some bad ends, such as for protecting the welfare of oneself which he gains through unjust business. The doctrine could be a

useful indicator of a proper moral virtue when we attempt to give a formal account of that moral virtue.

6.1.2 Theory of Human Goodness

Another important part of virtue ethics is its theory of human goodness. According to the theory, there are certain ways we human beings should live. To find such good ways of living, first, the theory provides an explanation about the word 'good'. According to the theory, 'good' is an adjective 'in the class of attributive, to which, for example, 'large' and 'small' belong, contrasting such adjectives with 'predicative' adjectives, such as 'red' (cf. Geach 1967; Foot 2001; Thomson 2008). This classification is important since this suggests that the account of goodness is given only when a noun phrase is given. For instance, the account of largeness cannot be given unless we know something about the object which is supposed to be large. The account of smallness cannot be given unless we know something about the object which is supposed to be small. In the same way, the account of goodness is given only when we know something about the object which is supposed to be good.

The object which is supposed to be good in this case is human beings. So, for having an account of the goodness of human beings, the information about human beings is needed.

The theory provides the following characteristic ends of human beings as the information which is needed for having the account of human goodness.

- (1) Individual survival through the characteristic life span of such a member of such a species;
- (2) Continuance of the species;
- (3) Characteristic freedom from pain and characteristic pleasure or enjoyment;
- (4) The good functioning of the social group (Hursthouse 1999, pp. 198-201).

Provided that these are the characteristic four ends human beings have, we can understand what sort of life is a good human life. Someone's life is good qua a life of human beings if that life properly satisfies these four ends.

Now, we can make a link between the theory of human goodness and the theory of the moral virtues. We can understand moral virtues as dispositions which are needed for achieving these four ends. We can have a following definition of virtue: a disposition, *d*, is a moral virtue if and only if the possessor's living in the accordance with *d* contributes to one or more than one of the four ends.

This account of moral virtue allows us to understand what the moral virtues we ought to possess. Hursthouse writes as follows:

Is it not plausible to say that, for example, courage plays much the same sort of role in human life as its analogue does in that of, say, wolves? Good wolves defend themselves and their cubs and each other, and risk life and limb as the pack attacks the prey, thereby fostering their individual survival, the continuance of the species, and the particular way the members of the social group co-operate in order to secure food for the group and protect themselves from danger. Human beings who are good in so far as they are courageous defend themselves, and their young, and each other, and risk life and limb to defend and preserve worthwhile things in and about their group, thereby fostering their individual survival, the continuance of the species, their own and others' enjoyment of various good things, and the good functioning of the social group (Hursthouse 1999, p. 209).

Without honesty, generosity, and loyalty we would miss out on one of our greatest sources of characteristic enjoyment, namely loving relationships; without honesty we would be unable to co-operate or to acquire knowledge and pass it on to the next generation to build on. And it has long been a commonplace that justice and fidelity to

promises enable us to function as a social, co-operating group (Hursthouse 1999, pp. 209-210).

The virtues of courage, honesty, generosity, benevolence, justice and fidelity are moral virtues since we need these virtues to live a life which characteristically achieve the four ends.

Importantly, virtue ethics holds that human goodness is the source of moral normativity: according to virtue ethics we ought to be virtuous since this is the way to live a good human life. Does this view imply that the moral virtues are extrinsically valuable since they are instrumentally valuable for achieving the characteristic four ends? The theories of the moral virtues and human goodness deny this interpretation. The theories hold that *the exercise of the moral virtues itself is a part of the achievement of the four ends, and achieving the four ends through exercising the moral virtues is human goodness*. Since the exercise of the moral virtues is part of achieving the four ends, it is mistaken to assume that the exercise of the moral virtues and achieving the four ends are distinct. The exercise of the moral virtues *is* achieving the four ends. Thus, the moral virtues are not extrinsically valuable by virtue of their relation to the four ends which are distinct from the moral virtues. Rather, the exercise of the moral virtues is part of achieving the four ends which is intrinsically valuable. Hence, the exercise of the moral virtues is intrinsically valuable.

6.1.3 Theory of Right Acts

Although virtue ethics is primarily concerned with the inner states of a person, virtue ethics also provide a theory of right acts. The theory of right acts holds the following view:

An action is right iff it is what a virtuous person would characteristically (i.e. acting in character) do in the circumstances (cf. Hursthouse 1999, pp. 28,49).

Given this account of right acts, the following explanation of the rightness of my keeping a promise can be given: I should keep my promise to my wife since that is the act an honest person would do in the circumstance I am now in.

The theory of right acts can provide us with some moral rules. Hursthouse writes as follows:

We can now see that it comes up with a large number of rules. Not only does each virtue generate a prescription – do what is honest, charitable, generous – but each vice a prohibition – do not do what is dishonest, uncharitable, mean (Hursthouse 1999, p. 36).

In this way, virtue ethics can provide us with some moral rules despite the fact virtue ethics is primarily concerned with the inner states of a person.

6.2 The Empirical Reliability of Virtue Ethics

I have presented a sample virtue ethical theory above. I shall now turn to consider how the abductive argument can be run if this first-order ethical theory is employed. First, I shall consider what sort of empirical prediction virtue ethics can provide.

6.2.1 Prediction about Human Goodness

According to virtue ethics, people's exercising the moral virtues is part of their achieving the four ends. From this, virtue ethics can provide the following empirical generalisation: if people possess the moral virtues, people reliably achieve the characteristic four ends. Here is how virtue ethics provides this prediction:

- (1) Courage, honesty, generosity, benevolence and justice are the moral virtues (moral premise).
- (2) The possessor of the moral virtues enjoys characteristically a good life *qua* human being (non-moral premise from the sample virtue theory).

(3) Rob possesses the moral virtues (non-moral premise).

(4) Rob enjoys characteristically a good life (empirical prediction).

(1) and (2) are part of virtue ethics. (3) is an instance of a morally virtuous person. (4) is a prediction the sample virtue theory provides from (1), (2) and (3).

Could (4) be possibly confirmed by observation? It seems that in a similar way I described the empirical reliability of consequentialism, the social scientists could observe people's achieving the four ends.

Suppose Rob lives a virtuous life throughout his life. Then, the social scientists investigate Rob's gaining certain goods in his life (Hursthouse 1999, p. 171; Foot 2002, pp. 129-130). The social scientists could investigate the following points which might be the indicators of Rob's enjoying characteristically a good life: (a) whether Rob himself believes that his life is worthwhile and he is living a happy life, (b) whether Rob gains certain trusts in society, and (c) whether Rob enjoys good friendships with his friends. (a) is about Rob's subjective happiness while (b) and (c) are about the relationships between Rob and people around him. If the social scientists observed these findings, these findings could support the claim that Rob enjoys characteristically a good life by exercising the moral virtues. In this way (4) could be confirmed.

We can expect that the social scientists may strengthen (4) by generalising the prediction. The social scientists can investigate other cases, such as cases of Lisa, Manny and Matthew. These individuals choose very different courses of lives though all of them possess the moral virtues Rob possesses. If the social scientists found that they gained certain amounts of the goods in their lives, their findings would generalise the prediction: if one possesses the moral virtues, one enjoys characteristically a good life *qua* human being by achieving certain amounts of the four ends.

Again, this may be not a surprising result. The theory holds that there is a close link between the moral virtues and human goodness. The theory also describes the content of human goodness. Given the description of human goodness, we could observe whether a person is achieving such human goodness through exercising his moral virtues. Although the theory is not a consequentialist theory, the theory's presupposition about the relation between the moral virtues and human goodness results in predictions whose success constitutes a variety of empirical reliability for the theory.

6.2.2 Prediction about the Possession of the Moral Virtues

There is another piece of empirical evidence which might confirm or disconfirm virtue ethics. It can be said that virtue ethics presupposes that normal human beings can possess the moral virtues. The possibility of possessing the virtues is already a psychological prediction, and our observations might confirm or disconfirm this prediction.⁹ For instance, suppose that virtue ethics says that we should possess a moral virtue, *m*, but we are not capable of possessing *m*, not because of the weakness of our will, but because of humans' psychological limitation. In this case, we could say that virtue ethics is empirically unreliable since virtue ethics presupposes a moral virtue which cannot be instantiated in this world. Here is an example: in arguing that consequentialism is compatible with special obligations to particular people such as our families or friends, Hooker notes that consequentialists should not hold the view that a morally ideal person is one who can have strong concern for any and equal concern for all. Hooker notes that this is because such an individual is psychologically impossible (Hooker 2000, pp. 139-140). Although Hooker is not defending virtue ethics, what he indicates is that we should reject a theory which asks us to possess empirically impossible virtues.

⁹ I thank Clea Rees for mentioning this point.

Our psychological limitation should not be understood in a narrow way. My suggestion here is not that virtue ethics is empirically unreliable if it presupposes moral virtues which normal human beings cannot *easily* manifest. It is sensible that virtue ethics suggests various challenging moral virtues which cannot be easily manifested in us though they are morally very important. Those moral virtues could include some virtues which have not yet been instantiated by us. But if some empirical facts about human beings reveal that there are some virtues which we psychologically cannot possess, it seems that a theory which presupposes these ‘impossible’ moral virtues can be regarded as empirically unreliable.

The Philosophical Situationist Challenge: as a Real Debate Concerning the Empirical Reliability of Virtue Ethics

In relation to the issue of our capability of possessing the moral virtues, there is an existing debate between the philosophical situationists who deny the existence of character traits and their opponents. The philosophical situationists argue that some empirical results from social psychology undermine traditional virtue ethics because empirical results show that there are no character traits of the kind that virtue ethics presupposes (Harman 1999; Doris 2002). There are some responses to the situationist challenge from the opponents (cf. Miller 2003b; Webber 2006, 2007; Snow 2010).

The debate between the philosophical situationists and their opponents can be regarded as a debate concerning the empirical reliability of virtue ethics. Virtue ethics presupposes certain kinds of character traits. This can be read as an empirical generalisation: if there is a human being, that human being has character traits which can be virtuous or vicious. The claim of philosophical situationism could be read that empirical evidence shows that human beings do not have such character traits. The claim of the opponents of philosophical situationists can be read that empirical evidence

philosophical situationists rely on does not undermine the character traits virtue ethics needs to presuppose.

This debate shows a possibility of disconfirming the empirical reliability of virtue ethics. At the same time, the debate shows the complexity of the assessment of normative theory's empirical reliability. To assess the empirical reliability of virtue ethics, first, we need to consider exactly what the theoretical commitments virtue ethics holds are. The situationists hold that virtue ethics is committed to the existence of stable character traits. The opponents argue either that virtue ethics is not committed to this or that it is not committed to the prevalence of stable character traits, only that they are possible for humans. If the opponents are right on these points, the empirical findings the situationists appeal to do not undermine the empirical reliability of virtue ethics. But, another question is waiting for us: if the opponents are right, then, what sort of theoretical commitments is virtue ethics committed to? When we know this point, then, we might be able to empirically investigate whether virtue ethics is empirically reliable on the points the opponents of situationism argue for.

In this section, I have described how some empirical kinds of facts could constitute the empirical reliability of virtue ethics. As I pointed out above, there is an existing debate which can be regarded as a debate concerning the empirical reliability of virtue ethics. I have also sketched other ways social scientists could support the empirical reliability of virtue ethics by observing the lives of virtuous people. From these, I conclude that virtue ethics could be empirically reliable and we can see what an empirically reliable virtue ethical theory would be like.

6.3 The Theoretical Presuppositions of Virtue Ethics

I shall now turn to the question about virtue ethics' theory-dependent features. In the same way I described the theory-building procedures of consequentialism, I shall describe how virtue ethics could be revised and developed by using a hypothetical society.

6.3.1 Vicky's Society

Vicky, who is a virtue ethics theorist, lives in a society where inhabitants of her society believe that virtue ethics is a plausible theory, and they employ the moral principles of virtue ethics. In Vicky's society, the following virtues are regarded as the moral virtues: courage, honesty, generosity, temperance, justice, and benevolence.

Compassion as a Problematic Emotion

In Vicky's society, it is believed that compassion is not a proper moral virtue. Rather, the people think that they should avoid having such an emotion. There are a few reasons why the people support this claim.

First, the people in Vicky's society think that compassion cannot fulfil the conditions a moral virtue should have. The people believe that compassion is a mere emotion people tend to have when they see people who are suffering, and we cannot give an account of compassion as a kind of excellence of the will.

Second, the people in Vicky's society think that having compassionate feeling may distract us from the proper exercise of the moral virtues. The people in Vicky's society observe that human beings tend to have such an emotion especially towards their family members and friends. The people believe that if one has a compassionate emotion exclusively to one's own family members and friends, one tends to lose one's strength of the will, and sometimes one fails to make proper judgements due to one's unfair

compassionate feelings. Obviously, such a tendency may be the obstacle for a morally ideal virtuous person.

Third, the social scientists in Vicky's society recognise that acts which are out of compassionate feelings have a bad effect. If people act out of compassion, the people who get benefits from such supportive acts feel ashamed. Those people who had to get some support from others feel that they are not strong enough to overcome their own difficulties, and this thought make them ashamed (cf. Frazer 2006, p. 62). The people in Vicky's society believe that this side effect should be removed since they believe that people helped by compassionate acts will think that they are powerless and their wills get weaker.

6.3.2 Revising Virtue Ethics

Vicky, a moral theorist in the society, reconsiders the notion of compassion. Vicky wonders whether we could give an account of compassion as a moral virtue. Vicky thinks of the doctrine of the mean and thinks that certain acts out of compassionate feelings could be done for the right thing in the right way. Vicky thinks that there are some bad ways to have compassionate feelings, but at the same time there are some right ways to have such feelings.

Vicky thinks that compassion can be accounted as one type of benevolence. She thinks that the virtue of benevolence is a general virtue while compassion is a sub class of benevolence which we ought to have particularly toward people who are suffering. The compassionate person will have a compassionate emotion and compassionately act to alleviate the suffering or misery of others at the right time, towards the right people and in the right way (cf. Crisp 2008, p. 244).

This account of compassion avoids some concerns the people in the society have. First, the account avoids the problem of the case people feel ashamed if they are helped

by others out of compassion. The compassionate person has compassionate feelings and acts compassionately *at the right time in the right way*. So the compassionate person would not take any concrete action if the compassionate person expects that giving some direct support may cause the powerlessness in the person who is helped.

Also, this account can avoid the concern that the compassionate person will be unfair in the way that the compassionate person tends to take supportive actions exclusively for his own family and friends. According to this account, the compassionate person would not take concrete action even for his family or friends if taking such an action was not a right way to support them.

Finally, Vicky thinks that the exercise of compassion can be regarded as part of achieving the human four ends. Vicky thinks that if compassionate acts are done in the right way, those acts would enhance many characteristic enjoyments human beings have, such as good relationships within family, good relationships with friends, and having new friendships with others. Vicky thinks that exercising compassion is part of enhancing those good relationships, and can be regarded as part of human goodness.

Given these considerations Vicky suggests that compassion is a proper moral virtue. Some parts of virtue ethics get revised as follows.

Moral Virtues

The theory of the moral virtues is revised. The people in Vicky's society used to believe that compassion is not a proper moral virtue. Now they think that compassion is a sub kind of benevolence. So, on the list of the moral virtues, they put the word, 'compassion'.

But the following moral virtues are still regarded as proper moral virtues we should possess; courage, honesty, generosity, temperance, and justice. Even the virtue of

benevolence is regarded as a moral virtue despite the fact that the account of this virtue is modified.

Human Goodness

Some parts of the theory of human goodness are revised. Previously, the theory was not emphasising compassionate interactions between people. Now the theory says that compassionate interactions at the right time in the right way are part of human goodness.

But the basic assumptions of the theory remain the same. The theory still holds the view that achieving the characteristic human four ends is human goodness and exercising the moral virtues is part of it.

Right Acts

The theory of right acts now says that we should also act in the way the compassionate person would do in the certain circumstances. This account of right acts was not in the previous list of right acts.

But the basic assumption of the theory of right acts remains the same. The theory still keeps the basic virtue ethicist assumption that right acts are the acts a virtuous person characteristically does in the circumstances.

6.3.3 Theoretical Presuppositions

We can now see the theory-dependent features in Vicky's theorising which are analogous to the theory-dependent features of science.

Hypotheses Presuppose Background Assumptions and Theories

The revision procedure depends on the theory of the moral virtues. When Vicky tries to give an account of compassion as a proper moral virtue, she relies on the theoretical assumption that moral virtues are the excellence of the will.

Vicky's making the hypothesis also relies on the doctrine of the mean which is part of the theory of the moral virtues. She expects that if compassion was a moral virtue, compassion should have a right way of manifestation as the doctrine presupposes. This is how Vicky investigates the right amount of compassionate feelings, the right time to manifest compassion, and the right way to act compassionately.

Central Issues Depend on the Theoretical Context

One of the central issues in Vicky's community is the nature of benevolence. This is simply because benevolence is regarded as one of the moral virtues we should possess. Some issues follow from this: are there any sub-kinds of benevolence?; what are the relations between the virtue of benevolence and other virtues?; etc. This theoretical background provides Vicky with an opportunity to entertain a new hypothesis which partly answers some of these questions.

The Standard of Confirmation Depends on Background Assumptions and Theories

The empirical reliability of virtues ethics shows the theory-dependency of the standard of confirmation. The observation that virtuous people reliably gain certain amounts of goods confirms virtue ethics since virtue ethics holds the assumption that virtues have certain relations with people's gaining goods. If there is no such assumption, the observation of this kind does not confirm virtue ethics. Here, we see how the standard of confirmation depends on certain assumptions the theory holds.

A similar feature can be seen in the theory-revision procedure Vicky conducts. Vicky thinks that we can give a plausible account of compassion as a moral virtue. It seems that in developing her account, she relies on certain observations, such as people's helping others at the right time and in the right way. These observations are evidence for the compassion hypothesis since there is the general assumption that a virtue has the feature as the doctrine of the means presupposes.

There is the Mutual Relation between Old Principles and Revised Principles

The revision procedure also shows the mutual relation between the old virtue ethical principles and the revised principles. Vicky revises her old account of benevolence by adding compassion as a sub category of this virtue. Such a revision procedure is possible since Vicky accepts the assumption that benevolence is a moral virtue.

These considerations show that virtue ethics could have theory-dependent features analogous to the theory-dependent features of science.

6.4 The Moral Realist Explanation of Virtue Ethics

Above, I described how virtue ethics can be empirically reliable and how the theory-building procedure of it can be analogous to the way science is developed. Assume that the empirical premises of the abductive argument are empirically confirmed. Then, I shall consider how the moral realist explanation can be given.

6.4.1 Constructivist Explanation

As we have seen above, the way virtue ethics is developed is highly theory-dependent. Hypotheses presuppose the basic structure of moral virtue. The observational standard is dependent on background assumptions about the moral virtues.

Again, anti-realist constructivism could provide an explanation of such theory-dependent features of virtue ethics. According to constructivism, there are no mind-independent facts about moral virtue. The reality of moral virtue is constructed by our moral reasoning. We first define, consciously or unconsciously, what sorts of features of human beings are parts of moral virtue. Then, we suggest various proposals of moral virtue which fit with that picture.

We can see how the constructivist explains various theory-dependent features of virtue ethics. The theory-dependent standard of confirmation can be explained as follows: it ultimately depends on the general framework we first define. This is the reason why there is no theory-free standard of confirmation. The mutual relation between old principles and new principles can be explained as follows: revisions made between old principles and new principles are to keep the consistency between our moral opinions about moral virtue. Hypotheses' being dependent on existing assumptions is explained as follows: hypotheses suggested on background assumptions are supposed to be consistent with the general framework of moral virtue which is originally defined by us.

6.4.2 No-Miracle Argument for Virtue Ethics

In response to the constructivist explanation, the naturalist (who is a moral realist) would claim that the constructivist cannot explain the combination of the two empirical premises. The naturalist would say that the approximate truth of virtue ethics best explains these two premises.

Virtue ethics is theory-dependent, but it is also empirically reliable. What is the explanation of the fact that this particular theoretical tradition is capable of producing empirically reliable principles of moral virtue? The approximate truth of virtue ethics is a straightforward answer. Since the theoretical description of moral virtue the theory provides is relatively similar to the reality of morality, the theory is capable of making accurate predictions. As the theory presupposes, there are really such moral virtues which we can manifest in our character traits and which contribute to the enhancement of the four ends. We also expect that Vicky's revision improves the reliability of the theory: we expect that a person who possesses not only the virtues the old theory presupposes but also compassion will better achieve the characteristic four ends. We

also expect that we are psychologically capable of being compassionate. These are possible since the background assumptions on which the revision-procedure relies are approximately true.

We could think of an alternative explanation, but, again, such an alternative explanation needs a miracle. An alternative explanation assumes that there is no such reality of moral virtue as the theory presupposes. But if so, why do we see the empirical success of virtue ethics which is made referring to those theoretical assumptions, such as people's virtues and will? Why would a new hypothesis which is suggested based on various background assumptions also improve its empirical success? If we have to assume that there is no such mind-independent moral reality, the only explanation of the empirical success of virtue ethics must be the one in terms of a miracle.

Does the approximate truth of virtue ethics imply the existence of mind-independent natural moral properties? It seems so.

First, the moral virtues the theory presupposes seem to be mind-independent. Vicky's discovery of compassion as a proper virtue is a good example. The empirical reliability of virtue ethics tells us that we are psychologically capable of possessing this virtue. This may imply that prior to Vicky's giving the account of compassion there are some individuals who manifest this virtue though people are not aware of this fact. Perhaps historians can find some individuals who were manifesting compassion from history. The existence of those individuals is evidence for that compassion is mind-independent in the sense its ontological status does not depend on our having evidence for it.

Second, these moral virtues seem to be natural properties. We are assuming that the moral virtues have important relations with the four ends which are characteristically good for human beings. We are also assuming here that these relations

are investigated by the social sciences: the investigation of virtuous individuals' lives shows that a virtuous person reliably achieves the characteristic four ends. What this implies is that the properties of those moral virtues are the object of empirical investigation, such as experimentation or observation. So, the moral virtues whose properties are the object of empirical investigation can be regarded as natural properties.

Hence, the realist explanation of virtue ethics would support the second premise of the basic argument: the existence of natural moral properties is ineliminable in the best explanation of phenomena we experience.

Summary of the Chapter

In this chapter, I ran the abductive argument for moral realism by using a sample virtue ethical theory. My attempt showed that the argument could be run if we employ neo-Aristotelian virtue ethics.

One might wonder at this point as follows: the two sample theories used so far are very naturalistic. The sample consequentialist theory refers to various external effects as morally important while the sample virtue ethics also refers to human nature. Isn't the argumentative strategy biased toward the naturalistic direction?

In response to this concern, in the next chapter, I shall consider if the argument could be run when deontology, which is not apparently naturalistic, is employed.

Chapter VII

In Defending the Abductive Argument (Part 3)

– a case of deontology? –

Introduction

In the previous two chapters, I attempted to run the abductive argument for moral realism by employing two different normative theories, namely consequentialism and virtue ethics.

But here is a problem. Both the sample theories of consequentialism and virtues ethics are naturalistic in an important way. What would happen if our first-order ethical theory was not apparently naturalistic, such as deontology?

In this chapter, I shall attempt to answer this question.

First I present two problems we encounter when we run the abductive argument by employing deontology, or any non-naturalistic first-order ethical theory in general. Then, I construct a sample deontological theory which is not apparently non-naturalistic. Then, I attempt to run the abductive argument by employing that sample deontological theory.

7.1 Naturalism and Deontology

The abductive argument is a very naturalistic argument. Its two premises are about empirical facts of normative theory, and its conclusion is defended by the inference to the best explanation of these empirical premises. Because of these naturalistic features, we face some problems when we attempt to run the abductive argument on the basis of a non-naturalistic first-order ethical theory. In this section, I discuss two problems we encounter when we attempt to run the abductive argument by employing deontology.

7.1.1 The Accommodation Problem

In defending the realist explanation of first-order ethical theory, the defender of the abductive argument appeals to some empirical implications of moral properties posited by first-order ethical theory. For instance, in defending the realist explanation of consequentialism, the realist appeals to the relation between morally good states of affairs and people's subjective happiness. Such relation is easily found in the natural world. The social scientists can observe the relation between consequentialist moral properties and non-moral properties. There is a tension between this sort of naturalistic approach and deontology.

A concern is mentioned by Alexander and Moore (Alexander and Moore 2007). Although they say that deontological moral theories do not presuppose any metaethical view, Alexander and Moore mention that the core notions of deontology, such as duty, permissibility and responsibility, do not easily fit with the metaphysical picture in which the naturalistic moral realist attempt to find a place for moral properties.

This problem can be clearly seen when we compare deontological properties with other non-deontological moral properties. One way to find a place for a property in the natural world is to consider whether that property could play any explanatory role. For instance, the justice of a country may explain why that country works in certain ways. Rob's being courageous may explain why Rob acts in certain ways. This is a sort of project the proponent of the singular argument may pursue.

Can we see this sort of explanation in terms of deontological properties? It is difficult to see what sorts of phenomena in the world could be explained by the fact that Rob has the duty to help Matt. Rob's belief that he has the duty to help Matt might explain why Rob helps Matt. But the duty Rob has itself does not explain why Rob acts in that way.

The supervenience of the normative on the natural, such as mental, biological and social properties (cf. Wedgwood 1999, p. 201), might tell us where deontological properties would be located in the natural world. According to the strong supervenience thesis of the moral on the non-moral, in any possible world, wI , and for any object, x and y , moral properties strongly supervene on non-moral properties if and only if, if x has the set of non-moral properties, N , and also has the moral property of M , then y , another object, which has N , must have M (Kim 1993b).

Consider the notion of duty. Suppose a person has the duty to aid strangers where strangers are in peril due to what the person has done (Moore 2002, p. 629). Then, suppose there is a child on the street, and Rob throws a ball to the street and that ball hits the child. According to the theory, Rob has the duty to aid the child. Then, where would Rob's duty as such be located in the natural world? Rob's duty consists in Rob's throwing a ball and its effect on the child. It is conceivable that if these features of Rob's act were different, there would be a change at the level of morality. Consider the following case; Rob throws a ball but the ball does not hit the child though another ball thrown by James hit the child. Rob's duty would disappear because of the change at the non-moral level, namely that the ball hit the child was not the ball Rob threw.

Rob's story is an example of the supervenience relation between the deontological and the natural. This shows that, as Rob's case, deontological properties, such as the duty to aid strangers, always have their non-moral base natural properties. Although, at this point, we cannot refer to deontological properties to explain something in the natural world, deontological properties are not very mysterious since they can respect the supervenience between the moral and the non-moral natural. This is important since this makes deontological properties not as mysterious as supernatural properties which cannot accept the supervenience of the supernatural on the natural.

And, we could even explain this modal fact about the relation between the deontological and the natural by giving a reductive account of deontological properties (cf. Wedgwood 1999, p. 209). Since all deontological properties have their base non-moral natural properties, we might be able to give a reductive account of the deontological by investigating the relation between individual instances of the deontological and their base natural properties.

The supervenience of the deontological on the natural may explain how deontological properties relate to other natural properties, and why deontological properties are not mysterious supernatural properties. This explanation may support the thought that deontological properties are not non-natural properties, so deontology may be compatible with naturalism which denies the non-naturalness of moral properties.

7.1.2 The Methodological Problem

There is a stronger problem concerning the relation between naturalism and deontology. The stronger problem is this: if deontology is committed to *a priori* moral knowledge (or epistemology), deontology is not compatible with the soundness of the abductive argument.

Typically, deontological theory employs non-naturalistic epistemology in pursuing moral principles. For example, consider the theory developed by Ross (1930, 1939). Ross develops his deontological theory by employing his non-naturalistic intuitionist epistemology. According to Ross's theory, there are certain features of acts which are *prima facie* right and wrong, and we can know those rightness and wrongness of acts by rational intuition. The suggestion is this: once we fully understand certain moral propositions, we can know the truths of those propositions *a priori*.

Suppose Rob fully understands what the *meaning* of making promises is. His understanding of the notion of making promises is as follows: if one makes the promise

to the other to φ at $t1$, one is supposed to φ at $t1$ otherwise one is breaking the promise. By understanding the meaning of making promises, Rob now knows the truths of the following several propositions *a priori*: keeping promises is *prima facie* right while breaking promises is *prima facie* wrong. The truths of these propositions are supported by the intuitionist epistemological methodology. Rob considers some particular cases of making promises and breaking promises. Rob also considers some thought experiments about keeping promises. Rob finds that these intuitionist methods support the truths of two propositions.

Such non-naturalistic epistemology is, *by definition*, in tension with the second premise of the abductive argument. The second premise implies *a posteriori* moral knowledge. According to the picture of moral epistemology the second premise provides, the confirmation standard is dependent on existing moral assumptions, not depending on whether we can know the truth of the suggested hypothesis *a priori*. Some accepted moral propositions could be revised in the light of new empirical findings. Non-naturalistic epistemology which employs *a priori* moral reasoning does not allow such revision at least at the level of foundational moral propositions: we can know foundational moral principles by our *a priori* intuitions. Our knowledge of those foundational moral principles supported by rational intuition cannot be possibly revised as naturalistic moral epistemology may allow. So, if deontology is committed to non-naturalist epistemology, there is no hope of the truth of the second premise of the abductive argument.

There is a further problem: typically deontological theory is committed to non-natural deontological properties while naturalism denies such non-natural moral properties. Suppose intuitionist epistemology is successful. What does the success of intuitionist moral epistemology imply? One obvious epistemological implication is this:

a priori moral knowledge is possible. This epistemological implication might have a metaphysical implication which would be a problem for naturalism. Now, we wonder what would be the nature of moral properties if intuitionist epistemology is successful. The non-naturalistic moral realist might argue as follows (cf. Shafer-Landau 2003, p. 61):

(1) A property is natural iff the proposition about its instantiation is known exclusively *a posteriori* (cf. Copp 2003, pp. 185-186; Shafer-Landau 2003, p. 61).

(2) Propositions about the instantiation of moral properties are sometimes known *a priori*.

(3) Therefore: moral properties are not natural properties.

The success of intuitionist epistemology supports the second premise of the argument. Then, how is the plausibility of the first premise? The plausibility of the first premise can be easily seen. Let us see a principal example of natural properties: the properties investigated by the sciences. It can be said that propositions about properties investigated by the sciences are known empirically. Our knowledge about physics and chemistry rely on certain observations we make. In a similar way, our knowledge in the social sciences is also dependent on certain theory-laden observations. The premise is also well designed to exclude some mysterious properties from the list of natural properties. The supernatural properties of God are not natural since they cannot be acquired by our ordinary empirical methods. So, the first premise seems to be plausible. Thus, with the success of intuitionist moral epistemology, the argument above works.

The success of the argument is a problem for the naturalist. The naturalist attempts to defend the existence of natural moral properties by the abductive argument. But if we employ deontological theory and we interpret deontology realistically, we have to accept the success of non-naturalistic epistemology. This implies the existence of non-

natural moral properties. If this is the consequence the naturalist has to accept, the naturalist cannot be a naturalist anymore.

The consequence of this consideration is this: it is obvious from the beginning that we cannot run the abductive argument employing deontology if that deontology is committed to an *a priori* epistemology.

7.1.3 Prospect for Naturalistic Deontology

There are some routes the proponent of the abductive argument could take.

(1) Just simply, we cannot run the abductive argument when we employ deontology. So, the soundness of the abductive argument is conditional: the abductive argument is sound only if deontology is rejected. If one hopes to accept the abductive argument, one needs to reject deontology. Since and insofar as we have some reasons to believe the truth of the abductive argument, we should reject deontology.

This is an interesting suggestion. The previous two chapters indicate that if either consequentialism or virtue ethics are the best normative theory, the existence of natural moral properties can be the best explanation of certain empirical facts about normative theory. Assuming that the defence of the abductive argument on the basis of consequentialism and virtue ethics is successful to certain extent, we may have a reason to reject deontology which is incompatible with the abductive argument.

(2) According to naturalism, moral properties are natural properties and moral inquiry is *a posteriori* empirical inquiry. Deontology's non-naturalistic aspects are the counterexample of naturalism. Therefore, naturalism should be rejected.

It is premature to reject naturalism only on this basis. The previous two chapters showed that the abductive argument could be run when consequentialism and virtue ethics were employed. These successes of running the argument give us some reasons to believe

that natural moral properties exist. Then, if the naturalist takes the second route, the reasoning the naturalist takes has to be something as follows: we find some instances of Ps (moral properties) which are not Qs (non-natural properties); but there is a possibility of some P's being Qs; therefore if there is any entity which is not Q, that is not P. Since the naturalist has given some reasons to believe that there *are* some Ps which are not Q, it is premature to reject naturalism on the basis of that deontology does not support the existence of natural moral properties.

Now, let us see another path the naturalist could take.

(3) The third route: the proponent of the abductive argument could *concede* that there are some serious tensions between non-naturalistic deontology and the abductive argument which is naturalistic. So, at the end of the day, the naturalist might have to reject either naturalism or non-naturalistic deontology. Given this concession, the naturalist could still seek a deontological theory which does not start with an apparent non-naturalistic moral epistemology, and consider a possibility of running the argument employing such deontological theory.

The concession the naturalist makes here is significant: the abductive argument might lose any argumentative force to some people who are committed to non-naturalistic deontology. Nevertheless, the naturalist could still consider how much his argument could be general. The naturalist could still seek how the argument he gives keeps its plausibility independently of our commitment to particular first-order ethical theory. Although the naturalist stops persuading non-naturalistic deontologists to become metaphysical ethical naturalists, the naturalist still attempts to persuade some deontologists to be metaphysical ethical naturalists.

In this chapter, I consider the possibility of (3). A sample theory I have in mind is a sort of theory Kamm has been developing (Kamm 1996; 2007). Although she seems to

be sympathetic to non-naturalistic moral realism (Kamm 1996, p. 11)¹⁰, I think it is still possible to construct a deontological theory which does not presuppose apparent non-naturalistic elements using some features of Kamm's theory. Below, I present such a theory based on the theory Kamm develops. Then, I attempt to run the abductive argument by employing such a sample deontological theory.

7.2 Kamm-Style Deontological Theory

In this section, I present a sample deontological theory I employ for running the abductive argument.

7.2.1 Case-Based Initial Judgements

As I have said, the sample theory I present here is a theory which borrows some theoretical features of the theory Kamm develops. I choose Kamm's theory because of the methodology Kamm employs. Here is the method she proposes:

Consider as many case-based judgments of yours as prove necessary. Do not ignore some case-based judgments, assuming they are errors, just because they conflict with simple or intuitively plausible principles that account for some subset of your case-based judgments. Work on the assumption that a different principle can account for all of the judgments (Kamm 2007, p. 5).

[People] who have responses to cases are a natural source of data from which we can isolate the reasons and principles underlying their responses. The idea [is] that the

¹⁰ The following quotation is evidence for the claim that Kamm may be sympathetic to non-naturalistic moral realism: 'The responses to the cases with which I am concerned are not emotional responses but are judgments about the permissibility or impermissibility of certain acts. These judgements are not guaranteed to be correct, and one must give one's reasons for making them. These reasons, in turn, are not personal emotional responses to the acts but are the properties of the acts themselves. Even though these judgments are not guaranteed to be correct, if they are, they should fall into the realm of a priori truth ... Intuitions are appropriate to ethics because ours is an a priori, not an empirical, investigation' (Kamm 1996, p.11). From this, it might be possible to conclude that Kamm's theory is, in the end, in a tension with naturalism. This possibility is not a real problem with my argumentative strategy here. I am just attempting to construct a naturalistic deontological theory which borrows some theoretical features of Kamm's theory. So, even if, Kamm's own theory is, in the end, non-naturalistic, it does not become a threat to my argumentative strategy.

responses come from and reveal some underlying psychologically real structure, a structure that was always (unconsciously) part of the thought processes of some people. Such people embody the reasoning and principles (which may be thought of as an internal program) that generates these responses. The point is to make the reasons and principles explicit (Kamm 2007, p. 8).

[Try] to unearth the reasons for particular responses to a case and to construct more general principles from these data (Kamm 1996, p. 9).

Unlike some moral theories which start with principles, the theory I present here starts with various initial responses in many case-based judgements. I call these responses, ‘initial judgements’. Initial judgements to hypothetical cases are a natural source of data. We try to reveal the reasons and principles which underlie these initial judgements. The attempt to reveal those underlying reasons and principles is an attempt to reveal a psychological structure in us which generate initial judgements (Kamm 1996, pp. 9-12; 2007, pp. 5, 8n).

In this picture, initial judgements do not have to be taken as judgements generated by *a priori* intuitions. For instance, our initial judgements in hypothetical cases do not have to involve the conceptual analysis of the subject matter. Rather, as Kamm’s expression says, our initial judgements can be taken as the consequence of our psychological structure. Obviously, this alone does not support the idea that our initial judgements cannot be the candidate for *a priori* knowledge. But the point is; since these initial judgements do not involve apparent non-naturalistic features, they do not have to be taken as the consequences of non-naturalistic *a priori* intuitions.

7.2.2 Assessing Principles

After the underlining principles are found, these principles are assessed. These principles are assessed in various ways:

[Theorists] then evaluate these principles in three ways: Do they fit the intuitive responses? Are their basic conceptions coherent and distinct from one another? Are the principles or basic concepts in them morally plausible and significant, or even rationally demanded? (Kamm 1996, p. 9)

Then, consider the principle on its own, to see if it expresses some plausible value or conception of the person or relations between persons. This is necessary to justify it as a *correct* principle, one that has normative weight, not merely one that makes all of the case judgments cohere (Kamm 2007, p. 5).

In this way, we examine the plausibility of suggested principles. We consider whether suggested principles fit with other common sense moral judgements. We also consider whether suggested principles are morally plausible assessing the plausibility of the underlying thoughts about the value and the conception of the person, or human relations.

7.2.3 How a Principle is Discovered

Here is an example case of how we discover a moral principle by using our initial judgements as data. Suppose I am given the following case and asked what would be my initial judgement about the case.

- a. Jack kills his aunt just for his fun.

My initial judgement about this case would be that what Jack does is wrong. Then, compare this case with some other cases. First, let us consider the following case:

- b. Jack kills his friend just for his fun.

Now the circumstances of *a* and of *b* are slightly different. The person who is killed by Jack in this case is not his relative, but his friend. Will my moral judgement about this case be different from the previous case? The answer is simply 'no'. I have still the judgement that what Jack does is wrong. Finally, let us see another case:

c. Jack kills a stranger he happens to meet on the street just for his fun.

What would be my judgement about this case? Will my moral judgement about this case be different from the previous two cases due to the fact that this time the one who gets killed has no special relationship with Jack? I would say 'no' to this. My judgement in this case is still that what Jack does is wrong.

From these considerations, we can find the following moral principle: it is always morally wrong to kill someone just for fun regardless of who the person gets killed is.

Finally, we assess this principle. Does the principle fit with other responses? Does the principle cohere with other principles already endorsed? Is the principle morally plausible by its own? To assess the principle in these ways, I need to refer to some background moral principles about the value of human being and human relationships. I might hold the following assumptions: all persons should not be harmed if they do not deserve such harm: a person's continuous living is *prima facie* good and it is wrong to stop someone's life for no justifiable reason. My moral principle seems to cohere with these assumptions. Also, it is difficult to see any morally objectionable aspect of my principle. So, my principle can be accepted as a correct principle.

Now, my moral principle provides the following duty we ought to fulfil: this is our duty to not kill someone just for fun regardless of who the person gets killed is. In this way, the sample theory of deontology gives moral principles which underlie our responses to particular cases.

7.2.4 Killing and Letting Die

As many deontological theories do, the sample theory also holds the distinction between killing and letting die. Consider the Trolley case. A trolley is going to kill five people if you do not divert it onto another track where the trolley is going to kill one person. You foresee that the trolley is going to kill one person if you divert it onto another track. About this case, we might have the initial judgement that you may divert the trolley. Next, consider the Bystander case. In this case, again, a trolley is going to kill five people. In this case you can stop the trolley, but only by pushing an innocent bystander to the track. The trolley can stop when it kills the unfortunate bystander. About this case, we might have the initial judgement that you are not allowed to kill the bystander to save the five. But this is a puzzling result. Why, in one case, we are allowed to bring one person's death for a greater good while in another case we are not allowed to do so?

The distinction between killing and letting die explains why we judge that we are not allowed to kill one healthy person. Killing one person is worse than letting five persons die. So, we think that in the Bystander case it is morally better to let the five die. In the Trolley case, on the other hand, the competition is killing one person and killing five persons. Since it is better to kill one, rather than five, if it is not avoidable, we judge that we are allowed to kill one innocent person to save the five.

7.3 The Empirical Reliability of Deontology

Above, I have presented a sample theory of deontology. I shall now turn to consider whether deontology can have empirical reliability.

It is relatively difficult to describe deontology's empirical reliability. In the cases of consequentialism and virtue ethics, it is relatively easier to find empirical findings which constitute empirical reliability for them. That is because both consequentialism

and virtue ethics appeal to some external standards: consequentialism appeals to the realisation of wellbeing while virtue ethics appeals to *eudaimonia* or human goodness. Both consequentialism and virtue ethics have parts which provide the contents of wellbeing and *eudaimonia*. These contents tell us what sort of empirical facts constitute empirical reliability for consequentialism and virtue ethics. Deontology does not have this sort of external standard. Therefore, it is relatively difficult to describe the empirical reliability of deontology.

Despite the difficulty of finding the empirical reliability of deontology, below, I suggest that deontology can provide some predictions.

7.3.1 Cases People have Never Thought About

I suggest that deontology predicts how people judge about cases which they have never thought about. Here is how deontology provides the empirical generalisation about how people respond to cases which they have never thought about:

- (1) Initial judgements in hypothetical cases are reliable.
- (2) It is always morally wrong to kill someone just for fun regardless of who the person gets killed is.
- (3) Our initial judgements about cases of killing someone just for fun will be that such act is wrong.

(1) is an assumption deontology holds: the assumption that our initial judgements in hypothetical cases are reliable in the sense that these judgements are correct. (2) is a moral principle which is discovered through reflecting some initial judgements in hypothetical cases (in the way I did above). (3) is an empirical prediction. (3) implies that if people are given cases of killing someone just for fun regardless of whether they

have never thought about them their moral judgement will be that such action is morally wrong.

I believe that it is very plausible to suppose (3) will be empirically reliable. We can just imagine that people who are given various cases of killing someone for mere fun would say that such action is wrong. This judgement will remain the same even when people are given a case in which Mary's and Tom's daughter is killed for mere fun though nobody knows about Mary, Tom and their daughter and, consequently, nobody has thought about them.

Why does (3) confirm deontology which holds (2)? It is due to (1): deontology holds that our initial moral judgements in hypothetical cases are generally reliable. This is a significant claim: this claim implies that all correct moral principles should be compatible with our initial judgements in hypothetical cases. This is why people's judgements about cases of killing someone for mere fun are evidence for the moral principle (2).

We can consider a more controversial case. Take the moral principle of the distinction between killing and letting die. We can have a prediction on the basis of this principle as follows:

- (1) Initial judgements in hypothetical cases are reliable.
- (2) Killing is worse than letting die.
- (3) Our initial judgements about cases which highlight the difference between killing and letting die will be that killing is worse than letting die.

To confirm the prediction (3), we can invent some hypothetical cases which highlight the distinction and test people's initial judgements about those cases. Obviously, the Bystander case is a good example. (3) implies that somebody who has never thought about the Bystander case would judge that we are not allowed to kill the bystander. This

is an empirical prediction and we can confirm this prediction by observing how people who have never thought about this case would respond.

We can strengthen (3) by testing other similar cases. For instance, we can use the following case: there are five patients in the hospital. One of them needs a heart, two of them need kidneys and two of them need lungs. We cannot help these five patients unless we kill one healthy person, chop up him and use his organs for the five. If people who are given this case judge that killing an innocent healthy person is wrong, their making this judgement confirms (2).

7.3.2 Prediction about Our Brains

Another prediction deontology can provide is somewhat indirect. Deontology holds that our initial judgements in hypothetical cases are reliable in the sense that these judgements are correct moral judgements. This might imply that when people are making their initial judgements in hypothetical cases (= correct moral judgements), certain parts of their brains which are related to brains' cognitive activities will be activated. Thus, we can predict the following empirical generalisation: when people make initial judgements in hypothetical cases, particular parts of their brains will be activated.

To explain this predictive power of deontology in detail, first, I introduce one existing debate concerning the role of intuitions (or initial judgements) in moral theorising.

Appealing to some empirical findings in the recent studies in evolutionary biology and neurophysiology, Singer (2005) challenges the reliability of initial judgements in hypothetical cases. Singer argues that it is wrong to assume that initial judgements in those hypothetical cases are basically correct. This is the objection against deontology's

assumption that our initial judgements in hypothetical cases are correct moral judgements.

Singer introduces the following empirical findings about people's moral judgements: when people make judgements in cases similar to the Bystander case there is more increased activity in parts of the brain associated with the emotions. By contrast, there is less activity in these parts of the brain when people make judgements in cases similar to the Trolley case. The research also shows that when the minority of the people who judge that it is right to push the bystander, there is the increased activity in parts of the brain associated with the emotions, but also these people take longer time to make their judgements. The further research also shows that there is more activity in parts of the brain associated with cognitive activity, when the people judge that it is right to push the bystander (Greene and Haidt 2002).

Singer also draws our attention to some insights into evolutionary facts of human beings: we human beings used to live in relatively small groups, and in such small groups violence could occur in an 'up-close and personal way – by hitting, pushing, strangling, or using a stick or stone as a club' (Singer 2005, pp. 347-348). In order to deal with such 'up-close or personal' violence, we have developed 'immediate, emotionally based responses to question involving close, personal interactions with others' (Singer 2005, p. 348). These claims indicate that we tend to have strong emotional responses to cases which are about our immediate environments while our responses to cases which are not about our immediate environments are not strong.

Singer assumes that these claims from neurophysiology and evolutionary biology are basically correct. Then, he argues that the empirical findings from these fields undermine the reliability of non-consequentialist initial judgements. He writes as follows:

If, however, Greene is right to suggest that our intuitive responses are due to differences in the emotional pull of situations that involve bringing about someone's death in a close-up, personal way, and bringing about the same person's death in a way that is at a distance, and less personal, why should we believe that there is anything that justifies these responses? (Singer 2005, p. 347)

Here Singer is claiming that we cannot justify our initial judgements in hypothetical cases. We can construct two arguments Singer gives for this claim:

First Argument

- (1) Judgements which indicate non-consequentialist preference are highly influenced by the emotions (neurophysiological premise).
- (2) The emotions which influence judgements in (1) have their origin in our evolutionary history (biological premise).
- (3) Reliable moral judgements must not be influenced by the emotions which have their origin in our evolutionary history (premise about moral judgements).
- (4) Therefore: judgements which indicate non-consequentialist preference are not reliable [(1) (2) (3)] (conclusion).

Second Argument

- (5) Judgements which indicate consequentialist preference are formed by strong cognitive activity (neurophysiological premise).
- (6) Judgements which indicate non-consequentialist preference are formed by weak cognitive activity (neurophysiological premise).
- (7) Reliable moral judgements are made of careful reflection which is associated with strong cognitive activity of the brain (premise about moral judgements).
- (8) Therefore: judgements which indicate consequentialist preference are reliable [(5) (6) (7)] (conclusion).

(9) Therefore: judgements which indicate non-consequentialist preference are not reliable [(6) (7)] (conclusion).

The first argument refers to the insights into facts about evolutionary biology while the second argument refers to findings in neurophysiology of moral judgements.

Why do these arguments matter to deontology? These two arguments matter since deontology should accept (3) and (7).

Deontology holds that initial judgements are reliable. How are they supposed to be reliable? They are supposed to be reliable in the way they are correct moral judgements: judgements which indicate non-consequentialist preference are correct moral judgements. My judgement that killing an innocent person just for fun is wrong is a correct moral judgement.

We should also remember that deontology holds that what generates initial judgements is a 'psychologically real structure' of morality. Such a psychological structure of morality seems to be in the realm of the cognitive side of us. That is because of the following assumption deontology holds: the psychologically real structure of morality can be represented by moral principles. For instance, the moral principle that killing someone just for fun represents a part of the psychological structure of morality: this part of the psychological structure generates our moral judgements in favour of this moral principle. Since generating moral judgements in favour of certain moral principles seem to be presupposing certain reasoning, the psychological structure of morality which conducts such generating may be in part of the cognitive activity of the brain.

From this, the sample deontological theory would provide the following empirical prediction:

(1) Non-consequentialist initial judgements are reliable (the theory's assumption).

(2) Reliable judgements are generated by the psychologically real structure of morality which is in the cognitive realm of us (the theory's assumption).

(3) If there is an instance of initial judgements which indicate non-consequentialist preference, that judgement is generated by the psychologically real structure concerning morality which is in the cognitive realm of us (empirical prediction).

But, obviously, what Singer is appealing to is in tension with this prediction. (1), (2), (5) and (6) all disconfirm the empirical prediction.

The Unreliability of the Current Empirical Findings

If the arguments I presented on behalf of Singer are sound, the prediction the sample deontological theory could make is disconfirmed. But there is one response to the argument. This response raises the doubt about the empirical premises of (1), (5) and (6).

Kahane and Shackel (2010) raises some methodological problems with the pieces of empirical findings on which Singer's argument relies. For instance, they claim that it is not clear which moral proposition the subjects of the experiments are endorsing or rejecting. Because of this, they think that it is not clear whether the majority of the subjects are making such non-consequentialist judgements and the minority are making consequentialist judgements (Kahane and Shackel 2010, p. 565). Kahane and Shackel point out that the subjects of the experiments are asked whether certain acts are *appropriate* in the cases. Kahane and Shackel argue that if the subject answers that the act, *a*, is appropriate, the subject might mean that the act is required, or just permissible. Obviously, an act's being required and being permissible are very different. Perhaps the subject might believe that not doing *a* might be also permissible if what he means by saying, '*a*-ing is appropriate' is just, '*a*-ing is permissible'. If so, even if the subject says that pushing the stranger in the footbridge case is not appropriate, he might mean that

not pushing the stranger is required (deontological intuition) or permissible (could be utilitarian intuition?) (Kahane and Shackel 2010, p. 566).

Kahane and Shackel raise other methodological problems as well. They indicate that initial judgements in the Trolley case might not show that the subjects who make these judgements actually endorse utilitarianism (Kahane and Shackel 2010, p. 573). For instance, there is a possibility that these subjects express utilitarian judgements just only on this occasion. Also, the subjects who answer that it is not right to push the bystander in the scenario may be endorsing a kind of utilitarianism. They might hold that making the rule of that act will diminish people's happiness in long run. So, in order to ascribe people's beliefs to utilitarian theory, more empirical investigations are needed (Kahane and Shackel 2010, p. 574).

These concerns Kahane and Shackel raise tell us that at the moment the empirical investigations of our moral judgements cannot threaten deontology by disconfirming the prediction.

Upshot

A careful look on the existing debate about moral judgements reveals certain empirical implications of deontology. Deontology predicts that our initial judgements should be formed through the cognitive activity of the brain. Such prediction could be confirmed or disconfirmed by the empirical findings and the careful interpretation of these findings by philosophers.

7.4 The Theoretical Presuppositions of Deontology

I shall now turn to consider whether deontology is developed in the similar theory-dependent ways science is conducted. Remember that there is a concern that non-naturalistic deontology is incompatible with the theory-dependent methods of ethics.

Can we overcome this difficulty if we employ the sample theory which is not apparently non-naturalistic?

Again, I use a hypothetical case where people believe in the sample theory of deontology.

7.4.1 Danielle's Society

Danielle, who is a deontological ethical theorist, lives in a society where the inhabitants believe that deontology is a plausible moral theory. In addition to the basic moral principles of deontology, the people in Danielle's society hold the following moral principles.

Moral Principles the People in Danielle's Society Believe

- (1) There is the duty to not harm others.
- (2) There is the duty to aid others in need.
- (3) It is morally permissible to let people suffer.
- (4) There is the stronger duty to aid others in need physically near to us than the duty to aid others in need physically far from us.

The people in Danielle's society believe that (4) is a plausible principle. That is because they think the principle explains some of our initial judgements in the following hypothetical cases.

The Pond Case

I am walking by a pond. I find a child is nearly drowning in it. If I wade in, and pull the child out, my five hundred pounds suit will be ruined.

In the Pond case, our initial judgement would be that we ought to save the child. Then, consider the following case.

The Overseas Case

I know that there is a child starving to death in the overseas countries. To save him, I must send five hundred pounds.

In the Overseas case, our initial judgement would be that it is good to send five hundreds, but it is permissible not to do so.

The people in Danielle's society think that (4) explains these initial judgements. Since we have the stronger duty to help others who are near to us than the duty to help others who are far from us, we have these initial judgements in the Pond case and the Overseas case.

7.4.2 Revising Deontology

Danielle, who is a moral theorist in her society, wonders if she should add another moral principle. She accepts that distance morally matters. But she thinks that the current theory does not tell us how different moral considerations relate to each other. She considers our initial judgements in the following cases:

My Child Case

I know that my son and his family need five hundred pounds tonight otherwise he and his family cannot have accommodation and food for a month. He and his family are living in a different town.

The Neighbour Case

I know that there is the family who are living next to me, and they need five hundred pounds tonight. Without my financial support, they cannot have accommodation and food for a month.

If we apply (2), we have the duties to help both our family and our neighbours. Then, if we apply (4) in these cases, our duty to help the neighbour family should be stronger

than our duty to help our own children and their family. But this is going to be problematic when we consider the following case;

My Child and My Neighbour Case

I know that my son and his family need five hundred pounds tonight otherwise he and his family cannot have accommodation and food for a month. He and his family are living in a different town. At the same time, I know that my neighbour family also need five hundred pounds for the same reason.

In this case, our initial judgement would be that we ought to help our own children and their family rather than our neighbours. But this initial judgement seems to be in tension with (4). The application of (4) requires us to help our neighbours around us, not our own family who are far from us.

Given these considerations, Danielle thinks as follows: in many cases distance does matter. At the same time the nature of our relationships to the one who is in need also matter. Sometime, the consideration of our strong relationships to the one who is in need overrides the consideration of distance. Our initial judgment in the *My Child and My Neighbour case* supports this. Danielle thinks that even if she does not help our neighbours in the case above, what she does is to let them suffer, not harm them. Her action will be still justified by (3): it is morally permissible to let people suffer. So, she thinks that the following moral principle needs to be added on our list:

The Principle of Family

(5) There is the stronger duty to help our own family who are in need than the duty to help others who are in need, even if they are physically nearer to us than our own family are.

This principle explains our initial judgement in the *My Child and My Neighbour case*. At the same time, this principle respects other moral principles, such as the principle of distance. It is still true that we have the stronger duty to help others who are physically nearer to us than the duty to help others who are far from us. But our duty to help our own family overrides this duty.

And, this principle seems not implausible from the perspective of our value and conception of human relationships. We would hold that our relationships with our own family are important. We would also hold that if somebody does not help us because that person is busy in helping his own family, such an act is not unjust.

Given (5), how does Danielle's moral theory change? Many parts of her theory remain the same. The theory still holds basic assumptions of the theory and the moral principles, (1), (2), (3) and (4). But the addition of (5) gives a sophisticated account of (4). As we have seen, the application of (4) used to imply that the duty to help others who are near to us is always stronger than the duty to help others who are far from us. (5) explains that (4) does not imply this. (4) just implies that in many cases the duty to help others who are near to us is stronger than the duty to help others who are far from us, but not always. (5) explains one of the exceptions (4) admits.

7.4.3 Theoretical Presuppositions

Here are the theory-dependent features we can see in Danielle's theory-building procedure.

Hypotheses Presuppose Background Assumptions and Theories

The new hypothesis Danielle suggests is dependent on background moral assumptions and principles. Danielle suggests her hypothesis on the basis of the background moral principles, such as that there is the duty to help others in need. Danielle's hypothesis is supposed to be compatible with the accepted moral principles though it requires a

different reading of some of them. Danielle's new hypothesis also depends on the theory of value and human relationships Danielle holds. Since the hypothesis respects some common conception of the value of human relationships, the hypothesis is suggested as a serious candidate for the true principle.

Central Issues Depend on the Theoretical Context

The new hypothesis is suggested to explain our initial judgement in *My Child and My Neighbour case*. Our initial judgement in this case becomes a theoretical issue since there is the background assumption that the duty to help others who are near to us is stronger than the duty to help others who are far from us. This background assumption seems to be in tension with the initial judgement in the case. Danielle's hypothesis is supposed to be a suggestion which revises the existing assumption about the moral importance of distance.

The Standard of Confirmation Depends on Background Assumptions and Principles

The standard of confirmation is based on the assumption that our initial judgements in hypothetical cases are basically correct. So, our observing that people make the moral judgements which support the distinction between killing and letting die becomes evidence for the distinction. Because of this assumption, the observation that sometimes we have initial judgements which seem to be incompatible with other initial judgements does not become evidence for the unreliability of those conflicting moral judgements.

There is The Mutual Relation between Old Principles and Revised Principles

There is the mutual relation between the principle of distance [(4)] and Danielle's new principle [(5)]. Danielle's new principle modifies the principle of distance in the way that Danielle's principle gives some limits of the application of the principle of distance. These considerations show that the sample deontological theory which is not apparently non-naturalistic may be developed in the similar ways science is conducted.

7.5 The Realist Explanation of Deontology?

Above, I have described how the sample deontological theory could be empirically reliable and how it could have theory-dependent features which are analogous to the theory-dependent features of science. Assuming these empirical features of deontology, I shall now turn to consider whether the moral realist explanation of these empirical features of deontology can be given.

7.5.1 Constructivist Explanation

The ways the sample deontological theory is developed are highly theory-dependent. Hypotheses are supposed to cohere with other initial judgements and moral principles which are accepted in the community. This is how Danielle suggests the principle of family.

The anti-realist constructivist would explain these theory-dependent features of deontology as follows: the reality of moral duty is constructed by our moral reasoning. The theory-building procedures of deontology are importantly dependent on our initial judgements in hypothetical cases. These initial judgements merely reveal our conceptions of rightness, duty, responsibility, permissibility, etc. not represent the reality of morality as such. The principle of family Danielle suggests is a principle which is supposed to represent our conceptions of morality.

7.5.2 No-Miracle Argument for Deontology

In response to the constructivist explanation, again, the naturalist would claim that the constructivist does not explain the combination of the two empirical premises. The realist would say that the approximate truth of deontology best explains these two empirical premises.

Deontology is theory-dependent, but it is also empirically reliable. What is the explanation of the fact that this particular theoretical tradition is capable of producing empirically reliable principles of moral duty? People's initial judgements in hypothetical cases confirm the moral principles deontology holds (such as people's judgement in favour of the principle about the distinction between killing and letting die). Also, cognitive psychology shows that people's initial judgements in hypothetical cases are generated by the cognitive part of our brains and this fact indirectly supports the correctness of our initial judgements. Importantly, these empirically reliable moral judgements are formed on the basis of background assumptions of deontology. The approximate truth of deontology explains why theory-dependent methods of deontology are capable of producing these empirically reliable principles. Since the theoretical assumptions deontology holds are approximately true, new principles which are produced on the basis of these assumptions are also empirically reliable. Danielle is able to suggest a new principle of family on the basis of various background assumptions. We are here assuming that Danielle's new principle is empirically reliable: people's initial judgements in relevant hypothetical cases are compatible with Danielle's moral principle while these judgements which represent Danielle's principle are generated by cognitive part of our brains. The explanation of the empirical reliability of this new hypothesis is that background assumptions on which this new principle is built are approximately true. These background assumptions, such as the assumption about the duty to help others in need, correctly describe the reality of morality.

Again, we could think of an alternative explanation, but such an explanation requires us to assume a miracle. The alternative explanation assumes that deontology is not about the mind-independent reality of morality. But if so, why do we see the empirical success of deontology which is highly theory-dependent? If we reject a moral

realist reading of deontology, only the explanation of the empirical success of deontology will be the one in terms of a miracle: there is no such mind-independent moral reality about which deontological moral principles are supposed to represent. But these moral principles miraculously turn out to be empirically reliable.

7.5.3 Difficulty of Defending the Mind-Independence Thesis

But someone might respond to this realist explanation as follows: it is not clear why an alternative explanation has to be the one in terms of a miracle. We may be able to have a better constructivist explanation. We should notice that all empirical facts which constitute empirical reliability for deontology are about people's making initial moral judgements. This may be evidence for the difference between deontology and scientific theories. In physics, for instance, a hypothesis about the nature of a physical entity predicts the occurrence of an empirical phenomenon by referring to the activity of the entity in question. This prediction implies that the empirical phenomenon predicted will be happening in the circumstances regardless of whether we have observational evidence for the phenomenon. This supports the ontological objectivity of the physical entity. But we cannot expect this sort of ontological objectivity of deontological entities. All the predictions deontology makes have essential reference to our initial judgements in hypothetical cases. We cannot see any ontological objectivity of deontological entities in the following prediction: 'if people are given an case of killing and letting die, people will judge that we have the duty not to kill though we do not have the duty to not let die'. We cannot even imagine that the phenomenon predicted may happen without someone's making that moral judgement: this prediction makes the essential reference to our making that moral judgement. So, this prediction may not support the ontological objectivity of deontological entities which need to be defended for the truth of naturalism.

How could realist further reply to such an objection? It seems there are some routes the realist could take.

Route 1: It is true that moral principles about moral duties have to make essential reference to our moral judgements. In the end, as Kamm does, it is assumed that moral principles suggested by this deontological theory are supposed to represent our thought processes concerning morality. However, the moral principles the theory holds are more objective than moral principles which are defended by such subjectivist positions, for instance, moral relativism. Moral relativism offer moral principles only on our actual agreements at the conscious level. But moral principles defended by deontology are more objective in the sense that the objectivity of moral principles is not dependent on people's having certain moral judgements. It seems plausible to say that some children are not aware of the moral principle that killing somebody for mere fun is morally wrong since they have never done any formal moral theorising. This is an example of the objectivity of deontological moral principles: the moral principle is correct even if nobody recognises this principle. Perhaps, there are many moral principles nobody has not yet recognised.

Further empirical research on moral psychology may support this line of reply. This reply is possible only if moral principles which are supposed to be discovered by us are *our common moral principles which underlie our individual moral judgements*: our individual moral judgements are generated by the psychological structure in us which is common in all human beings. Otherwise, the moral principles discovered by an individual cannot be objective in the sense that all people should follow those moral principles. Recent studies support the existence of such common moral conceptions in us (cf. Hauser 2006; Kamm 2007, p. 8n). If this is the case, we could say that all human

beings could in principle reach the same moral conclusions if they carefully reflect their moral judgements and find the moral principles that underlie these moral judgements.

This route is a possibility. This route could keep certain epistemic objectivity of moral judgements, and the objectivity of moral principles. But this route does not give any direct reply to the objection that the moral principles deontology hold are, in the end, dependent on ways of our moral reasoning: still, moral principles discovered in this way are not objective in the sense their correctness is not dependent on our moral judgements.

There is another route the realist could take:

Route 2: The real implication of moral principles is not about how our psychological processes of morality work. Rather, moral principles reveal features of acts which are morally relevant. These moral principles reveal ‘the properties of the acts themselves’ (Kamm 1996, p. 11). For instance, the principle of the moral duty to help others in need reveals the moral feature of such acts. Other moral principles reveal other deontological properties of acts. These moral principles also tell us which deontological concerns need to be prioritised in specific cases. And, our psychologically real structure of morality is good at discovering such moral properties of acts. In response to hypothetical cases, our psychological structure generates our initial judgements which approximately correctly describe the moral properties of the acts in these cases. Further empirical investigations might reveal that there is a certain relation between our psychological structure and these moral features of acts. Such a relation needs to be similar to the relation between our observations and the properties investigated by the special sciences, such as psychology, biology, and sociology.

This route is the one the naturalist should take. In the end, the naturalist needs to explain where deontological properties are located in the natural world. If we employ

our deontological theory as our first-order ethical theory, we need to explain the relation between our psychological structure of morality which generates our initial moral judgements, our formulating moral principles based on these judgements, and deontological properties of acts outside of us.

Further empirical investigations might reveal that there is such relation between our psychological structure of morality and certain features of acts. At that point, we might be able to give the following reductive account of deontological properties: a property of an act is deontologically important if and only if toward that property our psychologically real structure of morality responds. The set of such natural properties are *A*, *B*, and *C*, for instance.

But such a reductive account could be a double-edged sword. While such an account tells us which natural properties are deontological properties, the ontological status of these properties is, in the end, dependent on the ways of moral reasoning. According to this definition, if the feature of an act is not regarded as deontologically important by our psychological structure of morality, that feature is not deontologically important. So, it might be objected that in the end if one holds this version of deontology, one cannot defend the ontological objectivity of moral properties. The implication of this objection is this: there are natural moral properties which are causally or explanatorily relevant to certain features of our psychology, but the ontological status of these properties is, fundamentally, dependent on how our psychology thinks of morality.

The Summary of the Chapter

This chapter shows some problems with running the abductive defence on the basis of deontology. The first problem is the apparent tension between naturalism and

deontology which is typically has non-naturalistic aspects. The second problem is deontology's reliance on our moral judgements: this makes it difficult to defend the mind-independence thesis on the basis of deontology.

The conclusion of this chapter is that it is not clear if the abductive argument for naturalism can be defended on the basis of deontology. The expression 'not clear' should be taken literally. Perhaps, a sophisticated version of deontology which is not committed to *a priori* moral knowledge may be employed for the abductive defence of naturalism. My attempt in this chapter is one of such trials and my trial describes how the project can go though it is not very clear if my project will succeed.

In the next short chapter, I will sum up my attempt of running the abductive argument on the basis of different normative theories. I also consider the objections the naturalist needs to reply to on the basis of the abductive defence of naturalism.

Chapter VIII

Two Kinds of Objection against the Abductive Argument

In this short chapter, I will summarise what I have achieved in Chapter V, VI and VII. Then, I list the objections to the abductive argument. I will be discussing these objections in the next two chapters.

8.1 Summary of Chapters V, VI and VII

In Chapter II, I introduced one argument for naturalism which takes the following form:

The Basic Explanationist Argument (the Basic Argument, for short)

- (1) An entity exists if that entity is ineliminable in the best explanation of phenomena we experience. [the explanationist thesis]
- (2) Natural moral properties are ineliminable in the best explanation of phenomena we experience.
- (3) Therefore: natural moral properties exist

I claimed that the crucial disagreement between the naturalist and his opponents is on the second premise of the argument. I then suggested that the abductive argument may be a good argument whose conclusion is the second premise of the basic argument. The abductive argument takes the following form:

The Abductive Argument for Moral Realism

- (1) First-order ethical theory is empirically reliable.
- (2) The theory-building procedures of first-order ethical theory are not free from theoretical presuppositions.

(3) The best explanation of (1) and (2) [which are themselves empirical phenomena] is moral realism which implies the existence of natural moral properties.

(4) Therefore: natural moral properties are ineliminable in the best explanation of phenomena we experience [the second premise of the basic argument].

In Chapter, V, VI, and VII, I run this argument employing different normative ethical theories. The result of my investigation is that the argument can be defended on the basis of consequentialism and virtue ethics but it is not clear if the argument can be defended on the basis of deontology. I mentioned that there are some serious tensions between the abductive argument and versions of deontology which are committed to *a priori* moral epistemology. Although I tried to defend the abductive argument employing a version of deontology which does not have apparent non-naturalistic features, it was not clear whether this attempt would be successful.

How should we react to this result? In one sense, this result is not too bad for the naturalist: we can defend the abductive argument on the basis of consequentialism and virtue ethics which are examples of genuine normative theory. But this result might force us to take one of the routes I suggested in the previous chapter, namely the soundness of the abductive argument depends on the denial of deontology: if we accept the soundness of the abductive argument on the basis of consequentialism and virtue ethics, we should reject deontology which is not compatible with the abductive argument. Alternatively, we should reject the abductive argument if we want to accept deontology since the soundness of the abductive argument and the truth of deontology are incompatible.

Further research may be required to consider this issue. It may be the case that my trial of the defence of the abductive argument on the basis of the naturalistic version of deontology may be further developed and will be successful. If this project is successful,

we may be able to strengthen the thesis that the abductive argument and deontology are compatible. Perhaps there are some theoretical virtues naturalistic versions of deontology possess, and those virtues may make naturalistic deontology superior to non-naturalistic deontology. We may be in a position where we only reject non-naturalistic versions of deontology while we accept naturalistic versions of deontology together with the abductive argument. I will leave this possibility still open despite the fact my trial of running the argument on the basis of my sample non-naturalistic deontological theory is not obviously successful. I simply assume that further research is required to settle these issues.

The upshot is this: we can defend the abductive argument on the basis of consequentialism and virtue ethics while it is not clear whether the argument can be defended on the basis of deontology.

8.2 Empirical Objections and Philosophical Objections

In the next two chapters, I will discuss some objections to the abductive argument. My discussions include the discussions on some of the objections originally made against the singular argument.

The objections against the abductive argument can be divided into two groups: one group may be called Empirical Objections while another group may be called Philosophical Objections.

Empirical Objections are about the two empirical premises of the abductive argument. Remember the two empirical premises of the argument: (1) first-order ethical theory is empirically reliable and (2) the theory-building procedures of first-order ethical theory are not free from theoretical presuppositions. In defending the argument, I was simply assuming that these premises were empirically confirmed in the way I

described. But these assumptions can be easily rejected if there are some pieces of empirical evidence which refute these premises. In the next chapter I will discuss one of such empirical objections about the second premise of the argument. The objection goes as follows: recent empirical findings in social psychology shows that the way we make moral judgements is radically different from how we make judgements in science. Since the second premise requires that the way we form moral judgements is analogous to the way we form judgements in science, these findings in social psychology are empirical evidence for the denial of the second premise.

Philosophical Objections do not rely on empirical findings. In the previous chapters, I have been mentioning some fragments of these objections. In Chapter X, I fully discuss these objections and consider how the proponent of the abductive argument can reply to these objections.

The first objection is about the status of the argument. The previous three chapters show that the argument works when we employ different theories. This consequence invites the issue mentioned in Chapter IV: what is the status of the argument? How do we understand that the abductive argument is defended on the basis of the approximate truth of different normative theories? I will discuss this objection and claim that the proponent of the abductive argument can have various responses to this objection without giving up the argument itself.

The second objection is about one of the empirical premises of the argument though this objection does not rely on any empirical finding. Remember that there was an objection against Boyd's presentation of the empirical reliability of normative theory. The objection was this: what Boyd describes was the reliability of the relevant sciences, not of normative theory. It needs to be discussed whether the naturalist can have a reply

to this objection on the basis of the descriptions of empirical reliability I give in defending the abductive argument.

The third objection is about the central claim of the argument that the best explanation of the empirical premises of normative theory is the approximate truth of normative theory. Remember the two objections originally raised against the singular argument: (1) the alternative explanation objection, and (2) the moral pessimistic induction objection. Both of them are analogous to the ones made against scientific realism. I am going to discuss how well we may reply to these objections on the basis of the abductive defence of naturalism.

The fourth question is also the one originally made against the singular argument. The objection is about the general concern that naturalistic moral realism cannot preserve proper moral normativity which should be defended by any moral realist positions. In the same way I discuss the third objection, I am going to discuss how well we may reply to this objection on the basis of the abductive defence of naturalism.

With this general outline of the following two chapters, I will start to discuss Empirical Objection in the next chapter.

Chapter IX

The Abductive Argument and Empirical Research on Moral Judgements

Introduction

In this chapter, I discuss whether recent empirical findings from social psychology undermine one of the empirical premises of the abductive argument. The empirical premise which is potentially undermined by social psychology is the second premise: the theory-building procedures of first-order ethical theory are not free from theoretical presuppositions.

9.1 Social Psychology Undermining the Abductive Argument

The second premise implies that first-order ethical theory is developed in the same way science is developed. In the revision procedures of science, the following theory-dependent features are seen: (1) hypotheses presuppose background assumptions and theories, (2) central issues depend on the theoretical context, (3) the standard of confirmation depends on background theories, and (4) there is the mutual relation between old theories and revised theories. The second premise implies that moral inquiry also possesses these theory-dependent features.

The second premise is an empirical premise. Thus, the premise is rejected if empirical research shows that first-order ethical theory does not have such theory-dependent features.

These theory-dependent features presuppose some sort of rational theorising. When theorists suggest new hypotheses referring to theoretical entities, they suggest new hypotheses on some reasons. Through some sort of rational reflection on background assumptions, theorists suggest new hypotheses. In such reflection, theorists might see the importance of new hypotheses. Theorists might find the coherence between new hypotheses and background theories and assumptions. Theorists do these things by recognising some reasons for their theorising.

Some recent studies in social psychology have been held to raise doubts about the role of rational theorising in morality. They might show that there is no genuine link between the formation of moral judgements and moral reasoning as traditionally assumed by philosophers. Further, these studies indicate that how people form moral judgements is radically different from how scientific theories are built up (Haidt 2001). Such empirical results seem to be undermining the second premise of the argument: if the way we form moral judgements was radically different from the way scientists build up their theories, moral inquiry would not have those theory-dependent features analogous to the theory-dependent features of science. Hence, the second premise of the argument is empirically rejected.

9.2 Haidt on the Social Intuitionist Model

In social psychology, the mechanism of how moral judgements are formed is an important subject. The rationalist model and the social intuitionist model are two competing models of how we form moral judgements. Haidt argues that recent empirical studies show that the rationalist model does not correctly describe how moral judgements are formed. Haidt argues that the alternative social intuitionist model more accurately describes the mechanism of moral judgements (Haidt 2001). First I briefly

explain why Haidt thinks that the social intuitionist model is more empirically plausible than the rationalist model is. Then I explain why this conclusion might be a problem for the second premise of the abductive argument.

9.2.1 The Rationalist and the Social Intuitionist Models

Take the following moral judgement, 'killing an innocent person for the killer's fun is morally wrong'. According to the rationalist model, this moral judgement is formed mainly by the process of reasoning and reflection. In making the judgement, the judger would consider the following aspects of the act: what sort of effect, whether some good effects and bad effects would come out of such an act, and whether there could be any case where a person's being killed for the killer's fun is justifiable. Through considering various morally relevant aspects of the act, the judger makes the judgement that the act is morally wrong. Reasoning and reflection play important roles in this judgement formation process. By reasoning and reflection, the judger carefully analyses various aspects of the act and reaches the moral conclusion.

According to the social intuitionist model, on the other hand, the formation of this moral judgement starts with initial reactions to the case given. First, the judger 'feels' that killing an innocent person for the killer's fun is morally wrong (Haidt 2001, p. 814). Then, when the judger faces with a social demand for a verbal justification, the judger becomes a lawyer trying to build a case rather than a judge searching for the truth (ibid). If the judger is asked why the judger believes that killing an innocent person for fun is morally wrong, the judger might provide some reasons for the claim. But, according to the social intuitionist model, the consideration of these reasons does not play an essential role in the formation of the judger's belief. Rather these reasons are provided just to defend the judger's initial reaction that killing an innocent person for fun is wrong. So, the role of reasoning and reflection is different from the role played in the

rationalist model. Reasoning and reflection are secondary in this judgement formation process. Rather than searching truth by reasoning and reflection, the judge employs reasoning and reflection to defend the judge's initial reaction to the case.

Haidt writes that the difference between the rationalist model and the social intuitionist model can be metaphorically described as the difference between a lawyer defending a client and a scientist seeking truth (Haidt 2001, p. 820). The former is analogous to the social intuitionist approach and the latter is analogous to the rationalist approach. While the rationalist model says that the judge tries to find an objective answer to a given case like a scientist, the social intuitionist model says that the judge tries to defend his initial reaction like a lawyer who tries to defend his client.

9.2.2 Some Empirical Findings for the Social Intuitionist Model

Haidt gives a series of empirical findings as evidence for the social intuitionist model.

Certain Social Settings Significantly Affect our Moral Judgements

The studies on attitudes, people's perception and persuasion show that desires for keeping harmony and agreement have significant effects on our judgements (Haidt 2001, p. 821). For instance, one study shows that one's initial attitudes toward some controversial issues will be shifted toward one's partner's view if one knows the partner's view prior to the discussion (Chen et al. 1996). Another study shows that if people are expected to work with a particular person, their judgement about this person would be more friendly than the case when people are not expected to work with that person (Darley and Berscheid 1967). These are the instances of how our desires to keep harmony and agreement in our environments affect our judgements.

These findings indicate that our moral judgements are also significantly influenced by certain social factors. My judgement about Rob who is one of my friends might be different if Rob is a complete stranger. My judgement about the capital punishment

might be affected by my discussion partner's view if I am about to engage a dialogue on this issue with a person who supports the practice. In this way, the formation of our moral judgements is highly influenced by social settings, and reasoning and reflection alone are not the main factors which form moral judgements.

Defence Motivation

Another study shows that people have a desire called, 'defence desire'. This is people's desire to hold attitudes and beliefs that are congruent with existing self-definitional attitudes, which includes moral commitments and beliefs (Chaiken et al. 1996). When defence motivation is triggered, both heuristic (intuitive system) and systematic thinking (reason system) work to preserve self-definitional attitudes (rather than seeking the truth). One study shows that when students are asked to research evidence on both the plausibility and implausibility of the death penalty, students accept evidence which supports their prior belief uncritically while they carefully interpret opposing evidence (Lord and Ross 1979).

This study also shows that the role of reasoning and reflection in moral judgements is to defend prior moral commitments. The role of them is not to find the true answer (Haidt 2001, p. 821).

Cognitive Dissonance

Although Haidt does not mention this study in his article, another relevant phenomenon is observed in the field about cognitive dissonance. According to cognitive dissonance theory, when people have two contradicting cognitions, such as two beliefs whose truths are incompatible, in order to reduce their unpleasant psychological state which is generated by the dissonance of these competing cognitions, people tend to (1) change their cognitions, (2) add more consonant cognitions, or (3) change their views on the values of these cognitions (cf. Cooper 2007). This may be applied into the case of moral

judgement. If people have two competing moral beliefs, they will be in a psychologically unpleasant state, and in turn, try to reduce this unpleasantness by changing their moral beliefs. This may be taken as further empirical evidence for the social intuitionist model: people change their moral views in order to reduce their psychological unpleasantness, not because they find some theoretical reasons for the revision.

Ad-Hoc Moral Reasoning

The studies on how children develop their moral views also support the social intuitionist model. Kohlberg's theory used to suggest that young children in many cultures first hold the view that acts that get punished are wrong and acts that get rewarded are good. Then, they soon advance to the theory that acts that others approve of are good while acts condemned by others are bad (Kohlberg 1969). But more recent studies show that those children who are supposed to be at the stage where they believe that acts that get punished are wrong actually believe that harmful acts are wrong even if those acts are not punished (Turiel 1983). According to Haidt, this later finding shows that children form their moral judgements by their automatic moral intuitions. The reasons those children could provide for the justification of their judgement, such as, 'I though the act was wrong since it would be punished', is *ad hoc* justification which just 'sounds' plausible (Haidt 2001, p. 823).

Given these empirical findings, Haidt concludes that the social intuitionist model is more empirically plausible than the rationalist model. He writes:

'[These empirical findings are] intended to demonstrate that the roots of human intelligence, rationality, and ethical sophistication should not be sought in our ability to search for and evaluate evidence in an open and unbiased way' (Haidt 2001, pp. 821-822).

If...shocking or threatening issues are being judged, such as abortion, euthanasia, or consensual incest, then coherence motives [the desire to keep the existing moral commitments] also will be at work. Under these more realistic circumstances, moral reasoning is not left free to search for truth but is likely to be hired out like a lawyer by various motives, employed only to seek confirmation of preordained conclusions' (Haidt 2001, p. 822).

9.3 What Might the Social Intuitionist Model Imply?

Suppose that Haidt's interpretation of these empirical findings is correct and the social intuitionist model is an accurate explanation of how we make moral judgements. What does this conclusion show? How would the social intuitionist model be a threat to the abductive argument for moral realism?

The social intuitionist model might be a threat to the abductive argument since this model might undermine the second premise of the abductive argument. As we have seen in the beginning of this chapter, the premise says that moral inquiry is analogous to scientific enquiry in the way it is conducted on certain reasons. If the social intuitionist model is true, moral inquiry should be understood as an inquiry which is not to seek truth, rather to defend our initial reactions to given cases.

Remember the four theory-dependent features of science: (1) hypotheses presuppose background assumptions and theories, (2) central issues depend on the theoretical context, (3) the standard of confirmation depends on background theories, and (4) there is the mutual relation between old theories and revised theories. If the social intuitionist model was true, moral inquiry would not have these theoretical features.

First, the truth of the social intuitionist model seems to be in conflict with (1). According to the social intuitionist model, moral hypotheses we make are not the

product of reasoning or reflection. For a hypothesis to presuppose background assumptions and theories, such reasoning or reflection prior to the suggestion of that hypothesis is needed. The judge needs to consider a hypothesis from the candidates which seem to be not in conflict with background moral assumptions. Such a procedure requires that the judge proposes a hypothesis on the reflection about the coherence between the hypothesis and background assumptions. But, the social intuitionist model says, such consideration is not essential to the formation of moral judgements. Moral hypotheses are suggested not by presupposing certain background moral assumptions. Rather, they are suggested by the judge's initial reactions to given cases.

Because of a similar reason, the social intuitionist model is in conflict with (2). Since moral inquiry is primarily concerned with initial moral judgements, there is no genuine room for the judge to consider what sort of thing would be issues inherited from the past theory. We just feel that such and such things are morally important, rather than giving answers to certain questions inherited in the theoretical tradition.

These considerations may support the thought that the truth of the social intuitionist model of moral judgements is a threat to the abductive argument. From these, the opponent of the abductive argument would argue as follows: the empirical findings support the social intuitionist model, and the social intuitionist model rejects the rational aspects of moral inquiry which is needed for the defence of the second premise of the abductive argument. So the abductive argument should be rejected.

9.4 Lawyers Defend her Case on Reasons

I have two replies to this objection. The first reply goes as follows: even if the social intuitionist model is true, the truth of the social intuitionist model does not become a real threat to the abductive argument. Even if the main factor of moral judgements is our

initial judgements, our judgements and the defence of them must be on some reasons. If this is the case, we could defend the abductive argument from the threat of the empirical objection.

Let us look more carefully at the analogy between a lawyer and a moral judger.

Linda, a lawyer, attempts to defend her client who is trying to come into the inheritance of his parents. There is a quarrel over this inheritance because other members of family are also trying to come into the inheritance. For Linda, it does not matter if the client really deserves it. Her job is to give as many points which attract the court as possible. In this case, Linda's basic position, 'my client deserves getting the inheritance', does not change though there is a real legal possibility that the client is not entitled to come into the inheritance.

According to Haidt, Mario, a moral judger, is like Linda who maintains her position. Mario considers whether killing an innocent person for the killer's fun is permissible or impermissible. Mario believes that such an act is not permissible. He could provide with us some reasons for his belief. But, the empirical findings show that his basic position is not from his rational reflection of the case. Rather, he has the initial feeling that such an act is not permissible, and on the basis of this initial reaction he forms the belief. His providing some reasons for his belief is *ad hoc* in the sense that his basic belief remains the same and all the reasons he would refer to are just to defend his basic position. This is analogous to the way Linda attempts to defend her client.

Now, let us see Linda's case again. As the scenario mentions, Linda is capable of giving some reasons for her case though her basic position remains the same. But, how does she give such reasons for her case? It seems that she has to refer to some reasons which could be accepted by other people even if their position is different from hers. Otherwise, she cannot persuade the judges. The way she refers to such reasons is, it

seems, theory-dependent in the same way science is. She should refer to some facts which seem to be defending the client from the perspective of the confirmation standard inherited in her legal tradition. She might mention the fact that her client was supporting his parents when they were still alive since, from the confirmation standard, this sort of fact could be regarded as evidence for the client's right. She should refer to some facts which seem to be weakening her opponent's case. She might mention the fact that other members of the client's family did not receive any documental proof which indicates the parents' will. She would mention such a fact since she knows that this sort of fact would be the central issue in the court. She could even revise her position if some unknown facts which hugely undermine her case suddenly appeared. Her opponent might show us some evidence which indicates that the parents in fact hoped that their family equally shared the inheritance. Given this new evidence, she might revise her position in the following way: 'now the new evidence shows that the parents had the will that the inheritance should be distributed equally. But, this should not undermine the client's right to come into large part of the inheritance since he is legally entitled to such a claim'. All of these considerations seem to be analogous to the theory-dependent features of science.

Now, analogously, let us see Mario's case again. In this scenario, we are assuming that the social intuitionist model is true and Mario's moral belief is formed primarily by his initial reaction to the case. Now, suppose Mario has a friend, Saif, who is sceptical about morality. There is a quarrel over whether such an act is acceptable or not. Saif says that such an act is in the end permissible since he believes that there is no objectivity in morality. Saif asks Mario to provide some reasons for Mario's claim. Mario could provide some *ad hoc* reasons which are just to defend Mario's position, rather than for seeking the truth of the proposition in question. He has to refer to some

reasons which could be accepted by Saif. Otherwise, Mario cannot change Saif's mind. The way he refers to such reasons is, again, theory dependent in the same way science is. He should refer to some facts which seem to be defending his position from some basic understandings of morality. He might mention the fact that such an act would affect the sufferings of the victim, the victim's family and friends, since this sort of fact seems to be morally relevant from the perspective of such basic understandings of morality. He might mention that Saif's holding a sceptical position would undermine not only the foundation of morality, but also the foundations of various parts of our society. He would mention such a fact since he thinks that this sort of fact would be one of the central issues in the debate. He could even revise his position if Saif raised some points which potentially undermine his position. Saif might argue that we could not touch and see value and there must be no such moral value, and Mario is committed to the existence of an entity which we do not have any reason to believe it. Given this objection, Mario might revise his belief in the following way: 'now, it is difficult to say that killing an innocent person for fun is impermissible since we can see or touch the impermissibility of such an act. But, we have various other reasons to believe that such an act is impermissible since the acceptance of the social code of such an act would produce various sufferings in the world'. For Mario, Saif's objection is rather a springboard to strengthen his view.

All of these considerations seem to be analogous to the theory-dependent features of science. In defending his hypothesis, Mario refers to some background moral assumptions and this seems to be analogous to the way scientists suggest a new hypothesis: they suggest a hypothesis on the basis of background theories they accept. Mario's disagreeing with Saif itself may be seen as an aspect of ethical inquiry analogous to the way science is conducted. This judgement (Mario's disagreement with

Saif is morally significant) is dependent on his background conception of morality, such as that the wrongness of killing is one of the central issues in ethics. This may be seen as analogous to scientists' judgement that some particular theoretical issues are important and need to be pursued further. Mario's sophistication of his hypothesis facing Saif's challenge may be seen as analogous to the mutual relation between old theories and revised theories in science. Mario's sophisticated response is a revision of his initial reaction, and we can see the mutual relation between his initial reaction, Saif's objection and the sophisticated answer.

The upshot is this: even if the way moral judgements are formed is analogous to the way a lawyer defends her case, we could still see some important theory-dependent features in both forms of inquiry which are analogous to the way science is developed.

9.5 Lay People and Expert Moral Theorists

There is another reply to the empirical objection. This reply relies on the distinction between lay people and expert moral theorists. The reply goes as follows:

- (1) To undermine the second premise of the abductive argument, it needs to be shown that moral inquiry conducted by expert moral theorists is not analogous to the way science is developed.
- (2) The recent studies in social psychology show that moral inquiry conducted by lay people is not analogous to the way science is developed.
- (3) Therefore: the recent studies in social psychology do not undermine the second premise of the abductive argument.

About (1): to undermine the abductive argument, empirical research needs to show the psychology of moral theorists who conduct serious theory-construction of morality.

That is because the second premise of the abductive argument is not about the

psychology of lay people. Rather the second premise is about how moral theorists build up their theories. This point can be clear when we remind ourselves the thought that the abductive argument is analogous to the abductive argument for scientific realism. In the argument for scientific realism, the premise about the theory-dependent features of science is not about how lay people form their beliefs about physics. It does not matter how lay people form their beliefs about subatomic particles by reading physics textbooks, or by putting some initial thoughts on the matter. What matters is how real scientists build up their theories by setting up experiments, observing the results of these experiments and interpreting these observations. So, analogously, what matters is how real moral theorists build up their normative theories, rather than how lay people form their moral judgements.

About (2): the empirical findings Haidt refers to are all about the psychology of lay people. Haidt himself explicitly says that the purpose of his research is to reveal the process of forming moral beliefs in real life setting, not to find out how people rationally construct their moral theory (Haidt 2001, p. 820). So, the premise (2) is not implausible.

Interestingly, some of the empirical studies Haidt uses might support the claim that the way expert moral theorists conduct their normative theories is analogous to the way science is developed. Some of the recent empirical studies Haidt uses show that when people are in appropriate circumstances and asked to construct their impartial moral theories, they can construct their moral theories mainly by reasoning and reflection. According to Haidt, some empirical studies show that when a person is under certain circumstances (e.g. a person is given adequate time to consider cases, a person is in a position where that person's judgements are not about someone to whom that person knows or has some special relationships, etc.) biased motivations are not triggered

(Haidt, p. 822). This could support the thought that moral theorists who are supposed to be in such circumstances should be able to conduct their theory-building mainly by reasoning and reflection.

Since (1) and (2) are plausible, (3) should also follow from these two premises: the recent studies in social psychology Haidt uses are not a real threat to the second premise of the abductive argument for moral realism.

These considerations make it clear what sort of empirical findings could be a threat to the second premise of the abductive argument. A sort of empirical findings which could be a threat to the abductive argument is empirical studies on the psychology of moral theorists who build up normative ethical theories.

Are there such empirical studies which focus on the psychology of normative ethicists? It seems that such studies are not present at the moment. There are some empirical studies on how normative ethicists behave (cf. Schwitzgebel 2009; Schwitzgebel and Rust 2009). But these are not the ones we are seeking because we are seeking certain empirical studies on how normative ethicists build up their theories.

9.6 How Normative Ethicists Build Up Their Theories

Rather than finishing this chapter by concluding that there is no empirical finding which undermines the second premise of the argument, I would like to explore this issue more by seeing how real normative ethicists build up their theories.

In response to the empirical objection from social psychology, perhaps we can say that how real normative ethicists develop their theories empirically *in fact confirms* the second premise of the abductive argument. Below I describe how Brad Hooker, who is a consequentialist normative ethicist, develops his theory. Then, I examine whether the way Hooker develops his theory can be analogous to the way science is developed.

9.6.1 Hooker's Consequentialism

Hooker's consequentialism seeks the ideal moral code whose acceptance is reasonably expected to produce more aggregate value than any other code. The acceptance of a code means its collective internalisation. For instance, the internalisation of the moral code of keeping promises amounts to the establishment of a shared conscience in society where people believe or feel¹¹ that they should keep promises (Hooker 2000, pp. 2, 5). From this, Hooker gives an account of a wrong act: an act is wrong if everyone's feeling free to do it would have bad consequences (Hooker 2000, p. 5).

How do we seek the ideal moral code? Hooker suggests the following four criteria for the assessment of moral theories.

- (1) Moral theories must start from attractive general beliefs about morality.
- (2) Moral theories must be internally consistent.
- (3) Moral theories must cohere with the moral convictions we have after careful reflection.
- (4) Moral theories should identify a fundamental principle that both (a) explains why our more specific considered moral convictions are correct and (b) justifies them from an impartial point of view.
- (5) Moral theories should help us deal with moral questions about which we are not confident, or do not agree (Hooker 2000, p. 4).

Hooker's theory-building starts with (1). He suggests following moral convictions as attractive general moral beliefs.

¹¹ Hooker is neutral about whether our moral judgements are beliefs or the expressions of our non-cognitive states.

Attractive General Moral Beliefs

(a) We ought to help others in need, even those with whom we have not special relationships, unless helping those in need does not require great sacrifice of ourselves (Hooker 2000, p. 14).

(b) We owe more altruism to certain people, such as families and friends, than others.

(c) There are certain acts, such as physically attacking innocent people and their property, taking others' property without having any agreement, lying, and breaking promises, which are morally impermissible though in certain circumstances those acts may be permissible or required (Hooker 2000, p. 17).

Then, Hooker goes on to the procedure (4); seeking the moral principle which explains why those moral beliefs are plausible, and justifies them from an impartial point of view. The justification of those moral beliefs is that people's accepting these beliefs and living in accord with the internalisation of the codes of those beliefs have the best overall consequences (Hooker 2000, p. 4). Hooker's theory is obviously impartial in the sense that we can assess the plausibility of those moral convictions by observing the consequences of the internalisation of the codes of those practices.

Wary Rule-Consequentialism

How does Hooker revise his consequentialist theory? We can see how Hooker revises his theory in his response to one objection against consequentialism. I call the objection 'the calculation objection'. The objection goes as follows:

The Calculation Objection

- (1) Consequentialism implies that we ought to act in the way the consequences of everyone's feeling morally required to do a given act (internalising a code as a moral code) would be better than the consequences of everyone's not feeling so.
- (2) In order to know the code which should be internalised, we need to know what sort of expected value we would gain by internalising that code.
- (3) (2) is practically impossible (cf. Griffin 1996, p. 107)
- (4) Therefore: consequentialism is practically impossible.

In response to the calculation objection, Hooker suggests 'wary consequentialism'. In response to the objection, Hooker first claims that what we can find is a code 'whose general internalization could reasonably be expected to result in at least as much good as could reasonably be expected to result from any other *identifiable* code' (Hooker 2000, p. 114). Then, Hooker continues:

So suppose we instead aspire to find a code whose general internalization could reasonably be expected to produce as much good as any other code we can identify. More than one code may pass this test. That is, more than one code may have unsurpassed expected value. Rule-consequentialism must have a way of selecting among the codes in this set. Suppose rule-consequentialism is formulated so as to claim that, of these codes with unsurpassed expected value, the one closest to conventional morality determines which kinds of act are wrong. Call this view *wary rule-consequentialism* (Hooker 2000, p. 114).

One thing that counts in favour of wary rule-consequentialism is its epistemological modesty. We start with what we know, with what has been already tried. Attempts at moral reform should begin with existing practices, and then prune, refine, and supplement these where changes seem very likely to increase the overall good (Hooker 2000, p. 115).

Here we can see the criteria of the revision procedure of Hooker's consequentialism. The consequentialist theory is revised if the alternative moral code to existing practices is highly likely to increase expected value (Hooker 2000, p. 116). If there are two moral hypotheses with unsurpassed expected value suggested, the one which is closer to existing practices is chosen.

9.6.2 Theoretical Presuppositions of Hooker's Theory

Above, I elucidated the basic structure of Hooker's theory and how he revises his theory. Are the four theory-dependent features analogous to the ones of science seen in Hooker's theory-building procedures? Or, is the way Hooker develops his theory further evidence for the social intuitionist model and, in turn, evidence for the claim that the way ethics is developed is different from the way science is conducted? I claim that theory-dependent features analogous to the way science is conducted can be seen in Hooker's theorising. I exhibit these theory-dependent features of Hooker's theory through explaining his theory further.

Hypotheses Presuppose Background Assumptions and Theories

A new hypothesis in Hooker's theory presupposes the plausibility of basic moral convictions. This point can be seen when Hooker tries to give a rule-consequentialist answer to the question about how much the relatively well-off are obliged to do for the needy (Hooker 2000, p. 159). Hooker suggests the following moral rule: agents are required to help those in greater need, especially the worst off, even if the personal sacrifices involved in helping others add up to a significant cost to the agents over the course of their lives. Agents who accept this rule will be disposed to help those in greater need, and to do so up to at least the threshold of 'significant aggregative personal cost' (Hooker 2000, p. 174). Someone might think that the suggestion of this principle does not require us to refer to any background assumptions of morality since

the principle itself is intuitively plausible. But Hooker suggests this hypothesis as a hypothesis which coheres with two of our assumptions about morality, that we have duty to others in need and there are limits on how much self-sacrifice morality can reasonably demand. This is how Hooker follows the five criteria for the assessment of moral theory. Here we can see that Hooker is suggesting the hypothesis since he sees his hypothesis is a reasonable one from the perspective of the assumptions he holds.

Central Issues Depend on the Theoretical Context

The issue concerning how much we ought to sacrifice for others in need becomes one of the central questions due to the theoretical context. Hooker's theory holds that we have the duty to help others in need while the theory also holds that we have special obligations toward particular people with whom we have some special relationships. Then, the question about how much we ought to give up our own goods for strangers in need is an obvious question we need to ask. What this shows is that the central questions Hooker's theory tries to answer are dependent on its theoretical tradition. Because of certain views the theory holds, the question concerning how much we ought to give up our own goods for helping others becomes an issue. The social intuitionist model might not explain why this particular issue becomes a central issue in Hooker's moral theorising since it is hard to see how mere emotional responses to individual cases lead us to considering this issue.

It also seems that Hooker discusses this issue due to the fifth criteria for assessing moral theory, namely that moral theory should provide an answer to the question about which we are not confident enough. Hooker's choosing this issue may be partly caused by his referring to this criteria, not by his initial thought that the issue is important.

It is worth noting that this issue is a central question for all major normative theories. The fact that this issue is one of the central issues in normative ethics reflects

that all normative theories do presuppose that we should help others in need while we have the right to use our property for our own goods. Because of these two theoretical assumptions, the issue becomes one of the central problems in ethics in general.

The Standard of Confirmation Depends on Background Assumptions

Hooker's explanation of wary rule-consequentialism clearly shows that the standard of confirmation of Hooker's theory is importantly dependent on existing theoretical assumptions. If there are two competing hypotheses both of them are likely to produce the expected value, the one which is closer to existing practices than the other is chosen. This is analogous to the theory-choice procedure of science: in science, a hypothesis whose theoretical assumptions are relatively similar to the ones of existing theories is chosen as a simpler theory even if there is a competing theory whose theoretical assumptions are different but capable of explaining relevant observable phenomena.

There is the Mutual Relation between Old Principles and Revised Principles

This theory-dependent feature is, again, seen in Hooker's a rule-consequentialist answer to the question concerning how much we ought to give up our own goods for others. Hooker's theory starts with the assumption that the internalisation of the moral code that we ought to help others in need generally produces good consequences. Hooker's rule consequentialist answer to the question gives a more detailed account of this assumption. The old principle used to say that we ought to help others in need while the revised principle gives a more specific account of this moral duty: we are required to help those in greater need, especially the worst-off, even if the personal sacrifices involved in helping others add up to a significant cost to us. This shows the mutual relationship between Hooker's old theory and revised theory. Again, it is hard to see how this sort of mutual relation can be seen if moral theorising is merely our making initial responses to given cases.

Upshot

I elucidated the basic structure of Hooker's theory and described how Hooker's theory is revised. My elucidation shows that Hooker's theory has certain theory-dependent features analogous to the theory-dependent features of science. Thus, I conclude that Hooker's theory supports the second premise of the abductive argument.

Summary of the Chapter

In this chapter, I introduced some recent studies in social psychology about people's moral judgements. I considered whether recent empirical studies of moral judgements undermine the abductive argument. I concluded that recent empirical studies do not undermine the abductive argument. I gave two arguments for my response. First, I argued that even if the recent studies support the social intuitionist model, this does not undermine the second premise of the argument. Second, I argued that the empirical findings shown are not supposed to undermine the second premise of the argument since these studies are about the psychology of lay people. I argued that these empirical studies need to be about the psychology of expert moral theorists. Then, I investigated whether the ways real normative ethicists build up their theories support the abductive argument. I chose Brad Hooker's consequentialism, and claimed that we can see certain theory-dependent features analogous to the ones of science in Hooker's theorising. This may be empirical evidence for the second premise of the argument.

Chapter X

Philosophical Objections against the Abductive Argument

Introduction

I shall now start to discuss the philosophical objections I listed in the Chapter VIII. I am going to examine how well the naturalist can reply to the objections against the abductive argument I have been mentioning in the previous chapters.

10.1 What is the Status of the Argument?

In Chapter IV, I explained the abductive argument as a placeholder argument. Someone might wonder exactly what the status of this placeholder argument is.

10.1.1 Two Arguments about the Status of the Abductive Argument

In generalising the argument, I attempted to run the argument by employing different normative theories. Someone might challenge this argumentative strategy. There are two arguments which challenge my argumentative strategies:

The First Argument

(1) Running the abductive argument implies that once we get full social sciences we may defend the truths of different normative theories, or, one or two particular normative theories.

(2) Different normative theories disagree with each other on some fundamental ethical questions.

(3) Different normative theories cannot be true at one time [(2)].

(4) An argument which attempts to defend different normative theories is not successful [(3)].

(5) Therefore: running the abductive argument in this way is not successful [(1), (4)].

The Second Argument

(6) A metaethical theory should be neutral about the issues at the first-order theorising level.

(7) Therefore: the abductive argument is doing something a metaethical argument should not do [(1), (6)].

On First Argument

The first argument relies on the apparent plausibility of the premise (3), which is supported by another premise (2). It is not hard to see such plausibility of (3) when we consider (2). (2) says that different first-order ethical theories disagree with each other on some fundamental ethical questions. Consider some first-order ethical theories. The consequentialist would argue that the right act is the one which maximises certain values while the deontologist would argue that there are some acts that are morally impermissible despite maximising desirable outcomes. Furthermore, the virtue ethicist would argue that the cultivation of one's virtuous character itself is morally admirable while the consequentialist would disagree because he says that the moral worth of a person's moral virtues is determined by the consequence of having those moral virtues. These are fundamental disagreements between different first-order ethical theories.

The above explanation of (2) supports (3). Since it seems that different first-order ethical theories seem to give radically different assessments of the same act, the truth of one particular theory would imply the falsity of other theories. From this, we can see the plausibility of (3).

I shall now turn to discuss (1). Does the proponent of the abductive argument have to accept (1)? It seems so. According to the abductive argument, if we were given full social sciences, the two empirical premises of the argument would be confirmed or disconfirmed. If confirmed, we would be given a reason to believe the approximate truth of a particular theory whose empirical premises were confirmed. If we are given full social sciences *now*, and they confirm certain empirical aspects of different normative theories, we seem to have to accept the approximate truths of theories whose empirical premises are confirmed. So, if we run the argument in the same way I attempted in the previous chapters, we may be defending the truths of different first-order ethical theories. So, (1) seems to be the premise the naturalist should accept.

This is a surprising point: (1) implies that empirical findings in the social sciences may confirm or refute a normative theory. But the defence of naturalism on the basis of the abductive argument provides some ways how this may happen: I described how normative theories provide empirical predictions, and how social scientists may confirm these predictions by observation.

On Second Argument

I shall now discuss the second argument. The argument contains (1) which is also a premise of the first argument.

Some philosophers hold (6). There is an assumption that metaethical theories should be neutral about first-order ethical theories. The philosophers, Hare, Mackie and Dreier share this assumption (Hare 1965; Mackie 1977; Dreier 2002). For instance, Mackie thinks that his metaethical scepticism does not require us to be sceptics about normative ethics (1977). Mackie writes as follows:

These first and second order views are not merely distinct but completely independent: one could be a second order moral sceptic without being a first order one, or again the

other way round. A man could hold strong moral views, and indeed ones whose content was thoroughly conventional, while believing that they were simply attitudes and policies with regard to conduct that he and other people held. Conversely, a man could reject all established morality while believing it to be an objective truth that it was evil or corrupt (Mackie 1977, p. 16)

The thought here is that one's metaethical view does not affect one's view at the first-order level. This is the reason why Mackie argues that his error theory does not require the scepticism of first-order ethical theory.

Indeed this is the assumption anti-realists, such as Mackie, need. To avoid becoming sceptics about first-order morality, they claim that their having sceptic metaethical views does not require them to be sceptics at the first-order level.

Perhaps this assumption has some initial plausibility. Consider how non-cognitivists who are nihilists about the existence of mind-independent moral properties can be neutral about the debates at the first-order level. Non-cognitivists hold that moral judgements are not meant to refer to anything and there is no moral reality. Non-cognitivists might hold that one's making a moral judgement is an expression of one's accepting a moral norm. This view implies that one's judgement, 'killing an innocent person just for fun is wrong', is one's expression of his accepting the norm which prohibits such act. Now, we can see that someone who is committed to this non-cognitivist view can be neutral about the debates at the first-order level. Suppose Kantians and consequentialists disagree on whether Rob ought to keep his promise to his wife. Kantians say that Rob ought to keep the promise while consequentialists deny this. It seems that non-cognitivists can be neutral about this debate since they can accept both claims. Non-cognitivists can say that the judgement, 'Rob ought to keep his promise to his wife', is either an expression of one's acceptance of the Kantian norm or the acceptance of the consequentialist norm.

Given that (6) is not very implausible, (7) is defended by (1) and (6). How does the proponent of the abductive argument reply to these? Here is how he can reply:

To the first argument: (3) is not true. Different normative theories may be true at one time.

To the second argument: (6) is not true. It is perfectly sensible to claim that one's certain metaethical commitments affect one's first-order ethical views.

10.1.2 The Compatibility of Different Normative Theories

Recently, some doubts about the premise (3) have been raised. For instance, Parfit (2011a) argues that his Kantian contractarianism and rule-consequentialism would agree with each other on the fundamental issues of morality. Parfit argues that his Kantian rational agent would will that everyone ought to follow the rule-consequentialist moral principles whose universal acceptance would make things go best. What Parfit does is to give a case for the idea that different normative theories start with different theoretical backgrounds and frameworks but in the end they can agree on fundamental moral principles. Such an idea might support the thesis that different normative theories can be true at one time, and this undermines (3).

Audi also argues that different moral values each first-order ethical theories hold can be integrated and we can establish a theory which encompasses all core aspects of each of the normative theories (Audi 2007). He suggests that even if we face some cases where different values, such as happiness, justice and freedom, conflict with each other, we can balance these values employing some plausible principles. Although there is no single standard which decides the value we should prioritise in cases, where different values are conflicting, considerations of justice and freedom take priority (at least normally) over considerations of happiness. So if the only way we could enhance

people's happiness was by producing injustice, we should prioritise justice (Audi 2007, p. 17). It seems that this project implies the thought that there is no fundamental disagreement between different normative theories. Hence, the project rejects (2). If (2) is rejected, (3) will be undermined since (2) is the rationale for (3).

Hooker also mentions that his rule-consequentialism is not necessarily incompatible with other normative theories, such as contractualism and virtue ethics (Hooker 2000, p. 8n). Hooker indicates that these different first-order theories arise from some plausible general ideas about morality. So, Hooker says, it is rather difficult to assume that one theory is superior to the others if all of them are internally consistent (Hooker 2000, p. 8). This suggestion might also reject (3).

These philosophers' indications need genuine defence. Some philosophers have already raised some worries about Parfit's project (cf. Morgan 2009; Ridge 2009). If one follows Audi's line, one needs to argue that there is a metaphysically coherent system which accommodates different ethical values of happiness, justice and freedom in our metaphysical picture of the world. Also, if one hopes to develop the line of argument Hooker indicates, one needs to see if there is any radical disagreement between the theories which arise from our general ideas about morality. But, these suggestions do provide some doubts about the initial plausibility of (2), and (3). The development of one of these suggestions may be a real threat to (2) and (3).

Given these suggestions, I conclude that we do not have a sufficient reason to accept (2) and (3), and the first argument can be rejected on the basis of these suggestions. So, the proponent of the abductive argument can say that by running the argument we may defend different normative theories at one time.

10.1.3 Metaethics May be Non Neutral

The proponent of the abductive argument may challenge the plausibility of (6) despite the fact that there is some plausibility of (6) as I described above. In fact, the neutrality thesis is doubtful. Although I described the initial plausibility of (6), there are some philosophers who think that there is a strong link between normative ethics and metaethics. Those philosophers hold that metaethical theories cannot be neutral about the issues at the first-order level. For instance, Fantl argues that there is no morally neutral metaethical view, and any theory which does not assume the existence of moral properties cannot avoid accepting the denial of some morally plausible claims (Fantl 2006). Similarly, Enoch argues that some metaethical theories which cannot keep the proper objectivity of morality cannot avoid accepting some morally objectionable implications (Enoch 2011). Furthermore, Darwall argues that although normative ethics and metaethics focus on different issues, there must be a mutual dependence between the two. Darwall gives some examples of how metaethical disputes affect debates in normative ethics. Such examples include: (1) the truth of the externalism of moral reasons fits well with the truth of act-utilitarianism, and (2) to explain the normativity of the moral virtues, the nature of goodness of a person needs to be explained (Darwall 2006).

These indications provide some doubts about the plausibility of (6). And these indications seem sensible. Some metaethical theories seem to be fitting with particular first-order theories' frameworks while some first-order theories need support from some metaethical theories which underpin these first-order theories. And, we can see that many philosophers see the matter in this way and argue that their normative theories need such-and-such metaethical theories, or their metaethical theories need such-and-such normative theories.

For instance, Attfield argues that the conclusions he reaches in his normative theory need moral realist claims since his normative conclusions are not compatible with anti-realist metaethical views (Attfield 1995). On the other hand, some philosophers hold that certain metaethical conclusions require certain normative theories. For instance, Brink (1989) gives his coherentist epistemological argument for moral realism, and asks the question about how we should see different first-order ethical theories if we accept Brink's argument for moral realism. He writes as follows:

Different moral theories have different implications for the nature of moral facts, the decidability of moral disputes, and the justification of morality, and for our considered moral beliefs. A coherence theory of justification tells us we should accept that moral theory whose implications, here and elsewhere, are most plausible. We should accept the theory that provides the most systematic account of all of our beliefs, both moral and nonmoral. A coherentist epistemology makes a full-blown defense of any moral theory a long and difficult task, since such a defense requires not only that the theory in question be shown to be coherent with our other beliefs, but also that it be shown to be more coherent with our beliefs than other moral theories are (Brink 1989, pp. 212-213).

Here, Brink is saying that his metaethical theory of justification requires us to accept first-order ethical theory which better achieves epistemic coherency than other theories do. Following this strategy, in the final chapter of his book, Brink defends his version of utilitarianism on the basis of the claim that his conclusion in metaethical debates supports the truth of his version of utilitarianism.

If what Brink says is correct, it is perfectly sensible to accept one or two particular normative theories due to one metaethical commitment.

Then, what sort of first-order theory is compatible with the abductive defence of naturalism? The abductive argument requires us to see the empirical reliability of first-order ethical theory. I attempted to describe how social sciences could provide evidence

for the empirical reliability of first-order ethical theory. If we *are* given full social sciences, these social sciences will show whether a specific theory is empirically reliable or not.

We have already seen the existing debates concerning the empirical reliability of some normative theories. For instance, further empirical research on the neurophysiology of moral judgements might confirm or disconfirm the empirical reliability of either consequentialism or deontology. Further empirical research on character traits might confirm or disconfirm the empirical reliability of virtue ethics. Further empirical research on people's subjective happiness might confirm, disconfirm, or develop consequentialism's theory of wellbeing. If the social sciences tell us that one particular theory is empirically reliable while other normative theories contain empirically implausible implications, we may say that the empirically reliable theory can be explained by the approximate truth of that theory while such realist explanations of unreliable theories are unavailable.

To sum up; first, the assumption that different normative theories cannot be true at one time is questionable. Rather there are some ways to defend the thesis that different normative theories are compatible. So, the proponent of the abductive argument could claim that it is not a serious problem even if the abductive argument defends different normative theories at one time. Second, the assumption that metaethical theories should be neutral about the issues at the first-order level is also questionable. Rather, there are some good reasons to hold that one's metaethical views have to affect one's first-order views. I described how the abductive argument could confirm or reject some first-order theories which are not empirically reliable. So, I conclude that the proponent of the abductive argument can reject this objection.

10.2 On the Empirical Reliability of Normative Theory

In Chapter III, I argued that Boyd's original suggestion does not satisfactorily give us an adequate account of what it is for a first-order ethical theory to be empirically reliable.

Through running the abductive argument in Chapter V, VI, and VII, I have given substantial notions of empirical reliability for each normative theory. The opponent of the argument might raise some doubts about the plausibility of my presentation.

10.2.1 Reliability of the Other Sciences?

The opponent might argue that the specified empirical reliability described is not that of the moral theory but rather of other branches of science.

An Example Case

Suppose according to consequentialism (the one I presented in Chapter V), it is good to have special considerations for disabled people. This consequentialist theory says that having such considerations is morally good since it enhances people's wellbeing. Now there are some predictions we can make by this moral principle together with the consequentialist auxiliary propositions. People's cultivating a disposition to pay special attentions to disabled people is expected to contribute to people's wellbeing. A policy on affirmative action for disabled people is expected to contribute to people's wellbeing. Suppose Carol's society employs these practices. Then, the subjective measures of happiness show that the people in Carol's society are subjectively happier than the people in a society where the policies for disabled people are not employed. People's achieving certain degree of subjective happiness is an indicator of their enhancing wellbeing.

In the above case, the proponent of the abductive argument hopes to say that consequentialism is empirically reliable since the predictions it makes turn out to be true.

The opponent would still doubt that this shows the empirical reliability of consequentialism.

First, the opponent asks us what the predictions we are talking about are. The predictions are as follows:

(1) If people cultivate the disposition to take care of disabled people in an appropriate way, people in that society will answer positively to the life satisfaction question.

(2) If people employ the policy of affirmative action for disabled people, people in that society will answer positively to the life satisfaction question.

Then, the opponent asks us who make these predictions. The answer seems to be that the former prediction is made by psychologists while the latter is by sociologists. Social psychologists could investigate how certain dispositions of people affect people's subjective happiness. They might be able to make a prediction that people give positive answers to the life satisfaction question if they possess the disposition to take care of disabled people in an appropriate manner. Sociologists could investigate how employing certain policies affect people's subjective happiness. They might be able to make a prediction that people give positive answers to the life satisfaction question if they employ a policy of affirmative action for disabled people¹². Given these considerations, the opponent would say that even if we concede that there is regularity between the application of moral principles and people's subjective happiness, this does not show the empirical reliability of consequentialism. The predictions are made by the relevant scientific theories. Consequentialism itself does not provide any observational prediction.

¹² Although it is theoretically possible for sociologists to conduct such research, the situation may be slightly different from the case of psychology and economics. Many of real sociologists are not working on people's subjective happiness. See Veenhoven, R. 2008. Sociological Theories of Subjective Well-Being In: Eid, M. and Larsen, R. eds. *The Science of Subjective Well-being: A tribute to Ed Diener*. New York Guilford Publications

Moreover, the opponent continues to argue, the relevant scientific theories can revise their theories and are able to increase people's subjective happiness without any help from consequentialism. Psychologists and sociologists can investigate what sorts of psychological dispositions or social policies contribute to people's subjective happiness, and they can revise some parts of their theories in accordance with new empirical results.

How does the proponent of the abductive argument reply to this objection?

10.2.2 The Non-Reductivist Answer

The naturalist's answer to this objection may be dependent on the metaphysical thesis naturalism implies. In Chapter I, I claimed that the abductive argument is compatible with both the reductive thesis [moral properties are reducible to natural properties] and the non-reductive thesis [moral properties are natural properties but not reducible to other natural properties]. It seems that if naturalism holds the reductive thesis this objection might disappear. The reductive thesis provides a reductive account of moral properties, such as that a state of affairs is good if and only if that state of affairs enhances people's psychological pleasures. If this reductive account is accepted, the instantiation of moral properties can be predicted solely by the relevant sciences which tell us what is good for the enhancement of people's psychological pleasures. So, this objection becomes no objection against naturalism which holds the reductive thesis.

So, it seems, the objection becomes a real objection only when naturalism holds the non-reductive thesis. Thus, we need to consider how the naturalist who holds the non-reductive thesis can reply to this objection.

According to the non-reductive thesis, for instance, the moral property of wrongness is realised by different set of natural properties, and there is no reductive relation between wrongness and its base natural properties (Brink 1984; Sturgeon

1998a). Given this assumption, I suggest that there are certain predictions which can be made only by first-order ethical theory.

The relevant scientific theories can provide predictions about the relation between certain sets of natural properties and people's subjective happiness. Such predictions are the ones psychology and sociology could provide.

But what moral theories can provide are not just these predictions. For instance, the sample consequentialist theory can make the prediction that there is the regular co-occurrence between the instantiation of justice and people's subjective happiness. This prediction is this:

The Prediction by the Theory of Justice

When the moral property of justice is instantiated, certain amounts of subjective happiness are (if the relation is not causal), or will be realised.

Assume that the prediction above is empirically confirmed. The proponent of the abductive argument would claim that the relevant scientific theories cannot provide this prediction. Remember we are assuming here that the property of justice is non-reductive natural property. So there are many ways to realise the property of justice. Sometimes the property of justice might be realised by certain sets of social properties while on other occasions the property might be realised by different base natural properties. The prediction tells us that regardless of how a particular just state is instantiated, whenever the property of justice is instantiated, certain amounts of subjective happiness are also realised. This prediction is made only by consequentialism since only first-order ethical theory can tell us which states of affairs are just. The relevant sciences cannot tell us which states of affairs are just. Thus, predictions in terms of moral properties can be made only by first-order ethical theory.

Someone might still argue as follows: consequentialism says that people will enhance their wellbeing because of the instantiation of some moral properties. But the real cause of the enhancement of people's wellbeing is people's belief that what they are doing is morally right. So, in fact, there is no empirical generalisation between the instantiation of moral properties and people's wellbeing. Rather, the regularity exists between people's having moral beliefs and people's achieving a certain degree of subjective happiness.

I discuss this objection in the next section where I discuss some anti-realist alternative explanations of normative theory. That is because this line of objection is an important part of the objection the anti-realist would make against the realist explanation of first-order ethical theory.

10.3 Anti-Realist Alternative Explanations

The proponent of the abductive argument argues that the best explanation of the empirical premises about first-order ethical theory is moral realism whose core part is the approximate truth of first-order ethical theory. As I mentioned in previous chapters, there are objections analogous to the objections made against scientific realism. The anti-realist could argue that even if we concede that first-order ethical theory is empirically reliable and the way it develops is analogous to the way science is developed, still alternative anti-realist explanations are possible. Below I will present two lines of this criticism.

10.3.1 The Moral Pessimistic Induction¹³

One of the objections often made against scientific realism is the 'pessimistic induction'. The objection goes as follows: in the past, there were many empirically successful and

¹³ In his unpublished paper, Leiter mentions the possibility of this objection.

theoretically fruitful theories. The examples are the Newtonian theory of physics, the phlogiston theory of chemistry, etc. But now, we know that these theories are radically wrong about their theoretical descriptions. Thus, the meta-induction about scientific theories tells us that our current theories are simply false though they are empirically successful. What this shows is that the empirical success of a current theory does not give us warrant for the realist conception of that theory (Laudan 1981).

Here is a possible parallel challenge against the moral realist explanation of the success of moral theories. In the past, some of our good moral theories used to say that, for instance, there are people from certain social classes who are morally inferior. Aristotle's view on slavery may be one of these. Such a theory was, in a certain way, theoretically successful. According to Aristotle's own view, such a moral conclusion is reached by proper moral reasoning.

Now, almost all serious moral theories say that there is no such moral inferiority slaves naturally possess. So, according to current major moral theories, Aristotle's own view has turned out to be simply false. Now, we face a worry: what the history of morality shows is that certain theoretical successes of moral theories do not give us warrant for the truth of them. This consideration leads us to the pessimistic conclusion about our best moral theory: our current best normative theory may be simply false even if our theoretical standard says that the theory is the most plausible theory.

10.3.2 Some General Replies to the Pessimistic Induction

There are a few replies to this objection.

Leiter (unpublished), who mentions this objection, thinks that the objection does not work. He gives two replies to this objection. The first reply is that, in this case, what Aristotle was wrong about is not about his moral theory. Rather he was wrong about his scientific theory about the nature of slaves. So, we can expect that if Aristotle himself

had a more plausible theory of human nature which does not presuppose the natural difference between slaves and other people, Aristotle would not assume the existence of natural moral inferiority.

Leiter gives another reply to the objection. Through recognising certain obvious mistakes of the past normative theories, moral theorists who are working now can learn the patterns of mistakes. For instance, moral theorists might learn a pattern that we used to mistakenly exclude some people from our moral consideration due to their morally irrelevant features. There might be many other vicious patterns of moral reasoning we could learn from the past normative theories. The availability of learning these vicious patterns of moral reasoning strengthens the plausibility of our current normative theories. The moral theorists in the past, such as Aristotle, were not able to learn such vicious patterns of moral reasoning from the history of moral philosophy. The moral theorists who are living in the twenty first century are able to learn these vicious patterns of moral reasoning. So, from this, we can infer that the current best theory produced by the theorists who learn various vicious patterns of moral reasoning may be closer to the truth than the past best theory. In this way, we could avoid the pessimistic induction.

10.3.3 Reply from Moral Progress

There is a third reply analogous to the reply the scientific realist makes against the pessimistic induction (cf. Kitcher 1995). This reply is the one the proponent of the abductive argument can particularly take. Leiter mentions the possibility of this reply though he thinks this reply cannot be made by the moral realist since we cannot say that the modern utilitarian theory is closer to the truth than the past virtue ethical theory, for instance. By contrast, I argue that this analogous reply is possible for the proponent of the abductive argument for moral realism. First, I will sketch the scientific realist reply

to the pessimistic induction objection. Then, I will present how the moral realist can give an analogous reply against the moral pessimistic induction.

Against the pessimistic induction, the scientific realist says that we are entitled to make an 'optimistic induction' about scientific progress since current scientific theories seem to be closer to the truth than their predecessors from the perspective of the successors of those current scientific theories. From the perspective of scientific theories in the twenty first century, Priestley, Lavoisier, Dalton, and Avogadro were all wrong on some fundamental theoretical considerations. Nevertheless, we think that Lavoisier improved on Priestley, Dalton on Lavoisier, and Avogadro improved on Dalton. We can see the old scientific theories contribute to the gradual progress of science in terms of convergence on the truth. Since such an optimistic induction is possible, the scientific realist can say that science is gradually developing and our current theories are close to the truth (Kitcher 1995, p. 137).

Now I will present how the moral realist can give an analogous reply against the moral pessimistic induction. The proponent of the abductive argument could appeal to the empirical reliability of the past normative theories and the current theory. For instance, from the consequentialist perspective, there might be an obvious theoretical improvement between the old Benthamian moral theory and the Millian utilitarianism. This might be the case that people better realise their subjective happiness by employing the Millian principles than by employing the Benthamian principles. Indeed, Mill revised Bentham's theory on the basis of his own experience: in his youth, he followed the moral principles Bentham's theory provides. But he found himself not really well achieving his wellbeing, and he rather became mentally ill. On the basis of this experience, Mill revises the Benthamian theory of goodness. This revision is supposed to be the one which contributes to the wellbeing of human beings. The success of this

revision should be at least partly reflected in people's subjective happiness. If such an improvement is seen, we could claim that there is a proper progress between old moral theories and new moral theories. We might be able to see different sorts of moral improvement from the perspective of different normative theories. If social sciences provide enough evidence for the improvement of first-order ethical theory in this way, we would be given a reason to believe that our current theory is closer to the truth. In this way, we could avoid the pessimistic induction.

10.3.4 Evolutionary Explanation

There is another challenge the anti-realist could make. This is analogous to the argument van Fraassen proposed against scientific realism (Van Fraassen 1980, 1989). First, I briefly present van Fraassen's argument against the abductive argument for scientific realism. Then, I present the analogous argument against the abductive argument for moral realism.

Scientific realists argue that the success of science is explained by scientific realism. Otherwise, realists argue, the success of science has to be a miracle. Anti-realists, realists say, do not have any satisfactory explanation of the success of science.

Against the realist explanation of the success of science, van Fraassen gives an alternative evolutionary explanation. He says, 'science is a biological phenomenon, an activity by one kind of organism which facilitates its interaction with the environment. And this makes me think that a very different kind of scientific explanation is required' (Van Fraassen 1980, p. 39). He continues as follows:

I can best make the point by contrasting two accounts of the mouse who runs from its enemy, the cat. St. Augustine already remarked on this phenomenon, and provided an intentional explanation: the mouse *perceives that* the cat is its enemy, hence the mouse runs. What is postulated here is the 'adequacy' of the mouse's thought to the order of

nature: the relation of enmity is correctly reflected in his mind. But the Darwinist says: Do not ask why the *mouse* runs from its enemy. Species which did not cope with their natural enemies no longer exist. That is why there are only ones who do. In the same way, I claim that the success of current scientific theories is no miracle ... For any scientific theory is born into a life of fierce competition, a jungle red in tooth and claw. Only the successful theories survive – the ones which *in fact* latched on to actual regularities in nature (Van Fraassen 1980, pp. 39-40).

Then, what kind of competition are scientific theories in? Science is, according to van Fraassen, an ‘activity of constructing, testing, and refining scientific theories, that is – the production of theories to be accepted within the scientific community and offered to the public’ (Van Fraassen 1989, p. 189), and its aim is to give us theories that are *empirically adequate*. Empirical adequacy is ‘truth with respect to the observable phenomena (Van Fraassen 1989, pp. 192-193). Van Fraassen is claiming here that science as a whole is an activity which aims to produce empirically adequate theories. In order to produce such empirically adequate theories, scientists test and refine theories. Given this understanding of the nature of science, we might give an explanation of the success of science which does not rely on the *truth* of theoretical entities scientific theories posit. The explanation would be something as follows: there is no mystery why scientific theories are empirically reliable and the ways they are developed are theory-dependent. If the theoretical tradition is not capable of producing such empirically reliable theories, such tradition does not exist anymore. We should accept a theory as empirically adequate without accepting its theoretical description. The theoretical description of scientific theories is a useful tool to systematise what we observe, nothing more.

The moral anti-realist might learn from this objection. The anti-realist who learns from van Fraassen’s argument might think that we could give a similar evolutionary

explanation of theoretical features of moral theorising without supposing the existence of moral properties. Using the sample theory of consequentialism, let us see how an evolutionary explanation of the two empirical premises of first-order ethical theory is given.

The Anti-Realist Evolutionary Explanation

Consequentialism is an activity which constructs, tests, and refines moral principles. The aim of this activity is to produce moral principles which meet the theoretical standard which is accepted within the community. In Celine's society, the following theoretical virtues are regarded as theoretically good; internal consistency with other moral principles within the consequentialist framework and capability of realising people's wellbeing. Consequentialist moral principles have these theoretical virtues. Then, what is the explanation of the fact that consequentialist moral principles are empirically reliable and the ways they are produced are theory-dependent? It is an empirical fact that the theory-dependent methodology has produced empirically reliable moral principles. *And this is all about the success of consequentialism.* If moral principles produced by this tradition did not meet the theoretical standard, the consequentialist tradition would no longer exist. So, there is no wonder why the theory-dependent methodology of consequentialism is capable of producing empirically reliable moral principles. This explanation does not need to assume the reality of morality beyond our observations. Thus, the explanation is supposed to be explanatorily superior to the realist explanation in terms of its explanatory virtue of simplicity.

10.3.5 Reply: the Regularity between the Moral and the Natural

How could the realist reply to this challenge? The realist could argue as follows: the evolutionary explanation does provide an explanation of theoretical features of moral theorising. But it does not properly explain why the theory-dependent methodology of

consequentialism is capable of producing empirically reliable principles. Rather, following the Darwinian strategy, the anti-realist just refuses to provide any explanation of why theory-dependent methodology is capable of providing empirically reliable moral principles. This is problematic since there is certain regularity between the instantiation of moral facts and non-moral facts which can be explained in terms of moral facts. The realist explanation is capable of giving an explanation of such regularity while the anti-realist who advocates the Darwinian strategy may not be able to give an explanation of it. Thus, the evolutionary explanation is importantly explanatorily inferior to the realist explanation in terms of its consilience.

The following scenario explains this point.

Celine, the Consequentialist, Visiting Another Country

In her country, Celine thinks that just and charitable policies are both right policies since she observes that those policies contribute to people's wellbeing. Now, Celine is invited to a country where the people in that country suffer from some unknown causes. Celine is asked to investigate the causes of the sufferings and suggest some moral principles which eliminate the sufferings in the country. As a moral theorist, she investigates causes of the sufferings. What she discovers are certain states of affairs which can be regarded as unjust and uncharitable. She discovers that only a few groups of people receive social distributions while the majority of the people in the country do not get any social distributions despite the fact that they are obliged to pay high tax. She also discovers that people who suffer from illness cannot receive proper medical treatment since the government begrudges paying for this. According to Celine's consequentialist theory, these states of affairs are unjust and uncharitable. In order to make these states of affairs just and charitable, Celine suggests some moral principles. After the country starts employing Celine's moral principles, Celine observes that the

total amount of subjective happiness in the country increases, and the sufferings of the people becomes less.

In the above scenario, why is Celine capable of finding the causes of the sufferings?

Why do people achieve certain amounts of wellbeing by employing the moral principles Celine suggests? The realist can easily explain these phenomena. First, Celine successfully investigate the causes of the sufferings since her theory is approximately true. Her theory assumes the regular co-occurrence between the instantiation of unjust and uncharitable states and people's suffering. This background assumption enables Celine to notice that the causes of the sufferings may be the lack of the internalisation of the moral principles of justice and charity. The approximate truth of the background assumption explains why Celine reliably identifies the causes of the sufferings. Second, people achieve subjective happiness by employing the moral principles Celine suggests since these moral principles accurately describe the regularity between the instantiation of morally good states and the enhancement of people's wellbeing.

The anti-realist cannot properly explain the scenario above. It seems that it is hard for the anti-realist to explain the regular occurrences of the instantiation of moral properties and non-moral properties.

The realist could strengthen his reply by considering a following scenario:

Celine Visiting the Second Place

Then, Celine goes to another country where the people in that country do not have any systematic morality. So, they are not sure which moral theory they employ. However, Celine finds that social arrangements of this country are ideal from Celine's consequentialist moral point of view. The people in that country create states of affairs which are just and charitable. And Celine observes that people's wellbeing in this country is satisfactorily achieved.

The realist can easily explain why we can see the regular occurrence of the instantiation of certain moral properties and non-moral properties by postulating the real relation between them. On the other hand, the anti-realist cannot explain this phenomenon in terms of normative theory's being an activity. The people in the society do not hold any normative theory. So, in their theory, there is no empirically successful theory which can be explained. Nevertheless, there is still regularity between people's following moral norms (from the perspective of Celine's standard) and people's achieving a certain degree of subjective happiness. It seems that it is hard to explain this regularity in terms of anti-realism.

Also, this scenario can be used as a reply to one objection to the empirical reliability of first-order ethical theory. In the previous section, I raised the following concern: people are capable of realising their wellbeing because of their moral beliefs, not because of the facts about moral properties. So, even if we achieve wellbeing by employing consequentialist principles, this does not show the empirical reliability of consequentialism.

However, if there was a sort of regularity between the instantiation of moral properties and other natural properties, this regularity could be explained only in terms of the existence of moral properties. We cannot explain this regularity in terms of people's beliefs about morality. The scenario above shows this point. In the society Celine visits, people do not have the belief that their society is just. Nevertheless, they achieve good amounts of wellbeing by employing morally good policies. This empirical phenomenon can be explained by the existence of justice and charity which have relations with people's wellbeing.

Upshot

The debate between the proponent of the abductive argument and the anti-realist reveals that the proponent of the abductive argument can keep certain objectivity in morality.

The realist could say that the explanation of first-order ethical theory in terms of the existence of moral properties is possible even if nobody is aware of the success of first-order ethical theory (remember the case where people do not have any systematic morality). The realist would argue that even if nobody is aware of facts about morality, still the true moral theory reveals that there is certain regularity between people's following certain moral principles and some natural facts, such as people's subjective happiness.

10.4 On the Normativity Objection

In Chapter II, I raised a general worry about naturalistic moral realism: naturalistic moral realism cannot preserve proper normative force of morality. There are many arguments for this claim, but I would like to discuss one particular version of argument since this version is specifically raised against naturalism which is defended by the basic argument. Since the abductive argument is one way to defend the basic argument, we should expect that this particular version of argument may be a threat to the abductive defence of naturalism.

Morgan raises this line of argument. Morgan argues that if metaphysical ethical naturalism defended by the basic explanationist argument is true, this must be a strange position qua moral realism since this does not provide a kind of normativity we expect from moral realism (Morgan 2006).

10.4.1 Morgan's Objection

I understand Morgan's argument as follows:

(N1) Suppose that moral realism is defended by the basic explanationist argument (through the abductive argument).

(N2) If so, noble realism is also defended by the basic explanationist argument.

(N3) The satisfactory defence of moral realism implies the rejection of noble realism.

(N4) Therefore, moral realism is not defended by the abductive argument ((N1), (N3) *reductio ad absurdum*).

First, Morgan explains why (N2) is the case. Morgan invites us to see how we would defend ‘Nietzschean noble realism’ by the basic argument, the argument which appeals to an entity’s explanatory virtue for that entity’s ontological right. The morally ideal person in the Nietzschean framework values ‘psychological strength, creativity, artistic excellence, political success and the will to mould the world in one’s own image whatever the cost to others’ (ibid.), while he refuses moral values such as conformity, sympathy, pity and so forth (ibid.). Morgan dubs the values which are endorsed by the Nietzschean morally ideal person ‘nobility’, and argues that the proponent of naturalistic moral realism needs to accept noble realism. Morgan uses the ‘ruthlessness’ of a person as an example of noble qualities. Ruthlessness is willingness to single-mindedly promote one’s personal ends and values, whatever the cost to those who do not share them. Then, how can such a quality play an essential role in the best explanations of what we experience? Morgan thinks we can find some historical events which can be explained in terms of persons’ ruthlessness. An example case Morgan mentions is the French revolution. Morgan writes as follows:

[To explain the French Revolution, the] Nietzschean might well cite as a crucial factor the loss of grip by the members of the aristocracy, due to a decadent lack of self-discipline and a growing unwillingness to assert their dominance, with aristocrats wallowing in the anesthesia of pleasure as their world increasingly crumbled around them ... Decency

moves us, through affection, and this psychological effect brings about observable regularities at the macro-sociological level. But ruthlessness also moves us, this time through fear, but no less reliably and with similar observable consequences. So in the noble case once again the human motivational system is the mechanism which brings about the observed sociological regularity, again as it interacts with socio-political conditions, though this time of a decidedly non-moral character. If the aristocracy had not ceased to be ruthless and gradually become degenerate, then *ceteris paribus* the populace would have remained cowed, and the system of class dominance would not have been overthrown. Degeneracy at least in part explains political emancipation, then, and conversely nobility explains the stability of certain hierarchical societies (Morgan 2006, pp. 331-332).

Morgan concludes that the proponents of naturalistic moral realism need to accept the existence of noble values, such as ruthlessness since noble values play ineliminable roles in the best explanations of what we observe as we see in the quotation above.

Then, what is the problem? Morgan now explains the premise (N3). Morgan explains the problem and the plausibility of (N3) as follows:

As the naturalistic moral realist claims, it is a fact that an individual who has a motivational profile which contains appropriate sympathetic desires and feeling has reason to act morally.

...

But at the same time, as the noble value realist claims, it is a fact that an individual who has certain desires which are praise worthy within the Nietzschean moral framework (people who long to rule, who take human refinement to be more important than human need, people who worship the will to power) has reason to act immorally.

...

And, the consequence of the above is that there is a number of coexisting and competing real value systems, none of which has any intrinsic normative superiority (Morgan 2006, p. 333).

And, Morgan argues, the satisfactory defence of moral realism should reject such noble realism. He writes:

The moral perspective presents the values it champions as universally compelling standards... From the moral perspective, an agent's desires do not provide him or her with a rationale for repudiating morality. Rather, moral obligations require agents to restrain and if possible eliminate their desires to act in ways which violate its dictates. Morality casts judgment on inclination, rather than inclination on morality (Morgan 2006, p. 334).

Morgan is saying here that the basic argument does not provide any reason to follow either noble realism or moral realism since the choice depends on our motivational profiles. Morgan claims that this is an odd consequence as a consequence we expect from the truth of moral realism. Moral realism is supposed to be a thesis which guarantees a certain sort of objectivity of morality against immoralism. Moral realists want to argue that people who act solely for their own interests are somehow fundamentally wrong about moral normativity. But, if Morgan is right, naturalistic moral realists cannot reject noble realism since naturalistic moral realists need to say that for some people it is entirely reasonable to follow immoralism. So, Morgan thinks that the basic argument does not satisfactorily defend moral realism.

10.4.2 Stronger Reason for Morality

First, I argue that the abductive argument could provide us with a stronger reason to follow moral values than noble values, even if the argument ultimately defends the reality of noble values. If this is the case, this undermines the strength of (N2). (N2)

essentially claims that moral realism should reject noble realism in the way the argument for moral realism should give us a reason to not follow noble realism. My reply is this: even if the argument for moral realism defends the reality of noble values, still, the argument could give us a reason to not follow noble values.

Now, let us see how noble realism could be defended by the abductive argument which is one version of the basic argument. To defend noble realism by the abductive argument, we need to see how the value theory which holds noble values (such as ruthlessness) could provide empirical prediction. In the quote, Morgan employs a counterfactual test to describe the empirical generalisation the noble value theory could provide. In that counterfactual, Morgan indicates that noble values can be explanatorily relevant to the stability of society.

From this, we could expect that the noble value theory could provide the following prediction;

The Noble Theory's Prediction

If noble values are instantiated in a society, that society keeps certain stability.

Now, here is a possibility that empirical evidence might undermine this prediction.

Further empirical investigations might show that noble values do not contribute to establishing strong stability. They might reveal that the instantiation of noble values could contribute to establishing 'fragile stability'. People who possess noble virtues do not take care of other people. Obviously, these individuals could not have cooperative relationships with others. Such cooperative relationships may be crucial for establishing strong stability. Furthermore, empirical investigation might reveal that moral values, such as justice, contribute to establishing stronger stability than the stability which can be established by noble values. People who possess moral virtues, such as the virtue of justice, behave in the way they distribute goods in a fair manner. In some appropriate

cases, they would support others in need. Such individuals would have good cooperative relationships with others.

In such a case, even people who believe in noble values do have a reason to follow moral values if their desire is the stability of their own positions. Although following noble values is one way to keep the stability of their positions, following moral values is a better way to achieve such an end.

There is an important assumption which underlies this reply. The assumption is about the nature of reason for action. According to this assumption, one has a reason to φ if and only if φ -ing satisfies one's desire. According to this view, one's reason to follow some moral practices is to satisfy one's desire. On this assumption, what the reply is claiming is as follows: if one's desire is to keep one's position's stability, one has a stronger reason to follow moral values than noble values since by following moral values one can achieve the stronger stability of one's position.

Obviously, the plausibility of such a story depends on the empirical investigation of social stability and its relation with noble values and moral values. But the above story shows how the abductive argument could provide us a story of our having a stronger reason to follow moral values than noble values. The proponent of the abductive argument could claim this by appealing to some empirical findings.¹⁴

This response implies that we should be agnostic in choosing one of these if both the consequentialist theory and the noble theory are empirically reliable in the same degree. This response also implies that if in the specific cases the consequentialist theory is more empirically reliable but in general the noble theory is more reliable, we should choose the noble theory. Obviously this is a surprising implication. But this is

¹⁴ It may be thought we are assuming here the truth of instrumentalism about practical reasons. It is true that my response to the objection here requires instrumentalism. Nevertheless, the proponent of the abductive argument does not need to be committed to the truth of instrumentalism. Rather, he can be neutral about the theory of practical reason. I will explain this point later.

the image of moral normativity the abductive defence of naturalism endorses. The naturalist endorses this conception of moral normativity partly because of his optimism in humanity. The naturalist endorses the optimism that human beings generally do not hope the ideal of the noble theory. They do hope the happiness of other people as well as their own happiness. Because of these aspects of humanity, they usually have reason to follow moral norms, not the norms provided by the noble theory.

10.4.3 Normative Theory is More Important than Noble Theory

My second reply is on (N3). I will argue that the naturalistic moral realism I defend is immune from Morgan's objection even if the abductive argument defends the existence of 'noble values'.

Suppose the abductive argument defends Nietzschean noble realism. At the same time, suppose the abductive argument also defends the sample theory of Aristotelian virtue ethics. This is the case Morgan is worried about. Depending on people's contingent mental settings, people might have a reason to follow Aristotelian virtue ethics while other people might have a reason to follow Nietzschean theory. Morgan thinks that the basic argument cannot tell us which theory people should follow regardless of their mental profiles.

In response to Morgan's worry here, I argue that Morgan's worry could easily disappear.

We are assuming here that both the Aristotelian theory and the Nietzschean theory are defended by the abductive argument. Now, what we need to accept is the fact that there are such properties, 'courage', 'honesty', 'benevolence' (Aristotelian virtues), and noble qualities such as ruthlessness (Nietzschean virtues).

But, notice, the fact that the abductive argument defends the Aristotelian theory already generates a positive attack on the Nietzschean theory. The sample Aristotelian

virtue ethics would not accept morally ideal virtues of the Nietzschean theory. The Aristotelian theory would say that Nietzschean virtues are not the morally admirable excellence of the will. Also, the Aristotelian theory would say that there are some special reasons for *us* to cultivate Aristotelian virtues. The proponent of the Aristotelian theory would argue that given the human nature we have, we do not have any good reason to follow the Nietzschean theory while certain Aristotelian virtues are needed in order to live well qua human beings (Foot 2001).

What this shows is that even if the basic argument defends the Nietzschean theory, it could also defend rival normative theories which might reject the Nietzschean theory at the first-order level. Since there is this indirect way to reject noble realism, (N3) is not a problem for the proponent of the abductive argument, or the basic argument in general.

The underlying assumption of this reply is this: moral normativity should be given by first-order ethical theory which is supported by the abductive argument. The abductive argument would tell us that we have a reason to believe the approximate truth of some normative theories. These normative theories provide with us some reasons to follow moral practices. They might provide some categorical reasons to follow moral practices. Or they might provide some stronger instrumental reasons to follow moral practices. They aim to reject the immoralist challenge by providing these reasons. In this way, the abductive argument is neutral about the nature of moral reasons. Perhaps we hold rationalism about practical reason if the normative theory which is defended by the argument must hold such a position. In the same way, we can hold instrumentalism on the basis of the abductive argument.

Summary of the Chapter

In this chapter, I discussed some objections to the abductive argument for moral realism.

I attempted to defend the argument by providing various responses to these objections.

Given my responses, in the next concluding chapter, I will summarise what I have achieved in this dissertation and what needs to be further pursued.

Concluding Remarks

In this dissertation, I sought a way to defend the thesis that there are mind-independent natural moral properties which are part of the natural world (i.e. metaphysical ethical naturalism, naturalism, for short). In Chapter I, I presented this thesis as a metaphysical thesis about the mind-independent moral reality.

In Chapter II, I introduced the basic explanationist argument for naturalism (the basic argument, for short). This argument takes the following form:

The Basic Explanationist Argument

- (1) An entity exists if that entity is ineliminable in the best explanation of phenomena we experience. [the explanationist thesis]
- (2) Natural moral properties are ineliminable in the best explanation of phenomena we experience.
- (3) Therefore: natural moral properties exist.

Observing that the crucial premise of this argument is the second premise, I suggested that there are two ways to defend the second premise of the basic argument. These two ways are what I called the singular explanationist argument (the singular argument, for short) and the abductive argument for moral realism (the abductive argument, for short).

The abductive argument takes the following form:

The Abductive Argument for Moral Realism

- (1) First-order ethical theory is empirically reliable.
- (2) The theory-building procedures of first-order ethical theory are not free from theoretical presuppositions.

(3) The best explanation of (1) and (2) [which are themselves empirical phenomena] is moral realism which implies the existence of natural moral properties.

(4) Therefore: natural moral properties are ineliminable in the best explanation of phenomena we experience [the second premise of the basic argument].

In Chapter III, I gave a detailed elucidation of the abductive argument on the basis of the suggestion Boyd made in his essay, 'How to be a Moral Realist'. The elucidation reveals that the defence of the abductive argument requires an analogy between scientific theories and first-order ethical theory: the defence of the argument requires that normative theory is empirically reliable and its way to be developed is theory-dependent analogous to the way science is conducted.

The elucidation also reveals the incompleteness of the original suggestion. To fix this incompleteness, in Chapter V, Chapter VI and Chapter VII, I described how the argument could be defended on the basis of different normative theories, consequentialism, virtue ethics and deontology. I used various thought experiments to support the empirical premises of the abductive argument.

The result of these chapters was this: the defence of the abductive argument is possible on the basis of consequentialism and virtue ethics but it is not clear if the defence is available on the basis of deontology. This raised many interesting thoughts, such as; perhaps the defence of the abductive argument could be an objection to versions of deontology which are committed to *a priori* moral knowledge.

In Chapters IX and X, I discussed two groups of objections against the abductive argument, Empirical Objections and Philosophical Objections. In Chapter IX, I discussed one empirical objection based on recent findings in social psychology. I argued that the recent empirical findings do not undermine the abductive argument. I further claimed that we can actually confirm the second premise of the argument by

referring to how real normative ethicists build up their theories. In Chapter X, I defended the abductive argument against various philosophical objections which do not rely on empirical findings. My defence against these objections revealed more distinct naturalistic features of the abductive defence of naturalism.

Further Research

I hope that this dissertation makes a positive contribution to the defence of naturalistic moral realism. This dissertation also reveals that there are some points which may be investigated for the full defence of naturalism.

One of the limits of this dissertation is the lack of the discussions on Boyd's suggestion about the moral realist theory package. As I mentioned, it is true that some of the contents in the moral realist package have been discussed in the literature, such as his externalist moral semantic theory. But, it seems to me, we should also consider whether the moral realist theory-package is superior to the moral anti-realist package. The investigation on this topic may provide us with another argument for naturalism which is analogous to the argument against scientific anti-realism: the theory package anti-realists have to take contains many controversial philosophical theories. In the scientific case, the anti-realist package contains various sceptical philosophical theories, such as scepticism of induction. These theories are perfectly sensible, but anti-realists who reject the realist explanation might not necessarily hope to accept all the sceptical theories in the anti-realist philosophical package. If we investigate what would be the contents of both the moral realist philosophical package and the moral anti-realist philosophical package, we can see what the anti-realist needs to accept if he rejects the moral realist explanation. Our revealing the content of the anti-realist theory package might make anti-realists hesitate to accept the theory package, and this will be another argument for moral realism.

This sort of investigation may contain some empirical investigation of ethics. For instance, Devitt mentions that moral semantic theories are simply empirical hypotheses, and it is an empirical question which theory is true (2002, p. 3). Such investigation might reveal that people generally use moral terms in the way cognitivism describes while sometimes people use moral terms in the way non-cognitivism describes, but, only when they are emotionally very upset and unable to conduct any valuable moral dialogue.

Another important question I did not discuss in this dissertation is the question what sort of theory package is given if we run the abductive argument on the basis of different normative theories. In defending the abductive argument, I mentioned that we could see the plausibility of normative theory in terms of its empirical reliability. In addition to this way to assess the plausibility of normative theory, we may have another way to assess it on the basis of the abductive argument. If we investigate the contents of the theory package each normative theory has to go with, we may be able to see the plausibility of normative theory in terms of its having plausible or implausible theory-package. For instance, virtue ethics might have a plausible theory package while deontology might have to have a very implausible theory. This may be evidence for that virtue ethics is a correct theory while deontology is a wrong theory.

This sort of investigation may be possible between different versions of the same kind of normative theory. For instance, we may be able to compare neo-Aristotelian virtue ethics and pluralistic virtue ethics, sort of theory Swanton develops (2003), by looking at the contents of the theory-packages these theories have to go with. Perhaps, we can see that neo-Aristotelian theory has to have an implausible metaphysical theory of teleology while pluralist theory which contains some elements of Nietzsche's thought

is basically compatible with empirical findings in psychology. Such observation will confirm pluralist theory while it refutes neo-Aristotelian theory.

There is an important underlying thought the possibility of these investigations implies: a challenge to the thesis that metaethical debates do not affect debates at the first-order level. If we see fruitful discussions in these investigations, these discussions may be a threat to the thesis.

These further inquiries may strengthen the abductive argument for naturalism. These further inquiries may gradually reveal a clear picture of the reality of morality, in the similar way science gradually develops. A more sophisticated metaphysical theory which is in the theory package of a specific theory defended by the abductive argument might give us a clear picture of the shape of moral properties and how they are related to other natural properties.

Given the possibility of these further inquiries for naturalism, I conclude that the abductive argument is a good argument for naturalism and its defence may be further strengthened on the basis of the line I give in this dissertation.

Bibliography

- Adams, R. M. 1999. *Finite and Infinite Goods* Oxford: Oxford University Press.
- Alexander, L. and Moore, M. 2007. Deontological Ethics *Stanford Encyclopedia of Philosophy* [Online]. Available at: <http://plato.stanford.edu/entries/ethics-deontological/> [Accessed: 21.11.2010].
- Angner, E. 2011. Are Subjective Measures of Well-Being 'Direct'? . *Australasian Journal of Philosophy* 89, pp. 115-130.
- Aristotle. 2000. *Nicomachean ethics*. Translated by Crisp, R. Cambridge: Cambridge University Press.
- Armstrong, D. M. 1997. *A World of States of Affairs* Cambridge: Cambridge University Press.
- Attfield, R. 1995. *Value, Obligation and Meta-Ethics*. Amsterdam: Rodopi BV Editions.
- Audi, R. 1997. *Moral Knowledge and Ethical Character* Oxford: Oxford University Press.
- Audi, R. 2007. *Moral Value and Human Diversity* Oxford: Oxford University Press
- Ayer, A. J. 1946. *Language, Truth and Logic* 2nd ed. London: Gollancz
- Baker, A. 2005. Are there Genuine Mathematical Explanations of Physical Phenomena? . *Mind* 114, pp. 223-237.
- Bangu, S. I. 2008. Inference to the best explanation and mathematical realism. *Synthese* 160, pp. 13-20.
- Bird, A. 2005a. Abductive Knowledge and Holmesian Inference in Gendler, T. S. and Hawthorne, J. eds. *Oxford Studies in Epistemology. vol.1*, pp. 1-31.
- Bird, A. 2005b. Explanation and Metaphysics *Synthese* 143, pp. 89-107.
- Bird, A. 2007a. *Nature's Metaphysics: Laws and Properties*. Oxford: Clarendon Press.
- Bird, A. 2007b. Inference to the Only Explanation Philosophy and Phenomenological Research, LXXIV No.2, March, pp. 424-432.
- Blackburn, S. 1993. *Essays in Quasi-Realism*. New York: Oxford University Press.
- Blackburn, S. 1998. *Ruling Passions: a Theory of Practical Reasoning*. Oxford: Clarendon Press.
- Boyd, R. 1980. Scientific Realism and Naturalistic Epistemology. *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1980, pp. 613-662.
- Boyd, R. 1983. On the Current Status of Scientific Realism *Erkenntnis* 19, pp. 45-90.
- Boyd, R. 1988. How to Be a Moral Realist In: Sayre-McCord, G. ed. *Essays on moral realism* Ithaca, N.Y: Cornell University Press pp. 181-228.
- Boyd, R. 1990. Realism, Approximate Truth, and Philosophical Method. In: Savage, W. ed. *Scientific Theories, Minnesota Studies in the Philosophy of Science vol.14*. . Minneapolis University of Minnesota Press pp. 335-391.
- Boyd, R. 2002. Scientific Realism *Stanford Encyclopedia of Philosophy* [Online] 2009(03.10.2009). Available at: <http://plato.stanford.edu/entries/scientific-realism/> [Accessed: 12.01.2002].
- Boyd, R. 2003a. Finite Beings, Finite Goods: The Semantics, Metaphysics and Ethics of Naturalist Consequentialism, Part I. *Philosophy and Phenomenological Research* 66(3), pp. 505-553.

- Boyd, R. 2003b. Finite Beings, Finite Goods: The Semantics, Metaphysics and Ethics of Naturalist Consequentialism, Part II. *Philosophy and Phenomenological Research* 67(1), pp. 24-47.
- Brink, D. 1984. Moral Realism and the Sceptical Arguments from Disagreement and Queerness. *Australasian Journal of Philosophy* 62(2), pp. 111-125.
- Brink, D. 1989. *Moral Realism and the Foundations of Ethics*. Cambridge: Cambridge University Press.
- Brink, D. 2001. Realism, Naturalism, and Moral Semantics *Social Philosophy and Policy* 18, pp. 154-176.
- Carnap, R. 1983. The Concept of Confirming Evidence In: Achinstein, P. ed. *The Concept of Evidence* Oxford Oxford University Press, pp. 79-94.
- Chaiken, S. et al. 1996. Beyond accuracy: Defense and impression motives in heuristic and systematic information processing. In: Gollwitzer, P.M. and Bargh, J.A. eds. *The psychology of action: Linking cognition and motivation to behavior*. New York: Guilford Press, pp. 553-578.
- Chen, S. et al. 1996. Getting at the truth or getting along: Accuracy - versus impression -motivated heuristic and systematic processing. *Journal of Personality and Social Psychology* 71, pp. 262-275.
- Cooper, J. 2007. *Cognitive Dissonance: Fifty Years of a Classic Theory*. London: Sage Publications.
- Copp, D. 2003. Why Naturalism? . *Ethical Theory and Moral Practice* 7, pp. 179-200.
- Crisp, R. 2006. Aristotle on Greatness of Soul In: Kraut, R. ed. *The Blackwell guide to Aristotle's Nicomachean ethics* Oxford Blackwell, pp. 158-178.
- Crisp, R. 2008. Compassion and Beyond *Ethical Theory and Moral Practice* 11(233-246).
- Crisp, R. 2010. Virtue Ethics and Virtue Epistemology *Metaphilosophy* 41(1-2), pp. 22-40.
- Cuneo, T. 2006. Moral Facts as Configuring Causes *Pacific Philosophical Quarterly* 87(141-162).
- Darley, J. M. and Berscheid, E. 1967. Increased Linking as a Result of Anticipation of Personal Contact *Human Relations* 20, pp. 29-40.
- Darwall, S. 2006. How Should Ethics Relate to (the Rest of) Philosophy?: Moore's Legacy. In: Timmons, M. and Horgan, T. eds. *Metaethics After Moore*. Oxford Oxford University Press, pp. 17-37.
- Darwall, S. et al. 1992. Toward Fin de siècle Ethics: Some Trends *The Philosophical Review* 101(1), pp. 115-189.
- Devitt, M. 2002. Moral Realism: A Naturalistic Perspective. *Croatian Journal of Philosophy* 2, pp. 1-15.
- Diener, E. and Seligman, M. E. P. 2004. Beyond Money: Toward an Economy of Well Being *Psychological Science in the Public Interest* 5(1), pp. 1-31.
- Doris, J. 2002. *Lack of Character: Personality and Moral Behaviour*. Cambridge Cambridge University Press.
- Dreier, J. 2002. Meta-Ethics and Normative Commitment *Philosophical Issues* 12, pp. 241-263.
- Enoch, D. 2011. How Objectivity Matters In: Shafer-Landau, R. ed. *Oxford Studies in Metaethics: vol.5* Vol. 5. Oxford Oxford University Press pp. 111-152.
- Fantl, J. 2006. Is Metaethics Morally Neutral? . *Pacific Philosophical Quarterly* 87, pp. 24-44.
- Field, H. H. 1989. *Realism, Mathematics and Modality* Oxford Blackwell

- FitzPatrick, W. 2008. Robust Ethical Realism, Non-Naturalism, and Normativity In: Shafer-Landau, R. ed. *Oxford Studies in Metaethics 3*. Vol. 3. Oxford: Oxford University Press pp. 159-205.
- Foot, P. 2001. *Natural Goodness* Oxford: Oxford University Press
- Foot, P. 2002. *Virtues and Vices and Other Essays in Moral Philosophy* Oxford: Oxford University Press.
- Frazer, M. L. 2006. The Compassion of Zarathustra: Nietzsche on Sympathy and Strength *The Review of Politics* 68, pp. 49-78.
- Geach, P. 1967. Good and Evil In: Foot, P. ed. *Theories of Ethics* Oxford: Oxford University Press pp. 64-73.
- Gibbard, A. 1990. *Wise Choices, Apt Feelings: a Theory of Normative Judgement*. Oxford: Clarendon.
- Gibbard, A. 2003. *Thinking How to Live*. Cambridge, Mass.: Harvard University Press.
- Greene, J. and Haidt, J. 2002. How (and where) does moral judgment work? . *Trends in Cognitive Sciences* 6(12), pp. 517-523.
- Griffin, J. 1996. *Value Judgement: Improving Our Ethical Beliefs*. Oxford Clarendon Press.
- Haidt, J. 2001. The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Modal Judgment. *Psychological Review* 108(4), pp. 814-834.
- Hare, R. M. 1965. *Freedom and Reason* Oxford Oxford University Press.
- Harman, G. 1977. *The Nature of Morality: an Introduction to Ethics*. New York: Oxford U.P.
- Harman, G. 1986. Moral Explanations and Natural Facts - Can Moral Claims be Tested against Moral Reality? . *Southern Journal of Philosophy* 24(Supplement), pp. 57-68.
- Harman, G. 1999. Moral Philosophy Meets Social Psychology: Virtue Ethics and the Fundamental Attribution Error. *Proceedings of the Aristotelian Society* 99(3), pp. 315-331.
- Harman, G. and Thomson, J. J. 1996. *Moral Relativism and Moral Objectivity*. Cambridge, Mass: Blackwell.
- Hauser, M. D. 2006. *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong* New York Harper Collins.
- Hempel, C. G. 1965. *Aspects of Scientific Explanation and Other Essays in the Philosophy of Science* London: The Free Press
- Hooker, B. 2000. *Ideal Code, Real World: A Rule-Consequentialist Theory of Morality* Oxford Oxford University Press
- Horgan, T. and Timmons, M. 1991. New Wave of Moral Realism Meets Moral Twin Earth *Journal of Philosophical Research* 16, pp. 447-465.
- Horgan, T. and Timmons, M. 1992a. Troubles for New Wave Moral Semantics: The 'Open Question Argument' Revived. *Philosophical Papers* 21, pp. 153-175.
- Horgan, T. and Timmons, M. 1992b. Troubles on Moral Twin Earth: Moral Queerness Revived *Synthese* 1992, pp. 221-260.
- Hursthouse, R. 1999. *On Virtue Ethics*. Oxford: Oxford University Press.
- Jackson, F. 1998. *From Metaphysics to Ethics* Oxford Oxford University Press.

- Joyce, R. 2001. *The Myth of Morality*. Cambridge Cambridge University Press.
- Kahane, G. Forthcoming. Must Metaethical Realism Make a Semantic Claim? . *The Journal of Moral Philosophy*
- Kahane, G. and Shackel, N. 2010. Methodological Issues in the Neuroscience of Moral Judgement *Mind and Language* 25(5), pp. 561-582.
- Kahneman, D. and Krueger, A. B. 2006. Developments in the Measurement of Subjective Well-Being *Journal of Economic Perspectives* 20(1), pp. 3-24.
- Kahneman, D. et al. 2004a. A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method *Science* 306(5702), pp. 1776-1780.
- Kahneman, D. et al. 2004b. Toward National Well-Being Accounts *American Economic Review* 94(2), pp. 429-434.
- Kamm, F. M. 1996. *Morality, Mortality, Vol. II: Rights, Duties and Status*. New York Oxford University Press.
- Kamm, F. M. 2007. *Intricate Ethics: Rights, Responsibilities, and Permissible Harm*. New York Oxford University Press
- Kant, I. 1785/1998. *Groundwork of the Metaphysics of Morals*. Translated by Gregor, M. Cambridge: Cambridge University Press.
- Kim, J. 1993a. Explanatory Realism, Causal Realism, and Explanatory Exclusion. In: Ruben, D.-H. ed. *Explanation* Oxford Oxford University Press pp. 228-245.
- Kim, J. 1993b. *Supervenience and Mind : selected philosophical essays*. Cambridge Cambridge University Press.
- Kitcher, P. 1995. *The Advancement of Science: Science without Legend, Objectivity without Illusions*. New York Oxford University Press.
- Kohlberg, L. 1969. Stage and sequence: The cognitive - developmental approach to socialization. In: Goslin, D.A. ed. *Handbook of socialization theory and research* Chicago: Rand McNally, pp. 347-480.
- Korsgaard, C. M. 1983. Two Distinctions in Goodness *The Philosophical Review* 92(2), pp. 169-195
- Korsgaard, C. M. 2003. Realism and Constructivism in Twentieth-Century Moral Philosophy. *Journal of Philosophical Research* APA Centennial Supplement pp. 99-122.
- Kripke, S. A. 1980. *Naming and Necessity*. Cambridge, MA Harvard University Press.
- Laudan, L. 1981. A Confutation of Convergent Realism *Philosophy of Science* 48, pp. 218-249.
- Laurence, B. 2007. Epistemological Problems of Perception In: Zalta, E.N. ed. *Stanford Encyclopedia of Philosophy*
- Laurence, S. et al. 1999. Moral Realism and Twin Earth *Facta Philosophia* 1, pp. 135-165.
- Leiter, B. 2001. Moral Facts and Best Explanations *Social Philosophy and Policy* 18, pp. 79-101.
- Leiter, B. unpublished. Moral Skepticism and Moral Disagreement in Nietzsche.
- Lewis, D. 1987. *Philosophical Papers, Volume 2*. Oxford Oxford University Press
- Lipton, P. 2004. *Inference to the Best Explanation*. second edition ed. London: Routledge

- Locke, J. 1700/1979. *An Essay Concerning Human Understanding*. Nidditch, P. H. ed. Oxford: Clarendon Press.
- Loeb, D. 2005. Moral Explanations of Moral Beliefs. *Philosophy and Phenomenological Research* 70(1), pp. 193-208.
- Lord, C. G. and Ross, L. 1979. Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence *Journal of Personality and Social Psychology* 37, pp. 2098-2109.
- Mackie, J. L. 1977. *Ethics: Inventing Right and Wrong* London: Penguin.
- Mill, J. S. 1843. *A System of Logic*, London: George Routledge and Sons.
- Mill, J. S. 1871. *Utilitarianism* Reprinted in Miller, D. E. ed. 2002. *The basic writings of John Stuart Mill: on liberty, the subjection of women, and utilitarianism*. New York Mordern Library.
- Miller, A. 2003a. *An Introduction to Contemporary Metaethics*. Cambridge: Polity Press in association with Blackwell Pub.
- Miller, C. 2003b. Social Psychology and Virtue Ethics *The Journal of Ethics* 7, pp. 365-392.
- Miller, R. W. 1985. Ways of Moral Learning *The Philosophical Review* 94(4), pp. 507-556.
- Moore, G. E. 1903. *Principia ethica*. Cambridge Cambridge University Press.
- Moore, M. 2002. Legal Reality: A Naturalistic Approach to Legal Ontology *Law and Philosophy* 21, pp. 619-705.
- Morgan, S. 2006. Naturalism and Normativity *Philosophy and Phenomenological Research* 72(2), pp. 319-344.
- Morgan, S. 2009. Can There be a Kantian Consequentialism? . *Ratio* 22(1), pp. 19-40.
- Musgrave, A. 1988. The Ultimate Argument for Scientific Realism. in Nola, R. ed. *Relativism and Realism in Science*, pp.229-252.
- Parfit, D. 2011a. *On What Matters: vol.1*. Oxford: Oxford University Press.
- Parfit, D. 2011b. *On What Matters: vol.2* Oxford: Oxford University Press.
- Psillos, S. 1999. *Scientific Realism: How Science Tracks Truth*. London: Routledge.
- Putnam, H. 1975. *Philosophical Papers vol.1: Mathematics, Matter and Method*. Cambridge: Cambridge University Press
- Putnam, H. 1979. *Mind, Language and Reality: Philosophical Papers, vol. 2* Cambridge: Cambridge University Press.
- Railton, P. 1986. Moral Realism. *The Philosophical Review* 95(2), pp. 163-207.
- Railton, P. 1989a. Explanation and Metaphysical Controversy. In: Kitcher, P. and Salmon, W.C. eds. *Scientific Explanation* Minneapolis: University of Minnesota Press.
- Railton, P. 1989b. Naturalism and Prescriptivity. *Social Philosophy and Policy* 7(1), pp. 151-174.
- Railton, P. 1993. Replies to David Wiggins In: Haldane, J.W., C ed. *Reality, Representation, and Projection* Oxford: Oxford University Press pp. 314-328.
- Rawls, J. 1980. Kantian Constructivism in Moral Theory *The Journal of Philosophy* 77(9), pp. 515-572.

- Rea, M. 2006. Naturalism and Moral Realism. In: Crisp, T. et al. eds. *Knowledge and Reality* Dordrecht: Kluwer.
- Ridge, M. 2009. Climb Every Mountain? . *Ratio* 22(1), pp. 59-77.
- Ross, W. D. 1930. *The Right and the Good*. Oxford: Clarendon Press.
- Ross, W. D. 1939. *Foundations of ethics the Gifford lectures, delivered in the University of Aberdeen, 1935-1936*. Oxford: Clarendon Press.
- Rubin, M. 2008a. Is Goodness a Homeostatic Property Cluster? . *Ethics* 118, pp. 496-528.
- Rubin, M. 2008b. Sound Intuitions on Moral Twin Earth *Philosophical Studies* 139(307-327).
- Rubin, M. 2009. *Synthetic Ethical Naturalism* PhD Thesis University of Massachusetts Amherst
- Salmon, W. C. 1993. Scientific Explanation and the Causal Structure of the World. In: Ruben, D.-H. ed. *Explanation* Oxford Oxford University Press, pp. 78-112.
- Sayre-McCord, G. 1988. Moral Theory and Explanatory Impotence In: Sayre-McCord, G. ed. *Essays on Moral Realism* Ithaca Cornell University Press pp. 256-281.
- Schwitzgebel, E. 2009. Do Ethicists Steal More Books? . *Philosophical Psychology* 22(6), pp. 711-725.
- Schwitzgebel, E. and Rust, J. 2009. The Moral Behaviour of Ethicists: Peer Opinion *Mind* 118, pp. 1043-1059.
- Shafer-Landau, R. 2003. *Moral Realism: A Defense* Oxford: Oxford University Press.
- Shafer-Landau, R. 2007. Ethics as Philosophy: A Defense of Ethical Nonnaturalism. In: Shafer-Landau, R. and Cuneo, T. eds. *Foundations of Ethics: An Anthology*. Oxford: Blackwell, pp. 210-222.
- Shoemaker, S. 1980. Causality and Properties In: Van Inwagen, P. ed. *Time and Cause* Dordrecht: Reidel, pp. 109-135.
- Sinclair, N. 2011. The Explanationist Argument for Moral Realism. *Canadian Journal of Philosophy* 41(1), pp. 1-24.
- Singer, P. 1972. Famine, Affluence, and Morality *Philosophy and Public Affairs* 1(3), pp. 229-243.
- Singer, P. 2005. Ethics and Intuitions *The Journal of Ethics* 9, pp. 331-352.
- Slote, M. 2001. *Morals from Motives* Oxford Oxford University Press
- Smith, M. 1994. *The Moral Problem* Oxford Blackwell.
- Snow, N. 2010. *Virtue as Social Intelligence: An Empirically Grounded Theory*. New York Routledge.
- Stevenson, C. L. 1944. *Ethics and Language* New Heaven Yale University Press.
- Street, S. 2008. Constructivism about Reasons In: Shafer-Landau, R. ed. *Oxford Studies in Metaethics, vol. 3*. Oxford Oxford University Press, pp. 207-245.
- Sturgeon, N. 1985. Moral Explanations. in Copp, D. and Zimmerman, D. eds. *Morality, Reason and Truth*. Totowa, NJ: Rowman & Littlefield, pp. 49-78. Reprinted in: Rachels, J. 1998a. ed. *Ethical Theory 1*. Vol. 1. Oxford Oxford University Press, pp. 180-210 - to which page references refer.
- Sturgeon, N. 1986. What Difference Does it Make Whether Moral Realism is True? . *The Southern Journal of Philosophy* 24 (Supplement), pp. 115-141.

- Sturgeon, N. 1998b. Review: Thomson against Moral Explanations. *Philosophy and Phenomenological Research* 58(1), pp. 199-206.
- Sturgeon, N. 2005. Ethical Naturalism. In: Copp, D. ed. *The Oxford Handbook of Ethical Theory*. Oxford Oxford University Press, pp. 91-121.
- Sturgeon, N. 2006. Moral Explanations Defended In: Dreier ed. *Contemporary Debates in Moral Theory* Oxford Blackwell, pp. 241-262.
- Swanton, C. 2003. *Virtue Ethics: a pluralistic view*. Oxford: Oxford University Press.
- Thagard, P. R. 1978. The Best Explanation: Criteria for Theory Choice *The Journal of Philosophy* 75(2), pp. 76-92.
- Thomson, J. J. 2008. *Normativity*. Illinois: Carus Publishing Company
- Timmons, M. 1999. *Morality without Foundations*. Oxford Oxford University Press.
- Turiel, E. 1983. *The Development of Social Knowledge: Morality and Convention*. Cambridge Cambridge University Press.
- Van Fraassen, B. C. 1980. *The Scientific Image*. Oxford: Clarendon Press.
- Van Fraassen, B. C. 1989. *Laws and Symmetry* Oxford Oxford University Press
- Veenhoven, R. 2008. Sociological Theories of Subjective Well-Being In: Eid, M. and Larsen, R. eds. *The Science of Subjective Well-being: A tribute to Ed Diener*. New York Guilford Publications
- Viggiano, A. 2008. Ethical Naturalism and Moral Twin Earth *Ethical Theory and Moral Practice* 11, pp. 213-224.
- Webber, J. 2006. Virtue, Character and Situation *Journal of Moral Philosophy* 3(2), pp. 193-213.
- Webber, J. 2007. Character, Common-Sense, and Expertise. *Ethical Theory and Moral Practice* 10, pp. 89-104.
- Wedgwood, R. 1999. The Price of Non-Reductive Moral Realism *Ethical Theory and Moral Practice* 2(195-215).
- Wedgwood, R. 2007. *The Nature of Normativity*. Oxford Oxford University Press.
- Whewell, W. 1840. *History of the Inductive Sciences*. London: John W. Parker and Son.
- Wiggins, D. 1991. *Needs, Values and Truth: second edition* Oxford Blackwell
- Wiggins, D. 2005. An Idea we Cannot do Without In: Reader, S. ed. *The Philosophy of Need* Cambridge Cambridge University Press pp. 25-50.
- Williams, B. 1985. *Ethics and the Limits of Philosophy* London: Fontana
- World Values Survey. 2005. 2005-2006 World Values Survey [Online]. Available at: http://www.worldvaluessurvey.org/wvs/articles/folder_published/survey_2005/files/WVSQuest_RootVers.pdf [Accessed: 12.11.2010].