### Université de Montréal

The Importance of Character: Virtue Ethics and Psychology

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# Université de Montréal Faculté des études supérieures

### Ce mémoire intitulé:

The Importance of Character: Virtue Ethics and Psychology

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#### Résumé

L'éthique sert à étudier et améliorez les systèmes moraux et à guider des applications conformes aux principes moraux encodés dans ces systèmes. La thèse proposée affirme que l'éthique pourrait être conçue comme une discipline des sciences sociales qui inclut une réflexion de philosophie normative. Selon cette conception, 'l'éthique de la vertu', avancée par Aristote, deviendrait une psychologie morale scientifique qui guide l'éducation morale. L'éthique de la vertu devrait adopter une philosophie inspirée des sciences humaines et devrait être nourrie avec des données scientifiques. Cependant, la plupart des éthiciens rejettent l'existence de liens entre l'éthique de la vertu et la science. Un débat récent, au sujet des traits de caractère, suggère une approche plus scientifique en éthique de la vertu. Ce débat examine le concept de trait sur la base de recherches provenant de la psychologie sociale. Ces recherches sont interprétées par plusieurs comme indiquant que l'éthique de la vertu doit être rejetée. D'autres par contre trouvent que l'éthique de la vertu peut tenir compte des résultats en psychologie sociale sans changements majeurs. Nous soutenons que le débat ne peut pas être résolu avec une conception traditionnelle de l'éthique de la vertu. Seule une conception de scientifique qui incorpore des recherches de la psychologie de la personnalité et les neurosciences cognitives peut accommoder les critiques des deux camps. Une révision de l'éthique de la vertu suggère différents programmes de recherche et permet des applications en dehors du cadre traditionnel de l'éducation morale.

Mots clés : philosophie, éthique de la vertu, sciences sociales, psychologie morale, trait de caractère, philosophie des sciences humaines, psychologie sociale, psychologie de la personnalité, neurosciences cognitives, éthique appliqué

#### Abstract

Ethics studies and improves moral systems and guides the application of the principles encoded in these systems. It is advanced here that ethics could become a discipline of the social sciences that includes a normative aspect. According to this conception, virtue ethics, advanced by Aristotle, is a scientific moral psychology that guides moral education. As a science, virtue ethics should adopt a philosophy originating in the human sciences and incorporate new scientific data. However, most virtue ethicists reject the existence of links between science and virtue ethics. A recent debate, surrounding character traits, suggests that virtue ethics would benefit from a scientific approach. The debate examines character traits in light of social psychological research. Some have interpreted this research as indicating that virtue ethics should be rejected. Others argue that virtue ethics can accommodate social psychological findings with few modifications. It is suggested that this debate cannot be resolved with a traditional approach to virtue ethics. Only a scientific virtue ethics, one that incorporates personality psychology and cognitive neuroscience, can accommodate the criticisms of both camps. A revised virtue ethics also suggests novel research programs and offers some applications outside the domain of moral education.

Key words: Philosophy, Virtue Ethics, Social Science, Moral Psychology, Character Traits, Philosophy of Human Sciences, Social Psychology, Personality Psychology, Cognitive Neuroscience, Applied Ethics

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## Abbreviations Used

CT Character Traits

EN Ethica Nichomachea (Nichomachean Ethics)

FAE Fundamental Attribution Error

FFM Five-Factor Model

OA Obedience to Authority

PMPR Principle of Minimal Psychological Realism

VE Virtue Ethics

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Qu'est-ce que vertu? Bienfaisance envers le prochain.

-Voltaire (1994 [1764]: 506)

### Introduction

In a humanist moral system, religious or secular, morality is supposed to help humanity (Kurtz 2000). Moral systems codify, and help people to achieve, good deeds. These systems vary in their conceptual foundation and influence on social and private behaviour. For example, Christian morals are linked to God, carry influence in Western democracies, but are often ignored in private, especially as regards sexuality. International moral codes are based on the declarations of the United Nations, are regularly violated by nation states, and may yet have little influence on the behaviour of individuals.

Ethics is the analysis of moral systems and the attempt to improve them. This conjoins three efforts: research on moral systems, analysis of moral concepts, and the design of moral principles to guide reality. Ethicists and social scientists study the genesis, evolution, and practise of morality. The former set out to uncover moral concepts (e.g. 'evil' in Judeo-Christian morality); the latter are driven by curiosity about particular societies (e.g. morality in Victorian England).

Philosophers analyse moral concepts at a semantic and conceptual level; this usually called meta-ethics. For example, the analysis of 'duty' will involve determining the structure of a 'duty' sentence (e.g. an imperative) and a working definition of the concept of duty (e.g. an obligation to behave in a certain way regardless of circumstances).

Normative ethics is the attempt to devise a set of supreme moral principles and to apply these to concrete cases. Examples of moral principles: 'Do unto others as you would have others do to you', 'Obey God', 'Maximise pleasure', 'Do no harm', 'Do whatever you want', and 'Help others live'. Three main systems have set out to refine moral principles, each with its own focus. Consequentialism stresses the maximisation of particular outcomes, e.g. happiness, deontology urges people to obey duties, e.g. to tell the truth, and virtue ethics encourages people to emulate exemplars, e.g. saints.

The truth-status of moral principles is a heated source of debate. Some advocate that moral principles are a matter of convention (moral relativists), while others argue that principles are absolute truths (absolutists). Part of the difficulty of surrounding moral principles is that they involve humans; therefore moral principles have social, psychological, and biological aspects. Just as there are both universal (e.g. most humans desire affection and love) and relative (e.g. stone-age cultures requires fierce tribal loyalty to survive) humans truths, there are likely moral principles that have general, and others local, truth and applicability.

The application of moral principles to real cases is best thought of as part of technology<sup>1</sup>, i.e. a stage in the planning and design of artefacts and procedures (Bunge 2003). Technological applications change reality and ethical principles guide these applications in moral directions (i.e. in order to help humanity). Traditionally, applied ethics tends toward philosophical, or 'armchair', technology. Reflection and careful thought are used to design, and occasionally 'thought experiments' are used to test, procedures guided by moral principles (e.g. 'Do unto others as you would have others

<sup>&</sup>lt;sup>1</sup> This is technology in its larger sense, not merely as the collection of artefacts, but "technology as practice ... the organisation of work and people" (Franklin 1999: 2).

do to you' guides the decision to have a 'no hitting or fighting' policy established in an elementary school). In contrast, formal technology actively integrates scientific knowledge, experimentally tests technological applications, and reanalyses guiding principles in light of the results of application. Technologists often work in a 'morally blind' fashion (e.g. engineers building the World's Tallest Skyscraper); they allow their technological skills to be guided by the goals of their employers.

All technology is designed according to a particular conception of morality: tacitly or explicitly. Parliaments are explicitly designed to allow "the right of free and fair debate, the right of the majority to decide, and the right of the minority to protest and be protected" (Sturgis 2001: 1). In contrast, bombs are tacitly designed with the moral aim of destroying bad people. Moral principles can have a beneficial, or devastating, impact through their technological application. Unfortunately, technological progress has often been misidentified with societal and moral progress (Trigger 1998). In fact, societal progress only occurs when technology is used well; a good use of a particular technological application can include the decision to abandon it.

Whereas ethics has a long explicit relationship with law, its explicit influence on other fields, such as medicine and ecology, is more recent. As ethics interacts with domains of scientific knowledge through formal technology, questions surrounding its relationship to science have grown more insistent and difficult to put aside. The prevailing view is that ethics is *autonomous* from science; however, what this means is unclear. Some argue that ethics is divorced from scientific experimentation; concepts such as 'good' and 'right' cannot be studied with the scientific method (Harman 1988). Ethics' autonomy may result from its religious origins; moral systems under the yoke of

science are ruined (Taylor 1989). Others have noted that science and ethics are parallel; scientists assume that people are capable of understanding nature, while ethicists assume that people are capable of good (Hursthouse 1999).

I see the 'parallel' between ethics and science as a commonality. Ethics can be a scientific endeavour. Biology assumes that certain things are 'living' and the philosophy of biology works to define 'life'. Likewise, ethics assumes that people are 'good' and meta-ethics works to define 'good'. In my opinion, the case for ethics as a science is progressively conservative, involving systematic reforms. No revolution is required. As a science, ethics conserves its conventions (e.g. concepts such as 'good', 'trust', 'love') and gains new opportunities (e.g. Do animals have anything analogous to moral systems?). In marketing terms, scientific ethics is 'everything you love about ethics and more'. The notable exception to this maxim is religious ethics; the latter joins the ranks of creationist biology, astrology, and parapsychology. Just as ethics can proceed scientifically, so it can fail to be scientific.

I envision ethics as an interdisciplinary speciality of the human and social sciences<sup>2</sup>. Research on the genesis of moral systems requires historical sciences, e.g. anthropology and biology. This includes the mother of all ethical questions: why did humans developed morals in the first place? Sociology studies the evolution of moral systems: for example, the interaction of artefacts and morality. Technological innovations influence morals, e.g., birth-control changed the moral status of sex, and moral systems influence technological design, e.g. many religious moral systems denounce genetic engineering as meddling with the creations of God (Reiss & Straughan 1996). Psychology studies individuals' adherence to moral systems: for

example, are people 'sensible knaves' who behave well only when no one else is watching or are morals internalized?

Meta-ethics is scientifically informed in a manner analogous to other 'meta-sciences'; for example, the philosophy of biology (e.g. Ruse 1988) and metapsychology (e.g. Grigsby & Stevens 2000) are updated in light of new discoveries<sup>3</sup>. The concept of rights (as in 'human rights') is increasingly extended to animals as researchers uncover animals' cognitive and emotional capacities. General principles, e.g., 'Do no harm', are refined in light of application to concrete cases, e.g., medical treatments may require us to do harm in the short term. Some principles, such as 'Obey God' are rejected by scientific research, although many continue to believe in and be influenced by them. In a scientific ethics, the truth of moral principles is a matter of research and testing, not merely convention.

The strongest objection to the participation of science in secular ethics has actually originated in the use of moral principles to guide technology. There is a logical is-ought gap: values do not follow from facts (e.g., "I should eat" does not logically follow from "I am hungry"). Therefore, 'what is' cannot constrain 'what should be'.

Strictly speaking, the 'is-ought' gap is an ethical-technological problem, not a scientific one; science studies reality, technology changes it. The question is, 'how can we be sure that the technological changes are what 'ought' to be done?' In a scientific ethics, 'oughts' (e.g. we ought to promote education) are derived from supreme moral principles (e.g. learn about the world). These latter are metaphysical hypotheses assessed in light of the results of their application and based on their fit with other

<sup>&</sup>lt;sup>2</sup> Thomas Nagel, reluctantly I think, foresaw ethics in such a configuration: see Nagel 1979.

theory systems; with analysis, certain principles (e.g. 'Enjoy life') may be refined (e.g. 'Enjoy life without harming others') or discarded. Scientific ethics assumes that some principles will prove objectively better in promoting the welfare of humanity.

Incidentally, although the fact our social reality can be improved seems obvious, this idea is relatively new, dating back to the Renaissance and coming into force in the Enlightenment (Trigger 1998). Previously, most believed that the world was doomed to decay, or to endlessly cycle through decay and rebirth. As such, 'what is' was equated with 'what ought'; gods, or God, controlled the world and oversaw its destiny. The idea that humans can improve the world arose amidst improved science (e.g. Galileo's physics), technology (e.g. sanitation), history (e.g. Roman) and anthropology (e.g. Native American cultures). These discoveries led Enlightenment thinkers (e.g. Hume 1969 [1739-40]) to revise meta-ethics, separating 'what is' from 'what ought'.

The idea of 'sociocultural evolution' was later modified with a more general thesis of evolution (i.e. Darwin's), whereby things change, regardless of the efforts of humans (i.e., the world and its organisms will continue to evolve whether or not humans exist). The meta-ethical, and general, implications of this second thesis are profound; even if we do nothing, things will change. If 'what is' changes regardless of what we do, then the task of a humanist ethics is to do our best to choose courses of actions that promote our continued existence. Perhaps evidence that certain ways of doing things (i.e. certain moral principles realised in social planning) lead to a better world for humanity will lead to an acceptance of the idea that certain means to cross the 'is-ought'

<sup>&</sup>lt;sup>3</sup> A view of moral properties as 'unscientific' was previously applied to 'life' (vitalism) and 'mind' (dualism). The latter became known as *emergent properties*; I suggest a similar fate for morals (see 1.4).

gap are better than others<sup>4</sup>. By this line of thought, nuclear war and environmental degradation are the primary evils of our age.

If solutions to a problem are unknown, science can be applied to discover solutions. Applied science aims to solve practical problems, i.e. answer a 'what' question, such as 'What are effective treatments for autism?' In contrast, pure science sets out to solve a conceptual problem, i.e. a 'why' question, such as 'Why is there is autism?' Pure and applied science overlap; the difference between a practical and conceptual problem is a matter of degree. If the science in a particular field is primitive, answering 'what' will require 'why'. However, while pure sciences are concerned with understanding the world, applied science, like technology, is guided by moral principles. For example, the application of nuclear physics to the design of the atomic bomb was done under the assumption that defeating Nazi Germany was 'good'. Most involved soon realised that protecting the global population by dismantling the newly created nuclear armaments was a greater good.

This thesis will discuss Aristotelian Virtue Ethics (VE). VE is best thought of as an applied science of psychology, guided by the explicit moral principle that is, roughly stated, 'enjoy life and learn about the world' (and involving the tacit principle 'teach others'). Many have noted that Aristotle's moral principles remain good; and most have noted that they require revision. Aristotle failed to state that 'all people deserve to enjoy life and learn about the world'; he defended slavery and had a low opinion of women.

Aristotle applies psychology to develop a program of moral education. He remarks that for moral behaviour, "whether we form habits of one kind or another from

<sup>&</sup>lt;sup>4</sup> Or more precisely, we will conceive of ethics as the project of creating a better reality for humankind, rather than aiming for what 'ought' to be.

our very youth...makes a very great difference, or rather *all* the difference" (EN 1103b: 23-25)<sup>5</sup>. The research program within VE is novel enough to require an account of *why* people behave (i.e. it is at the stage of a pure science), although its primary interest is what makes people behave *well*. Modern psychology has a better account of the former; it remains in a nascent state regarding the latter. My suspicion is that both fields could co-operate in researching moral psychology.

However, VE remains on the sidelines and fails to play a large role in research into, or programs of, moral education. This is because many virtue ethicists see VE as philosophical moral psychology. The failure to embrace a scientific approach has damaging consequences for VE. Fear about dirtying the 'sacred chambers of ethics' with the muddy feet of science keeps VE in a primitive state. Obsolescence renders VE difficult to apply technologically, although VE lends itself to philosophical appropriation as a 'way to live one's life' (e.g. Vanier 2000). While armchair applications can be beneficial, they are rarely tested and never institutionalised. Furthermore, they are doomed to remain at a low level of sophistication; contrast a home-remedy to open-heart surgery.

The promise and failure of VE is illustrated in a recent debate, which I shall call the character debate. Owen Flanagan (1991) initiated the debate by challenging the autonomy of ethics vis-à-vis science. He argues that normative ethics should be constrained by empirical findings. My take is slightly different. I see the ethics as 'autonomous' in its focus on unique problems, e.g. good and evil. Most sciences are 'autonomous' in this way (e.g. biology studies life, geology, the Earth).

<sup>&</sup>lt;sup>5</sup> All Aristotle quotes are from: Aristotle. (1987) *A New Aristotle Reader*. (J.L. Ackrill, Ed.) Princeton, NJ: Princeton University Press. (pp. 363-478).

To empirically constrain ethical theorising Flanagan introduces the *Principle of Minimal Psychological Realism* (PMPR). Ethicists must ensure that "when constructing a moral theory or projecting a moral ideal that the character, decision processing, and behaviour prescribed are possible, or are perceived to be possible, for creatures like us" (Flanagan 1991: 32). I understand the PMPR as a feature of effective technological design. To the extent that technological projects are supposed to be currently realisable they should involve what is psychologically possible (e.g. designing curricula for moral education in schools should recognise the intellectual capabilities of children).

Although the PMPR is appropriate for any ethical theory, VE is a good test case because of its reliance on psychological concepts, such as 'emotion' and 'character traits' (CT). The latter are at the centre of the character debate. Roughly put, CT are dispositions to behaviour (including emotional behaviour) that form the basis of virtues and vices: dispositions to good and evil. Flanagan warns virtue ethicists that there are problems facing VE both in its use of CT and its larger view of virtue. Flanagan seeks to raise doubts about VE in others using *social psychology*, a branch of psychology that studies social behaviour. Specifically, Flanagan draws on a series of experiments and findings known as *situationism*. Situationism demonstrates that situations, not character traits, determine behaviour; furthermore, situationist experiments reveal that normal people can be made to behave in vicious ways. Perhaps virtue is a false hope.

Others have taken up Flanagan's challenge (e.g. Doris 2002, Harman 1999a). They note that situationism rebukes the 'global' view of CT that is present in VE, wherein a trait invariably manifests in particular type of behaviour (e.g., a possessor of an honest-trait is honest across contexts). VE makes predictions about CT and

situationism falsifies these predictions. Perhaps VE is better off replaced by a 'situationist' ethics. To these criticisms, virtue ethicists reply that situationism fails to threaten VE. VE may manage to explain the findings of social psychology in a way that leaves the theory relatively untouched (Athanassoulis 2000, Kupperman 2001, Sreenivasan 2001). So stands the character debate. Yet, there are many problems with the character debate and these problems illustrate the consequences of refusing a scientific approach to ethics.

I'll summarise the debate with an analogy drawn from politics. Flanagan's role is a whistle-blower; guided by his knowledge of psychology, he suspects that something is rotten in the state of VE. Doris and Harman are radical activists; they wholeheartedly advocate a massive reform of VE- without care to preserve a system that may yet have qualities and resources. The advocates of VE are conservatives. They seek to dismiss the problems facing VE and offer only token changes to existing policies. The problem is that VE is both in bad shape and in need of reform *and* VE is a sophisticated theory with ample resources. The radicals fail to propose workable solutions and the conservatives fail to address the decrepit state of their ethical theory. I position myself as a progressive reformer; I seek to keep the good in VE and to reform the bad.

I defend a scientific approach to VE as the best means of reform and will dedicate much of this thesis to this project. I offer only a brief assessment of the arguments of participants in the character debate; most mishandle psychology badly enough to greatly reduce the worth of a painstaking examination of their arguments.

Only one participant thought to examine the status of psychological theories of CT<sup>6</sup> and all have neglected the ample body of psychological literature, dating from the 1970s

onwards, rebuking situationism. Flanagan is knowledgeable enough about psychology to restrict his criticism of VE to viable paths, yet, his goal is to raise problems rather than offer solutions. In contrast, the 'radicals' misjudge social psychology's place in the larger field of personality psychology and thereby see social psychology as a viable competitor rather than a sub-component. The 'conservatives' neglect the latent scientific aspects of Aristotelian VE and disregard the need to incorporate new psychological data. Both sides make some contributions that are implausible in light of the existing body of psychological research.

In Chapter 1, I present the Aristotelian origins of VE (1.1.) and a standard neo-Aristotelian view of VE (1.2). The methodology (1.3) that characterises the latter is criticised. I then present an alternate framework, derived from the human sciences (1.4). Chapter 2 introduces 'situationist' social psychological research (2.1-2.5). Chapter 3 and 4 present the arguments of the critics and defenders of VE. Chapter 5 presents research on character traits (5.1) and some cognitive neuroscience findings that are relevant to moral psychology (5.2). A concluding chapter speculates on research and applied ethical programs for a revised VE.

In presenting the character debate, I hope to show that the adoption of a scientific philosophical worldview is imperative in ethics and philosophy at large.

Although the are philosophers who reject, and those who advocate, scientific philosophy, a larger number are, to paraphrase Michael Ruse, like King Canute, waiting for tides of science to come in (Ruse 1988: 81). This wait-and-see approach harms academic philosophy and does disservice to the public.

<sup>&</sup>lt;sup>6</sup> Unfortunately, John Doris (2002) begins his examination with a misguided view of situationism intact.

Academic philosophers share, rather than own, philosophy and ethics. Philosophy is present in all fields and all fields struggle with moral issues. The failure of philosophers to become familiar with science strips them of their philosophical authority. Scientists and medical professionals are proving increasingly willing to take over, and create, philosophical terrain: e.g. neuroethics (Farah 2002).

In the social sciences, the need for scientific philosophy is more apparent; obsolete philosophies abound (e.g. existentialism, pragmatism, Marxism) and create a confusing terrain for researchers. Confusion leads to the creation, and tolerance, of bad social programs. Our moral duty is to promote increased co-operation between philosophy and the social sciences; I hope to use the character debate to illustrate some of the benefits therein.

### **Chapter 1: Virtue Ethics**

Aristotelian virtue ethics examines the psychological features that cause some people to behave well. Aristotle's reliance on principles of developmental biology gives virtue ethics a framework that is somewhat compatible with modern psychology. In contrast, neo-Aristotelian virtue ethicists see virtue ethics as a means to define morality in terms of what virtuous people characteristically do. Their interest in character is coupled with a failure to elaborate on psychological structures that define character. The neglect of character encouraged amidst unscientific research methods. A human science framework, one that welcomes scientific input, is suggested.

### 1.1 Virtue Ethics: Character, Emotion, and Cognition

Questions surround scientific ethics even as its practice is ancient. Aristotle applied science to study human moral behaviour- with an eye towards improving it. He directed his studies "not in order to know what excellence is, but in order to become good"; becoming good requires us to "determine the nature of actions" (EN 1103b: 27-30). VE is only one part of Aristotle's ethical approach; politics is also important.

Many have advocated VE (e.g. Hume, Socrates) but Aristotle is its patron. VE is widely recognised for its focus on character: good people have good characters.

Ethicists distinguish VE from other ethical theories for its focus on moral psychology.

Paul Churchland (1998) contends that VE is the ethical theory most in tune with scientific psychology, also known as *cognitive neuroscience*, the study of the brain and the mind. This is surprising, as Aristotelian psychology is 'pre-neurological'; Aristotle

did not see the brain as the organ of thought. I speculate that the fit with modern psychology results from the philosophical framework guiding VE, which is derived from Aristotle's study of biological development.

In the physical and natural sciences, Aristotelian influence endures in 'general science', i.e. metaphysics, rather than in specific findings. Metaphysical hypotheses can remain fertile for centuries or millennia. A notable example is the postulate that there is a real world that can be studied. Aristotle's blending of observation with theory was later refined with the inclusion of experiment. His decision to link ethics to psychology may be another legacy.

Experimental science couples metaphysical assumptions with operational hypotheses. Metaphysical assumptions (e.g. there is a reality that humans can gradually come to know) are untestable<sup>7</sup>. In contrast, operational hypotheses are testable, albeit often in principle rather than practice. Technological limitations, e.g. the current state of technology, or historical limitations, i.e. events occurring in the past, may prevent testing. These limitations are sometimes overcome. For example, recently developed recording technologies are allowing neuroscientists to test 60-year-old neurological hypotheses (Nicolelis & Ribeiro 2002) and improvements in the ability to study ancient DNA (i.e. paleogenetics) are improving knowledge about organisms' evolutionary past.

Scientific hypotheses are bounded by systems of hypotheses, i.e. theories.

Isolated assumptions (e.g. extra-sensory perception) that are at variance with other theoretical systems, such as physics or biology, are unlikely to be given scientific credence. A conspicuous problem in the character debate is that participants repeatedly

<sup>&</sup>lt;sup>7</sup> On the other hand, concordance with these assumptions proscribes the practice of science; conversely, why study an illusion?

offer 'loose' hypotheses that are at variance with psychological research. Loose hypotheses seem plausible- in isolation- even as they violate well-established scientific systems. While implausible hypotheses cannot be rejected outright, these extraordinary claims will require extraordinary justification.

Aristotle's assumptions about moral behaviour were bounded by a larger philosophical system including his research on developmental biology and embryology. Aristotle advocated *epigeneticism*; the development of a germ (i.e. an egg) is influenced both by its own composition and its environment (Mahner & Bunge 1997). Consequently, Aristotle was aware that the properties of living things, including moral properties, are a mix of 'nature and nurture'; "we are adapted by nature to receive them, and are made perfect by habit" (EN 1103a: 23-25).

Metaphysical prescience aside, VE makes few clear operational hypotheses and is clearly out-of-date. For example, Aristotle thought that psychological properties had their origin in the heart. In my opinion, VE is best seen as a work in progress; its concepts are rudimentary and require refinement. Aristotelian ethics avoided refinement through its incorporation into Christian Theology and its subsequent disappearance from secular philosophic consideration during the Enlightenment. The popularity of philosophical linguistic analysis and the domination of positivism hampered the return of VE; psychology is unsuited to grammatical analysis and replete with 'inner variables'. Yet, VE regained its popularity. In the 20<sup>th</sup> century, the association between Aristotle and orthodox Christianity undone, both Christian (e.g. Anscombe 1981, Vanier 2000) and secular philosophers (e.g. McDowell 2003, Nussbaum 1990) began to re-examine VE.

Aristotle postulates that people differ in their moral behaviour. Virtuous people are the most moral, vicious people, the least. Aristotle centres his account on virtuous people, implying that the application of VE should aim to produce virtues. The primary VE work, the *Nichomachean Ethics*, begins with an analysis of 'good'. Virtuous people strive for two kinds of good: "intellectual and moral" (EN 1103a: 14-15). Moral good is *eudaimonia*, the flourishing of humanity, e.g. health and well-being, while intellectual good leads to excellence in craft and the perfection of knowledge about the universe.

Aristotle then presents the moral agent: a composite of character, emotion, and practical wisdom. All psychological properties are constituted both vegetally (i.e. features possessed by 'lower forms of life' such as plants and animals) and rationally (i.e. features unique to humans). Social factors determine what we learn and biological principles underlie that humans, of all animals, can learn as much. As regards moral progress, virtue theory is guardedly melliorist; the extent to which people can change is constrained by their biological constitution and the society that they live in.

Character is expressed in traits (or states) and virtue is a character trait (CT) that "makes a man good and which makes him do his own work well" (EN 1106a: 22-23). Moral virtues predispose people to do good and moral vices dispose people to evil. Likewise, intellectual virtues lead to excellence and intellectual vices to shoddiness. CT are expressed at different levels; only the mean between these levels is a virtue (e.g. the excess of patience is complacency and its lack is anger). Aristotle lists the moral virtues as: courage, temperance, generosity/liberality, magnificence, magnanimity, pride, patience, truthfulness, wittiness, friendliness, modesty, and righteous indignation (EN Book II, Chapter 7).

The relation of CT to other psychological properties, and to behaviour, is difficult to decipher. CT could be general dispositions that describe a person's habitual emotional and cognitive patterns. For example, a trait for patience means that a person is used to feeling calm, used to waiting things out, and used to perceiving ways to act in their environment in a patient fashion. If CT are meant this way, then traits incorporate all the characteristics that are needed to explain the psychological properties of the person that generate moral behaviour.

This interpretation is problematic because Aristotle separates CT from a direct causal role in action and implies intermediary psychological processes. While both character and action involve voluntary decisions, "actions and states are not voluntary in the same way" (EN 1114n: 30-31). Traits are acquired through habit and practice, i.e. over a long period, through practise analogous to "exercise and care" (EN 1114a: 34). Whatever a person is feeling or thinking when they act may be influenced by traits, but cannot be wholly determined by them. Although a fit body allows a person to do many things (e.g. run or ride a bike), fitness does not determine exactly what a person does in a particular situation. Likewise, a person with an 'angry' trait expresses their anger in various ways.

The ambiguity present in Aristotle's account of traits foreshadows some problems within the character debate. Owen Flanagan (1991) notes that "trait ascription can seem to imply, but cannot on reflection be taken to imply...a trait that is displayed no matter what" (Flanagan 1991: 280). In contrast, other participants take Aristotelian CT as 'robust' or 'global', whereby having a particular trait always leads to a particular type of behaviour.

I wonder if Aristotle uses traits merely as a conceptual means to distinguish one person from one another, rather than as indicators of psychological structures in the individual. For example, traits allow us to say that 'she tends to be witty, while he is often tactless'. CT indicate 'individual differences', yet reveal little about the role traits play in behavioural generation. In other words, traits capture the fact that people differ; yet traits explain little about why people differ. Modern psychological research in CT has tended to follow this approach (see 5.1).

The other features of Aristotelian moral psychology are more straightforward. Emotion aids and hinders virtuous behaviour. In general, emotions are helpful. People experience pleasure when they do good acts and experience vicarious pleasure through the good acts of others. Yet emotion may lead to *akratic* behaviour, i.e. against reason, "under the influence of passions" (EN 1147b: 14). For example, a person might be nervous despite reasoning that there is nothing to fear; if their emotions hold sway they may act badly, e.g. they cannot face sitting through an important lecture and decide to go home.

Martha Nussbaum notes that insufficient emotions may also prevent right action, placing a person in the predicament of "having knowledge in a sense and yet not having it" (EN 1147a: 13-14 c.f. Nussbaum 1990). A person with insufficient, or incorrect, emotions fails to understand moral situations. For example, if a person learns of a military invasion through jargon such as 'pre-dawn vertical insertion' or 'collateral damage', they may know at some level that the invasions have involved death, yet the words fail to produce a true understanding of what has happened.

Psychologists increasingly view emotions as a form of cognitive activity, one linked to bodily regulation, e.g. increasing heart rate, and to efficient learning, e.g. people learn to avoid greatly feared stimuli quickly (e.g. Damasio 2001, LeDoux 2002). Interestingly, the phrasing of moral dilemmas to include the possibility of bodily exertion (e.g., pushing another person as opposed to pressing a button) tends to activate emotional centres in the brain (Greene *et al.* 2001). The activation, or failure to activate, emotional centres can lead to different responses to otherwise similar moral dilemma.

To take up the previous example, thinking abstractly about a military conflict (e.g., 'the two forces engaged each other') may lead to the failure to feel anything, whereas a realistic description (e.g. 'one soldier had his legs blown off') will engage one's body in the thought. A strong feeling may focus the person on bodily matters (e.g. preventing harm) whereas an abstract approach might focus analysis on abstract concepts (e.g. the financial costs of the conflict).

People use 'practical wisdom', also known as *phronesis*, to tell them what to do in a particular situation. Practical wisdom is gained through habit, which is in turn guided by theoretical knowledge. If practical wisdom is gained habitually, then radically new situations may confound people (i.e. their old habits cannot appropriately guide them in the new situation) and cause them to act poorly.

Practical wisdom is roughly equivalent to the contemporary notion of procedural knowledge; this is knowledge that people can act on yet find difficult to explain verbally (e.g. how to balance while riding a bicycle). People have a 'sense' of how to do things, although explicating this sense may be beyond them. Psychologists have

remarked on the relation of procedural knowledge to moral behaviour (e.g. Grigsby & Stevens 2000: 300-301). Moral teaching that occurs at a purely declarative level (e.g. the memorisation of rules of good behaviour without actual practise obeying them) may fail to guide moral behaviour.

Aristotle synthesises his account of moral psychology into four types of people: virtuous, continent, incontinent, and vicious. They all aim for excellence, "a state concerned with choice, lying in a mean relative to us" (EN: 1106b-1107a 36-37), and strike with varying results. Virtuous people hit the mark, continent people are near the mean, incontinent people shoot wide, and vicious people find themselves at the extreme. The ways that people fail to act well vary. For example, although both incontinent and vicious people may succumb to *akrasia*, only the former will regret the fall, and while both continent and virtuous people do what is right, continent people do so only after careful deliberation and emotional vacillation.

Aristotle views the development of personality as mediated by an interaction of 'nature' and 'nurture'. The important components of personality include habits, emotions, and practical wisdom. The relation of CT to behavioural generation is somewhat unclear; *in situ* psychological mechanisms (e.g. choice) seem to mediate a person's behaviour. Aristotle predicts that continent and incontinent people are 'unbalanced' in certain components related to behaviour, whereas virtuous people display an appropriate level. Vicious people may lack certain emotional structures entirely. While VE offers an intriguing framework for moral psychology, its specifics are lacking.

### 1.2 Modern Virtue Ethics

Rosalind Hursthouse (1999) presents an overview of neo-Aristotelian VE.

Hursthouse sees unification in ethics on the horizon and stresses that all ethical theories have qualities and that all of them fail when caricatured by partisans. Although Hursthouse acknowledges that VE involves moral psychology, she does not link VE to scientific psychology.

Hursthouse states that unlike other ethical theories, no rules, codes, or calculations exist in VE: virtue is uncodifiable. While ethical rules are helpful as guidelines, they require application and this mandates practical wisdom. People find themselves in different situations and use practical wisdom to resolve these. VE encourages people to ask themselves 'Who should I be (in this situation)?' with the goal of emulating what a virtuous person would do.

I suspect that Hursthouse's account would be better served by incorporating neuropsychology. Her interest in 'uncodifiability' essentially relates to the complexity of behavioural generation; no simple system will capture the factors that generate behaviour, virtuous or otherwise (see 1.4). Furthermore, by advocating that people learn by emulation, either by imagining someone doing something or by watching someone directly, VE capitalises on motor learning (i.e. emulating the movements and behaviour of virtuous people), as opposed to abstract rule learning. Motor learning is strongly linked to procedural knowledge (recall 1.1).

In an effort to 'make peace' with other ethical theories, Hursthouse maintains that VE invokes a quality of consequentialist theories. Whereas consequentialism advocates analysing consequences, VE notes that agents assess the moral outcome of

their actions. Hursthouse calls this outcome the "remainder"; in VE, people are obliged to deal with this remainder. When people act, they reflect upon their actions and are emotionally affected. The repercussion of a bad act may include remorse. Remorse leads people who behave badly to make reparations for their failures.

I note that 'remainders' affect people unevenly. Firstly, some people are so overwhelmed by remorse that they fail to make reparations. Secondly, certain brain injuries seem to rob people of the ability to reflect on their actions or to feel guilt (e.g. Anderson *et al.* 1999). I would also expect to witness non-pathological (i.e. occurring within the bounds of normal development) cases of 'remainder-neglect' to manifest. People might vary on their ability to feel or act on a 'remainder' due to educational patterns or developmental deficits.

Hursthouse sees virtue as distinct from character traits. Virtue is synonymous with human goodness and irreducible to "completely discrete, isolable character traits" (Hursthouse 1999: 131). Virtue is "something that makes its possessor good...she gets things right" (*ibid*: 13). The word that substitutes best for virtue, that "pick[s] out something that always makes its possessor good is 'wisdom'" (*ibid*: 13).

I question whether Hursthouse's decision to unlink virtue from CT justifies her decision to ignore psychology entirely. Hursthouse attempts no further clarification of the psychology of behavioural generation and fails to cite any psychological research in her account of VE. She has noted that certain people are virtuous and left why and how they manage to be virtuous unclear. In my opinion, Hursthouse abandons Aristotle's attempt to determine the "nature of actions" (EN 1103b: 30).

The disregard of psychology is typical of modern VE. Although virtue ethicists vaunt the uniqueness of VE (e.g. Slote 2003 [1995]) and note the centrality of character to VE (e.g. Watson 2003 [1990]), they neglect psychological research on character. For example, *Choosing Character* by Jonathan Jacobs (2001) quotes no biological or psychological studies of character; his interest is in the responsibility we should take if our character is, for example, aggressive. To the extent that virtue ethicists are satisfied with 'armchair psychology' that is uninformed by science, they have abandoned an Aristotelian approach.

### 1.3 Approaches in Virtue Ethics

Both scepticism and mild interest towards scientific psychology characterise philosophical research in VE. Scepticism originates from narrativist and Wittgensteinian approaches, which place the analysis of narratives and common sense above scientific research, at least as regards studying humans. Interest in science tends to originate from an eclectic approach to garnering source material than an advocacy of scientific philosophy *per se*.

The narrative approach to character, also known as the hermeneutic approach (e.g. Taylor 1989), explores stories, myths, and poems. The narrative thesis is that a personal point of view, i.e. a subjective approach, best unveils character. Our lives are stories, and these stories reveal, richly and deeply, matters of ethical and philosophical importance (e.g. attachment, acceptance, rejection, and the uniqueness of each individual). An objective approach risks emptiness because it captures only the surface: e.g. 'the boy sat in front of the piano and began to cry'. The subjective approach delves

deeper: e.g. 'I sat there, terrified. The crowd's eyes burned into my skin, and the piano's keys, formerly inert bars of off-white, seemed to me now like the teeth of an animal, ready to wound. I felt warm tears pour down my face...'

The project of exploring lives obliges narrativists to turn to literature and its detailed accounts of lives and how they are lived. Narrativists are unconvinced of the value of the scientific approach as applied to psychology. Joel Kupperman notes that while "[i]t would be very useful to have more scientific work on character...the moral psychologies of ...Aristotle, Confucius, and La Rochefoucauld would appear to be as good as any we have" (Kupperman 1991: 172). Furthermore, literature has the advantage of sheer volume; compared to psychology, "[1]iterature has had centuries of headstart, and it has been served by genius of the highest order" (Allport 1960: 6).

I have several reservations about narrative work. Its theoretical productivity is low; narrativists generally refuse to posit laws or hypotheses. While many would argue that the formulation of laws in social science is impossible, some admit that "the role of authorship and agency in the construction of psychosocial texts" (McAdams 1999: 495) needs to be addressed at some point in the future. Of relevance to the character debate is that the exclusive reliance on literary and lay sources impedes discussion of technical concepts (e.g. CT). There is also cause for suspicion regarding 'the poverty of objectivity', because narrative views of science are often flawed.

The view that science must "square with experience, sensitively observed...[we must] hold ... scientific accounts up against the best interpretative accounts of behavior" (Nussbaum 2001: 119) is patently false. Science routinely studies unobservable things (e.g. neurones within the brain) or things that contribute to, yet are

only indirectly involved in, behaviour (e.g. genetics). Equally ridiculous is the strict bifurcation of the natural and human sciences, whereby psychology is a misguided "ambition to model the study of man on the natural sciences" (Taylor 1985: 1). This ignores the long successful marriage of natural and human sciences in fields such as geography, to say nothing of recent successes.

In narrative work, scientists are often depicted as desiring the reduction of everything to atomic components and of ignoring the 'whole'. For these 'reductionists', consciousness and morality are illusions. People think that their self-interpretations are important, while in fact they are illusory veils cast over the genuine mechanisms (Dennett 1988). Admittedly, reduction is a fruitful strategy- up to a point.

Reductionism has dispelled 'mystery mongering' approaches such as animism and vitalism, whereby phenomena such as 'life' and 'mind' are slated to remain enigmas. Yet, radical reductionism does away with macrobiology, ecology, and social sciences. Radical reductionism is increasingly regarded as unscientific in its disregard for complex organisation, i.e. systems, both in the physical (e.g. Goldenfeld & Kadanoff 1999) and social sciences (e.g. Trigger 1998: 150-151).

Things should be studied both in light of their sub-components and in terms of their systematic functioning. To take a trivial example, the application of science to baseball could legitimately examine physical (energy transference from bat to ball), physiological (movement of the arm), psychological (perception of the ball), or societal (the place of baseball in the society) levels of organisation. VE would lose nothing, and gain a great deal, in adopting a scientific approach. An analysis of virtue could extend to include its social, psychological, and biological aspects.

Another research model with tenuous ties to science is modelled after the work of the later Wittgenstein. This philosophy examines everyday language usage; Wittgenstein proposed that language is a 'toolbox' that contains the 'tools' to solve conceptual problems. Wittgenstein's focus on how we speak, think, and reason has inspired virtue ethicists to work on perception (e.g. McDowell 2003).

The 'linguistic toolbox' is helpful in detailing how words (e.g. 'aggressive', 'kind') are used in everyday speech. However, restricting research to the language "we" use avoids imperceptible phenomena (e.g. quarks) and fails to develop concepts much beyond a common-sense level. This will be illustrated in the section on CT research in psychology (5.1), where a linguistic strategy became mired in difficulty.

Many virtue ethicists see a kinship between Wittgenstein and Aristotle.

Hursthouse argues that Aristotelian psychology is a "philosophical psychology ...sympathetic to the later Wittgenstein" (Hursthouse 1999: 15-16). Both Wittgenstein and Aristotle reject sharp distinctions between the rational and non-rational. Yet, contra Hursthouse, these two philosophers arrive at this conclusion from totally different approaches. Aristotelian psychology is tied to the biological study of mammalian life. In contrast, Wittgenstein rejected scientific psychology and stated: "there is no process in the brain correlated with associating or with thinking" (Wittgenstein 1967: 106e).

A third approach to VE is mildly interested in science. Philosophers with this approach tend towards eclecticism, whereby science is just one more interesting source of data, alongside history and pop-culture. Participants in the character debate generally fall into this group.

I submit that scientific philosophy requires more than occasionally peeking inside a science textbook. At the very least, it requires extensive background research, in order to 'stand on the shoulders of giants' and properly survey a field and its problems. Scientific philosophy also requires a scientific ontology, as defined by theory-systems such as physics and biology, rather than 'possible worlds' metaphysics. Background research and scientific realism are crucial because although there are countless reasonable, i.e. consistent and logical, ways to explain phenomena, many of these are unrealistic, i.e. have already been tested and rejected.

I accuse the participants in the character debate of insufficient background reading; some make claims that are either in direct variance with current research.

Interestingly, in their neglect of research and other theoretical systems, philosophers are merely repeating history. Many psychologists' research on CT neglected neuropsychology and violated tenets of biology (see e.g. 2.3).

While each character debate participant presents valuable arguments, separating the gold from the dross will require a survey of psychological research on character (5.1). I will set out a human science framework- the bare minimum needed to adequately integrate scientific psychology into ethics- and suggest that a revised VE be built on this framework.

# 1.4 The Philosophy of Human Science

Although virtue ethicists poorly tended Aristotelian psychological science, its original structure remains relatively accepting to modern psychology (Churchland 1998). A philosophy derived from the 'human sciences' (i.e. biological, psychological,

and social) can rekindle VE's scientific fire. A human science philosophy can also frame a secular approach to ethics, where moral properties belong in the conjunction of biology, psychology, and society that define human beings.

Science espouses a systematic approach and a *systemic* worldview<sup>8</sup>; things interact with each other in systems rather than as aggregates or unanalysable wholes. Many systems have *emergent* properties, i.e. properties their components lack. Emergent properties include life (possessed by a cell, but not a cellular component, such as a cell wall or ribosome), solidity (a property of a system of molecules, but not a particular molecule), and behaviour (a property of an organism-environment system). The philosophical concept of emergence describes a *property* emerging from a *system* (e.g. liquidity is the property of a system of molecules at a particular energy level and pressure), not one *thing* emerging from inside another *thing* (e.g. a clown springing from a jack-in-the-box). Systems/things may *assemble* out of other systems/things (e.g., a watch is *assembled* of simpler parts, which in turn are assembled from molecules).

Systems that are complex (i.e. involve many types of components and constituent factors) are also called 'dynamic systems'. Classic examples of dynamic systems are found in meteorology (i.e. weather). As the properties of systems are altered if a component is changed (Boudon & Bourricaud 2002), and complex systems have many components that are subject to change, the expression of properties in a dynamic system can vary greatly depending on starting conditions. Consequently, prediction becomes difficult.

<sup>&</sup>lt;sup>8</sup> Beware: The name for a systems approach varies. For example, Wilson (2000) calls it 'holism', while Raymond Boudon uses the term 'methodological individualism' (e.g. Boudon 1984).

Biological organisms are also complex systems. Biological properties emerge and submerge depending on the interaction of systemic components (e.g., an overly heated environment can lead to the loss of consciousness). A biological system's behaviour will vary greatly depending on its initial state (e.g. Hebb 2002, Grigsby & Stevens 2000); for example, a hungry mouse will behave differently from an exhausted one.

In psychology, emergence links mental properties to the brain, so that mental properties emerge from brain systems. An analogy to the relationship between mind and brain is as follows: as an organism 'lives', so a brain 'minds'. Social systems also have emergent properties: e.g. 'relationships' and 'human rights'. 'Social' is characterised as a system involving at least two creatures of the same species: for humans, two or more people (Bunge 2003). Social systems also involve social artefacts, such as schools, prisons and televisions. Moral properties form a special subset of the properties of social systems of humans. Certain animals (e.g. primates) may have some of the biological, psychological, and social properties that emerge as morality.

Conceiving of morality in an emergent framework has more of 'pruning' effect, i.e. expelling certain conceptions of morality as implausible (e.g. theological, idealist), than a constructive one. I suspect that emergence will discount narrative and Wittgensteinian approaches (1.3), as the latter would ignore the technical concept of emergence itself. Yet in itself, emergence provides no clear moral system. Therefore, neither neo-Aristotelian VE (1.2), nor Aristotle's VE (1.1), nor most other ethical

systems, are barred from an 'emergent' refit. The rudiments of an 'emergent' VE will be presented in the Conclusion.

What follows is an examination of the character debate in virtue ethics, first through the 'situationist' debate within psychology and then the 'character debate' within philosophy. I attempt to show that a failure to integrate a human science philosophy and draw on several domains of psychological research diminishes the quality of the debates, without diminishing their importance.

### Chapter 2: Social Psychology

Social psychology reveals both foul and fair in human behaviour. Many of its findings were used to argue that situations, not character, guide behaviour; these findings are dubbed 'situationism'. Milgram's (1974) experiments on 'Obedience to Authority' demonstrate that a majority of people will obey orders to inflict painful shocks on a dissenting subject. In an analysis of experimental studies, Mischel (1968) found that the stability of a person's behaviour from one situation to the next is only weakly correlated. Similarly, Darley and Batson (1973) found that situational factors predict ethical behaviour. Despite the weakness of character-based explanations, people attribute behaviour to character. This pattern dubbed the Fundamental Attribution Error (Heider 1958, Ross 1977). Yet, 'situationism' only reveals the complexity of personality and behavioural generation- not its mechanisms. Neuropsychology is needed to explain the generation of behaviour.

## 2.1 Social Psychology and the Study of Society

People behave in new ways in social situations: eyebrows raise and words flow, gifts are exchanged and kisses are blown. Social behaviour is readily viewed as moral behaviour: charity and murder, honesty and untruth. The variety and complexity of social behaviour renders its study difficult. Societies are so complex that they rarely show their 'roots' (Tocqueville 1986 [1836]). Social properties arise from the whole and from individuals: for example, language has both individual and national properties. Social properties are malleable and experimenters risk altering the behavioural patterns of their subjects. Theories meant to reduce complexity often dangerously oversimplify;

univalent explanations of society (e.g., societal transactions are solely 'economic', 'power', or 'discourse' based) are fruitful to the extent that they capture some aspects of social systems and fail to the extent they ignore others. Those studying society need to take care.

The field of social psychology studies the behaviours of individuals in social systems and through interactions with social artefacts. This covers both 'external' (e.g. body language) and 'internal' (e.g. thoughts and attributions) behaviour. Examples of social psychology include the study of behaviour of individuals working in teams and the shopping behaviour of people exposed to music.

Whereas social psychology is a discipline proper, personality psychology is interdisciplinary. Personality psychology must incorporate social, clinical, and neuropsychological research. Restricting study to a certain system is often practical; ignoring other systems entirely leads to poor theory. To foreshadow the fate of the situationist argument that is at the centre of the character debate, social psychology is unable to produce theories of human functioning divorced from input from other psychological disciplines.

Social psychologists uncover how social systems affect people. This could involve biological characteristics common to all people (e.g. blushing when embarrassed) or culturally derived education specific to certain people (e.g. people who have learned to rise during the national anthem). The title of the principal journal of social psychology, the *Journal of Personality and Social Psychology*, reflects its participation in the larger project of personality psychology. This is noteworthy, as some philosophers in the character debate argue that the findings of personality

psychology and social psychology are in opposition and view 'situationism' as a conceptually viable theory (e.g. Doris 2002, Harman 1999a).

The origins of social psychology are in late 19<sup>th</sup> century *crowd*, or *mass* psychology (e.g. Le Bon 1975 [1895]), a field heavily influenced by philosophical idealism. Crowd psychology postulated that 'crowd mind' controlled group behaviour, thereby sharing in one of idealistic philosophy's conceits: group behaviour is inferior to that of enlightened individuals<sup>9</sup>. The "individu isolé possède l'aptitude à dominer ses réflexes, alors que la foule en est dépourvue." ["The detached individual has the ability to dominate his reflexes, while the crowd does not."] (Le Bon 1975: 57).

There is truth to the view that crowds commit awful deeds. However, the view that the members of a crowd evince 'simple emotions' is unwarranted: people may outwardly conform, inwardly rebel. Furthermore, crowds can accomplish pro-social actions; for example, non-violent resistance to police brutality in 1960s America led to greater equality for blacks, and volunteer teams routinely form to aid in the search for missing children, often abducted by 'lone wolves'.

Social psychology began to shake off its pseudo-scientific origins in the early 20<sup>th</sup> century. In 1924, Floyd Allport introduced the first scientific social psychology textbook and the field grew explosively in North America thereafter. Before the advances of cognitive neuroscience, social psychology seemed psychology's sole success story. Major accomplishments include the study of altruism and the creation of conflict resolution techniques for the workplace.

<sup>&</sup>lt;sup>9</sup> This outlook persists in hermeneutic psychology; for example, Heidegger states that in the crowd "[e] veryone is the other, and no one is himself" (1964: 165).

However, social psychology has, in a sense, stayed true to its roots, unveiling many distasteful and ethically reprehensible characteristics of human behaviour. For example, people conform to group opinions even when they know these opinions are wrong- a case of 'The Emperor Has No Clothes' (Asch 1955 c.f. Baron & Byrne 1997). The 'group effect' can cause individuals to suppress helping behaviour. Witness the Kitty Genovese case where a woman was stabbed to death outside an apartment complex under the gaze of many witnesses, none of whom helped, not even by telephoning police. Worse yet, people operating within hierarchical social systems can commit awful crimes without feeling responsible for them. The Holocaust trials brought forth the reality that people disavow responsibility for their actions when they are 'just following orders'.

The Holocaust is a modern atrocity committed in a modern society. In its wake, racist doctrines that had attributed foul acts to 'savages' were stripped of their legitimacy: a 'civilised' people carried out the Holocaust. We now know that genocide has occurred in many societies, many times in history (Diamond 1997). Genocides- and many have occurred since the Holocaust- urge us to understand human nature; with its dark possibilities uncovered and understood, perhaps genuine change can begin.

## 2.2 The Milgram Experiment

Stanley Milgram was horrified by the Holocaust and curious as to how obedience to an anti-social authority, the Nazis, occurred. He felt that the Holocaust's "inhuman policies may have originated in the mind of a single person, but they could only have been carried out on a massive scale if a very large number of people obeyed

orders" (Milgram 1974: 1). Milgram decided to study the phenomenon of obedience empirically. The experiments that make up 'Obedience to Authority' (OA) are among the most notorious in the history of psychology<sup>10</sup>. A typical experimental variant is presented in what follows.

In each experimental trial, two people entered a Yale University laboratory to take part in a study on the effects of punishment on learning. Subjects were males aged 20 to 50, recruited either through an ad in a local newspaper or through direct mailing, paid 4\$ in advance - approximately \$25 today - for participation in the 1-hour experiment. An experimenter greeted the subjects, introduced the theory and experimental procedure, and had the subjects draw lots. According to these, one subject was assigned the role of 'teacher' and the other the role of 'learner'. The learner was led to an adjoining room and had his arm strapped to an electrode. The teacher watched the learner's preparation and then returned to the main experimentation room.

The teacher sat down in front of a shock generator. The generator had switches that delivered electric current to the electrode strapped to the learner. The teacher would read word pairs to the learner, and then read a testing sequence to which the learner would respond with one of four possible answers. The teacher spoke to the learner through a microphone; the learner indicated their response through an answering device whose buttons corresponded to the possible answers.

The teacher was ordered to shock the learner if the learner failed to answer correctly. The shocks began at 15 volts and increased by 15 V each time a wrong answer, or no answer, was given (i.e. Shock Level = (15 + 15(n-1)) V, where n= the

<sup>&</sup>lt;sup>10</sup> A description of experimental procedure is found in Milgram (1974); Milgram & Johnson (1965) is a documentary video featuring samples of the experiments with commentary.

cumulative number of mistakes). The generator ran up to 450V, equal to 30 mistakes. Labels corresponding to the switches indicated 'Slight Shock' (15V-60V), 'Moderate Shock' (75V-120V), 'Strong Shock' (135V-180V), 'Very Strong Shock' (195V-240V), 'Intense Shock' (255V-300V), 'Extreme Intensity Shock' (315V-360V), 'Danger: Severe Shock' (375V-420V). The 435V and 450V switches were marked 'XXX'. If asked, the experimenter told subjects that although the shocks were extremely painful they did not cause permanent damage.

This was the apparent experiment; Milgram was deceiving his subjects. In each experimental trial, the 'teacher' was the only genuine subject; the experimenter and 'learner' were confederates. The actual subject was always assigned the role of teacher. Once left alone in the adjoining room, the learner removed the electrode from his arm. He then set up a tape recorder that would play pre-recorded, and intensifying, vocal responses once the electric current entered the 'Moderate Shock' zone; these responses could be heard clearly through the walls of the adjoining room.

In each trial, the learner provided the same pattern of answers to the pair-learning task; approximately three wrong answers for each correct one. As teachers progressed through shock-levels, the learner began to respond audibly. The 75V shock produced grunts from the adjoining room. If the teacher continued to higher voltages, these grunts became screams and protests. At 300V the learner shouted that he would no longer answer, at 315V he gave an agonised scream and shouted that he "was no longer a participant" (*ibid*: 23), and after 330V he was silent. If a teacher tried to cease the learner's shocks the experimenter would verbally push the teacher to continue using a series of scripted prods:

The experimenter...[used] as many as necessary to bring the subject into line.

Prod 1: Please continue, or, Please go on.

Prod 2: The experiment requires that you continue.

Prod 3: It is absolutely essential that you continue.

Prod 4: You have no other choice, you must go on.

The prods were made in sequence: Only if Prod 1 had been unsuccessful could Prod 2 be used. If the subject refused to obey the experimenter after Prod 4, the experiment was terminated. (*ibid*: 21)

No other measures were taken to ensure that the teacher continued the experiment; the teacher was free to cease participation at any time.

Milgram asked psychiatrists to estimate at what level teachers would break-off their participation in the OA experiments. The psychiatrists "predicted that most subjects would not go beyond the 10<sup>th</sup> shock level [150V]...about 4 percent would reach the 20<sup>th</sup> shock level [300V], and about one subject in a thousand would administer the highest shock level on the board" (*ibid*: 31). The actual results were as follows: amongst 40 subjects, 20% ceased in the Strong Shock range (135V-180V), 5% ceased in the Intense Shock range (255V-300V), 12.5% ceased in the Extreme Intensity Shock range (315V-360V) and 62.5% continued to the highest shock level.

Milgram initially ran four variations of the experiment. The one described above is the 'Voice-Feedback' variation: the teacher hears the learner's protests. The 'Remote' variation featured no vocal responses; the learner expressed discomfort by banging on the wall. The 'Proximity' variation had the learner in the same room as the teacher, visible and audible. The 'Touch-Proximity' variation had the teacher hold the learner's hand down on a shock plate to give the shock. The variations led to the following results: "[35] percent of the subjects defied the experimenter in the Remote condition, 37.5 percent in Voice-Feedback, 60 percent in Proximity, and 70 percent in Touch-Proximity" (*ibid*: 36).

Milgram conducted further variations. A fifth variation changed the location of the experiment from prestigious Yale to a dingy office building. Furthermore, the learner announced that they had a mild heart condition, to which the experimenter repeated that the shocks are painful but cause no permanent tissue damage. Otherwise, this variation was identical to the Voice-Feedback condition. There was no significant change in results. A sixth variation changed the personnel; the experimenter became soft-spoken, the learner tough. No significant change in results was detected. A seventh variation had the experimenter leave the room after the opening instructions and provide verbal prods by telephone. In this case, obedience dropped to 20.5 %.

Among the remaining variations, only one had significantly different results. This was when subjects were free to choose the shock-level. In this variation, only 1 subject went up to the 30<sup>th</sup> shock level, one other to the 25<sup>th</sup> level, and remaining subjects stayed below 150V<sup>11</sup>. OA was repeated with female subjects and with various ages and nationalities with similar results (for a review see Blass 1991).

Milgram was unable to explain his evidence. "I am certain that there is a complex personality basis to obedience and disobedience...I have not found it"

(Milgram 1974: 205). Milgram framed his results in terms of the remarkable power of authority:

Subjects have learned from childhood that it is a fundamental breach of moral conduct to hurt another person against his will. Yet almost half the subjects abandon this tenet in following the instructions of an authority who had no special powers to enforce his commands. (*ibid*: 41)

<sup>11</sup> Interestingly, this result is comparable to that which the psychiatrists Milgram surveyed had predicted.

Milgram notes that the narrowing of the obedient subject's attention. Subjects focus on the task at hand (i.e. reading the word list and operating the shock generator) rather than the larger issue of hurting a fellow human being. Milgram dubs this the 'agentic state'; obedient subjects become 'agents' in realising the experimenter's ends:

Although a person acting under authority performs actions that seem to violate standards of conscience, it would not be true to say that he loses his moral sense. Instead, it acquires a radically different focus. He does not respond with a moral sentiment to the actions he performs. Rather, his moral concern now shifts to a consideration of how well he is living up to the expectations that the authority has of him" (Milgram 1974: 8).

No explanation of OA has been produced in social psychology (Blass 1991) or in psychology as a whole (Nissani 1990).

I speculate that an explanation lies in neuropsychological work on human neural category systems (Ashby & Ell 2001), the brain systems that allow people to judge if something is correct or incorrect. One of these systems appears to operate at a procedural level (i.e. knowledge of 'how to' do things that cannot be easily verbalised); another proceeds at a declarative level. Both of these systems operate simultaneously, although one might be dominate in the generation of behaviour. Psychologist Gregory Ashby notes that radiologists, who can identify tumours amidst the black and white splotches of an x-ray, provide a paradigm of the procedural system (Ashby 2003, October 17). A case of the declarative system is a mathematical grouping procedure (e.g. 2/4, 4/8, 30/60, and 75/150 belong in the same group because they reduce to 1/2).

The declarative system is mediated by the frontal lobe of the brain, the source of voluntary decision-making and abstract rules. In contrast, the procedural system is

strongly tied to the motor system and learns response positions and movements (e.g. a pattern of movement such as flicking switches). I note that obedience within the OA involved a motor task; subjects flicked a switch if the wrong answer was indicated. The operation of a shock generator is a fairly demanding physical task, one that may have shifted the subject's awareness away from the moral dilemma and towards manipulating the machine (Carver 1975, c.f. Blass 1991: 407).

Subjects who obeyed the OA experimenter were doing something 'right' at the procedural level (i.e. they were carrying out the task set out by the researcher) even as they were doing something 'wrong' (i.e. hurting another person). While most obedient people had the requisite declarative moral knowledge (e.g. rules such as 'Do no harm') to know that harming the learner was wrong, perhaps their behaviour was generated using their procedural system.

Some dissenters may have internalised (i.e. encoded as procedural knowledge) 'how to' resist orders during their upbringing. Another possibility is that disobedient subjects were able to 'switch over' to using declarative knowledge to guide their behaviour. Even so, the subjects faced the difficult task of disobeying the orders of an experimenter whom they had previously agreed to aid and had accepted payment from.

The most disturbing aspect of the OA is that most subjects in the Milgram study displayed conflicted obedience. The documentary film of the experiment shows obedient subjects tittering, sweating, and clearly distressed. Conflicted individuals' may have had their declarative systems active, yet these systems failed to control their task behaviour (i.e. flicking the switch). The agitation suggests something of a 'battle' between several behavioural systems, with the procedural system 'winning out'.

Taking a neuropsychological approach to OA suggests a slew of research programs for moral psychologists and applied ethicists. For example, how can declarative knowledge be made to 'win out'? Is it in fact always desirable that people rely on declarative systems (i.e. does relying on declarative rules result in virtuous behaviour)? Can selective disobedience (i.e. disobedience towards cruel orders) be encoded at a procedural level?

Regardless of one's approach to moral psychology or to ethics, Milgram's findings should add a sense of urgency to ethical efforts. Even 'normal' people run the risk of doing evil when so commanded.

#### 2.3 The Prediction of Behaviour

In 1968, Walter Mischel published an influential metaanalytic <sup>12</sup> review of personality research in which he criticised personality theories developed without input from rigorous experimentation. Mischel felt that experiments have "implications [that] have not been explored thoroughly" (Mischel 1968: 1). His pronouncements emboldened views on the 'power of the situation'. Mischel examined a wide array of personality topics (e.g. attitudes, cognitive ability, avoidance, and sexual identification). However, most psychologists focused on his analysis of the link between personality and behaviour. To many, the analysis suggested irreparable flaws in personality research.

The thrust of Mischel question was "what do particular personality constructs add to the analysis, prediction, and modification of behavior-what is their utility?"

<sup>&</sup>lt;sup>12</sup> Meta-analyses are the mathematical compilation of the results of several studies.

(Mischel 1968: 4). Mischel examined psychodynamic (e.g. Freudian) and trait theories of personality in view of "research programs that have tried to identify individual differences on variables and to assess their relations to other things that the person says or does in different situations" (Mischel 1968: 81). Both theories assume that overt behaviour signifies underlying personality factors and that personality theories posit that personality is "more or less stable regardless of the situation" (*ibid*: 6). Taken together, these assumptions are problematic. If behaviour is highly situationally specific, then why infer that personality is stable?

Mischel relied heavily on a study by Hartshorne and May (1928). This study had "surprised psychologists by showing that the ... moral behavior of children is not strongly consistent across situations and measures" (Mischel 1968: 36). Hugh Hartshorne and Mark May investigated social behaviour in children to monitor the success of character training (i.e. moral education) in schools. They noted that "[t]heories of ethical training... suffer from lack of data... [h]undreds of millions of dollars are probably spent annually by churches, Sunday schools, and other organizations for children and youth with almost no check on the product" (Hartshorne & May 1928: 5).

Hartshorne and May worked during the ascendancy of clinical work in personality (e.g. psychiatry, psychoanalysis, and psychotherapy). Psychological data was typically collected from *case studies*. This method of observation involves inferring laws from the study of a small number of people, who were most often mental patients, i.e. abnormal (see e.g. Freud 1961 [1909]). Running against the grain, Hartshorne and

May chose a "path of extensive testing and statistical interpretation" (Hartshorne & May 1928: 6).

Hartshorne and May studied moral lapses (i.e. failure to adhere to moral codes) such as cheating on tests, stealing of trinkets, and lying. The experimenters explored children's behaviour in 'natural' settings, e.g., classrooms and play areas, where situations were orchestrated to provide opportunities for deception. These situations were kept within everyday bounds; the experiments used tests, games, and surveys. For example, a test for cheating provided children with an opportunity to copy answers on a quiz from a neighbour: two different quizzes were written, and these were distributed in such a way that such cheating was evident.

The study involved over 10 000 students from different economic, religious and demographic backgrounds. Their results surprised them. There was a "large place occupied by the 'situation' in the suggestion and control of conduct, not only in its larger aspects…but also in its more subtle aspects" (*ibid*: 413). The experimenters discovered widespread deception and found few purely 'honest' or 'dishonest' cases (i.e. there were few children who consistently failed to cheat or who consistently cheated). They noticed certain trends: older children are more deceitful, more intelligent children more honest, and emotionally unstable children more dishonest. Yet, there was no clear correlation between a particular type of person and consistently honest behaviour. Nor was there indication of an honesty trait: "honesty or dishonesty is not a unified character trait in the children of the ages studied, but a series of specific responses to specific situations" (*ibid*: 243).

The common factors in moral lapses were the desire for success in a task and the possibility of receiving rewards. Hartshorne and May's conclusion for improving moral behaviour was to create and maintain environments that encouraged honesty and discouraged deception. They advocated changes to the existing school environment, so that practical opportunities for deception were limited.

There is no evidence for supporting that children who are more likely to resort to deceptive methods than other would not use honorable methods with equal satisfaction if the situation in which dishonesty is practiced were sufficiently controlled...[the] attention of educators should be placed not so much on devices for teaching honesty or any other 'trait' as on the recommendation of school practices in such a way as to provide ... opportunities for the successful use by both teachers and pupils of such forms of conduct as make for the common good. (*ibid*: 414)

To put this in a contemporary educational psychology context, children can be encouraged to more effectively self-regulate behaviour with self-motivation rather than reward based motivation (Deci & Flaste 1995). Children motivated by the intrinsic pleasure of a task suffer fewer 'moral lapses' than if motivated by a reward or a grade.

Mischel interpreted this study, and others, as evidence against character traits. He concluded that there was at best a 30% correlation achieved between an individual's behaviour in situation x (e.g. cheating on a test) and behaviour in situation y (e.g. cheating in a game); often this correlation was closer to 10 or 20 %. The corollary for traits is that if a questionnaire is used to measure a trait in situation x will have only a 30% predictive power in situation y.

When testing 2 or more variables, psychologists propose a *null hypothesis*; this hypothesis predicts that correlation (conventionally assigned the symbol *r*) between the

variables under study (for example, heart disease and stress-level) will not be significantly different than the correlation expected by chance, i.e. r = 0. Statistical analysis of the data determine whether the null hypothesis can be rejected; i.e. whether a correlation significantly greater than chance is present between the variables. The level of correlation needed to reject the null hypothesis is typically set between 0.01 and 0.05 (Howell 1997).

The correlation that Mischel reported between CT and behaviour is *statistically significant*; i.e. deviates far enough away from chance to reject the null hypothesis and to attribute some relation between the two variables. Mischel sums up his look at CT with ambivalence: "[s]tatistically significant relationships of this magnitude are sufficient to justify personality research on individual and group differences. It is equally plain that their value for making statements about an individual are severely limited." (Mischel 1968: 38). This critique shook the confidence of many personality psychologists.

However, Mischel's conclusion was 'revolutionary' only to those ignorant of neuropsychology. Neuropsychologists had already abandoned a 'one-to-one approach' of linking x behaviour to x trait (or x behaviour to x situation) in favour of a dynamic approach. In his landmark work, *The Organization of Behavior*, Donald Hebb noted that while the "tradition in psychology has long been a search for the property of the stimulus which by itself determines the ensuing response...[t]his approach ...is no longer satisfactory as theory" (Hebb 2002 [1949]: 4).

Mischel's view on the conceptual basis of personality is questionable. The hypothesis that there is a lawful pattern to personality (e.g. traits) is compatible with the

observation of substantial behavioural variation, especially if personality is a dynamic system. Behavioural variation is a feature of life; any organism that fails to adjust its behaviour to changes in its environment will go extinct. The use of traits in a theory-system predicts neither uniform nor vastly different behaviour; trait theories gain their 'colour' through the specific hypotheses that are constructed (e.g. what kinds of behaviour a trait is tied to). A recurrent problem in personality research is the neglect of operational hypotheses. To restate Mischel's concern, many personality theories lack operational hypotheses. The reply of some of Mischel's critics was that a lack of operational hypotheses in trait theories is a feature of sloppy theorising.

A further problem is that Mischel's discovery of a 'correlation ceiling' fails to address its theoretical significance. What does a 10%-30% 'correlation ceiling' signify? Does limited role for traits indicate a large role for 'situations'? Sarason *et al.* (1975) analysed the effects of dispositional and situational factors in several studies and found that situations account for an average of 10.3 % of variance, versus 8.7 % for personality. The situational "margin of superiority is by no means striking enough for them to be considered prepotent" (*ibid*: 204)<sup>13</sup>.

Several critics have chided Mischel for his naiveté vis-à-vis the scientific process (e.g. Block 2002, Eysenck 1982). Others have singled out the situationist-personality debate out for philosophical sloppiness, noting that "[b]oth the situationist and dispositionist views are clearly inadequate" (Baumeister 1999: 367). However, Mischel's critique had a largely curative effect on psychology; it shocked many psychologists out of their own scientific and philosophical naiveté. Most psychologists

<sup>&</sup>lt;sup>13</sup> This tempers philosopher John Doris' claim that the "experimental record suggests that situational factors are often better predictors of behavior than personal factors" (Doris 2002: 2).

are now professed *interactionists*; i.e. environment and organism interact in the production of behaviour. Mischel is correct to say that the way people act, "cannot be isolated meaningfully from the conditions in which he does it" (Mischel 1968: 293).

Mischel concedes that contemporary theories "increasingly have come to recognize that behavior tends to change with alterations in the situations in which it occurs...[that] the same basic underlying disposition...may manifest itself behaviorally in diverse ways" (*ibid*: 39). Global CT are "excessively crude...to encompass adequately the extraordinary complexity and subtlety of the discriminations that people constantly make" (*ibid*: 301). So crude, in fact, that no scientific theory could rely on them.

### 2.4 The Good Samaritan

Many social psychologists took Mischel's (flawed) critique to heart and sought to dismantle CT. John Darley and Daniel Batson (1973) were guided by the view that, "research on bystander intervention in emergency situations... has had bad luck in finding personality determinants of helping behavior" (*ibid*: 100). A person "who was likely to be honest in one situation was not particularly likely to be honest in the next" (*ibid*: 100).

Darley and Batson turned to the parable of the Good Samaritan for an experimental scenario. In the parable, a man is robbed and wounded by highwaymen and left by the side of the road. A priest and then a Levite (priest's assistant) pass by the man without helping. Finally, a Samaritan helps the man, taking him to an inn and paying for his treatment. It seems that personality factors play a part in the parable: the

priest and Levite are devotedly religious, whereas the Samaritan is spiritual. Darley and Batson note that situational factors play a role; "[n]ot only was the Samaritan most likely thinking about more mundane matters than the priest and the Levite, but, because he was socially less important, it seems likely that he was operating on a quite different time schedule" (*ibid*: 101). Darley and Batson set out to recreate the parable, using seminary students as unwitting experimental subjects.

'The Good Samaritan' experiment sets out three hypotheses. 1) People "thinking ethical and religious thoughts will be no more likely to offer aid than persons thinking about something else" (*ibid*: 101). 2) Persons "encountering a possible helping situation when they are in a hurry will be less likely to offer aid than persons not in hurry" (*ibid*: 100-101). 3) People "religious in a Samaritan-like fashion will help more frequently" (*ibid*: 101).

To test the personality hypothesis, Darley and Batson had seminary students "participate in a study on religious education and vocations" (*ibid*: 101). Participants were given a test to measure religiosity using three separate instruments (personality questionnaires); these determined if participants saw religion as a means to other ends (e.g. eternal life), as an end in itself, or as a quest for personal meaning. The latter two types of religiosity were deemed 'Samaritan-like'.

The situational hypotheses were tested in a later session: the participants were told to go to a specific building on campus to give a talk. To test the 'thought content' hypothesis, one group of participants was told to speak on the Good Samaritan parable, another group told to speak on vocations. To test the 'hurry' hypothesis, these two groups were subdivided. Some participants were told to hurry, some given no special

instructions with regards to time, and a third group were told to depart even though they were a bit early.

The participants were given a route to follow. Along the way, they passed a "victim [an experimental confederate]... slumped in a doorway, head down, eyes closed, not moving. As the subject passed by, the victim coughed twice and groaned, keeping his head down." (*ibid:* 104). The participants were rated on a four point helping scale according to their behaviour towards the victim:

0 = failed to notice the victim as possibly in need at all; 1 = perceived the victim as possibly in need but did not offer aid; 2 = did not stop but helped indirectly (e.g., by telling ... assistant about the victim); 3 = stopped and asked if the victim needed help; 4 = after stopping, insisted on taking the victim inside an then left him. (*ibid*: 104).

Of the factors measured, only hurry had a statistically significant impact on helping behaviour<sup>14</sup>. Unhurried subjects offered help 63% of the time, intermediate hurry 45% and high hurry 10%. Darley and Batson note that "[a] person not in a hurry may stop and offer help to a person in distress. A person in a hurry is likely to keep going" (*ibid*: 107). The experimenters note that the hurried subjects seemed not to notice the victims; they speculate that subjects "did not perceive the scene in the alley as an occasion for an ethical decision" (*ibid*: 108).

Those neither rushed nor unhurried, and who had failed to help, often reported being "in conflict between stopping to help the victim and continuing on his way to help the experimenter...[c]onflict, rather than callousness can explain their failure to stop" (*ibid*: 108). Darley and Batson conclude that "whether a person helps or not is an

instant decision likely to be situationally controlled...[h]ow a person helps involves a more complex and considered number of decisions, including the time and scope to permit personality characteristics to shape them" (*ibid*: 108).

A possible interpretation of this experiment is that human beings have perceptual capacities that can be exhausted by complex tasks (e.g. hurrying). From a VE point of view, education could train people to 'hone in' on certain environmental features, e.g., improve their ability to perceive distress. This sort of 'preventative perceptual training' is the goal of some First Aid programs, where participants are made aware of the dangers present in their own environments in order to avoid them.

Another possible interpretation surrounds a budding cognitive neuroscience theory wherein the motor system plays a major role in 'decision making'. In this view, "behaviour is seen as a constant battle between currently available opportunities for action...the brain continually transforms sensory information into the parameters of potential actions" (Cisek 2001: 36-37)<sup>15</sup>. Most of this processing occurs unconsciously. I speculate that a person who is hurrying passes things too quickly to process 'helping' as a behavioural 'option'. I also venture that with sufficient perceptual training, as described above, people would be more likely to notice unobtrusive stimuli as an opportunity to help.

<sup>&</sup>lt;sup>14</sup> However, some subjects offered 'super-help', e.g. offering to take the victim for coffee; this sort of behaviour was not recorded on the 4-point scale.

<sup>&</sup>lt;sup>15</sup> Perhaps fans of Heidegger's (1964) 'Being-in-the-world' have something to celebrate, coupled, I hope, with the humble admission that that Heidegger would reject a neural explanation.

#### 2.5 The Fundamental Attribution Error

We label people all the time; the curt shopkeeper is a 'jerk' rather than 'a person having a bad day' and the quiet student is 'shy' rather than 'bored'. These 'attributions of character' are formed with minimal observation and scanty background knowledge.

The way that people attribute 'dispositions', and ignore situations, is called the Fundamental Attribution Error (FAE).

Attribution theorist Fritz Heider (1958) is credited with identifying the error. Heider's research is "concerned with the attempts of ordinary people to understand the causes and implications of the events they witness" (Ross 1977: 174). People have beliefs that, while perhaps incorrect, have a significant impact on their behaviour (e.g. religious beliefs, racial stereotypes).

A characteristic of naïve perception is its 'economy'. We perceptually seek features that "serve to integrate a bewildering mass of data in the most economical terms" (Heider 1958: 53). Heider remarks that most people attribute unitary causes to events: internal or external. 'Internal causation' includes judgements about ability and personality. 'External forces' include judgements of good or bad luck, i.e. situational factors arranged in a manner favourable or unfavourable to the subject.

Economy leads "[n]aive psychology ... to isolate [i.e. ignore] those wavering, more fortuitous conditions that interfere with ... constancy" (Heider 1958: 92). One example of this sort of 'lean' attribution is inferring that when "a person brings about a number of changes in the environment, and one of them is generally considered much more attractive than the others, we will take for granted that it was the person's goal"

(*ibid*: 115). Likewise, if someone commits a 'cruel' behaviour, e.g. slams a door in another person's face, we might attribute a cruel intention, without knowledge of whether the behaviour was accidental or intentional.

Lee Ross (1977) develops Heider's attribution theory to address CT. He hypothesises that people tend to attribute the behaviour of others to 'traits' without regards to situational factors. Ross raises fears about the "professional psychologist's apparent susceptibility to this error" (Ross 1977: 185). He suggests that the reason Milgram, Darley and Batson, and Mischel aroused great controversy was that they "contradicted not only the formal theories ... but also the working assumptions that guide ... everyday personal encounters" (*ibid:* 187) of psychologists. For example, psychiatrists falsely predicted the outcome of the Milgram study and assumed that subjects' 'characters' would prevail.

Ross seems to equate psychological attribution patterns with psychological theories. Yet, the use of the term 'implicit theory' is metaphorical; 'patterns of attribution' is more accurate. People fall back on these attribution patters when hurried, stressed, or tired (e.g. Kunda 1999). Patterns of attribution must also be distinguished from 'folk psychology' or 'lay psychology'; the latter are the, often inconsistent, beliefs that people hold about character. For example, a psychologist with a refined theory of personality and a person with a 'folk theory' of personality might exhibit a FAE pattern of attribution when confronted with a stressful situation. Afterwards, the former would have the conceptual tools to explain what happened in psychological terms. To their credit, the virtue ethicists in the character debate draw a distinction between the FAE and CT research (i.e. Athanassoulis 1999, Kupperman 2001, Sreenivasan 2001).

With the pattern/theory distinction in place, it is unclear how the failure of psychiatrists to predict Milgram's result is evidence against character traits; these psychiatrists were more likely guided by incomplete theories. The FAE needs to be used carefully and tempered with its actual findings in attribution research. For example, the attribution error fades over time; in some cases, "the [FAE] may even disappear after a few days" (Burger 1991: 190). Perhaps a Middle East conflict attributed to a rash, or heroic, President in the present will be attributed to an oil-dependent economy in the near future.

Social psychological experiments illustrate the complexity of behaviour and provide urgency to the project of moral psychology. In contrast, its 'situationist' theoretical analyses stand as cautionary tales against sloppy theorising. I suspect that Aristotelian VE has some of the theoretical complexity, and lacks the substantive content, to incorporate social psychology. I will use character debate (Chapter 3&4) to illustrate my suspicions.

### Chapter 3: Threats to Character

If the field of ethics is strengthened by experimental input, this comes with a price; experiments may entail the alteration, revision and rejection of theories (Flanagan 1991). If experimental evidence requires the substantial alteration of conceptions of character, VE is threatened (Doris 1998, 2002; Harman 1999a, 2001). However, Aristotelian virtue theory has demonstrated its acceptance of psychological input. The philosophers who seek to reject VE are best seen as attempting to stem naïve interpretations of character.

# 3.1 Bridging the Gap between Psychology and Ethics

Both philosophers and psychologists have attempted to link psychology to ethics, although rarely in co-operation. Psychologists philosophise outside the tradition; for example, B.F. Skinner's promoted social behavioural engineering (see e.g. Skinner 1948) and Jean Piaget and Lawrence Kohlberg studied moral reasoning and development in children (e.g. Kohlberg 1973, Piaget 1969 [1932]). Ethicists' interest in psychology has tended to limit itself to philosophical psychology. Owen Flanagan notes that philosophy and psychology "almost never join the same debates, or if they do, they do so in complete ignorance of one another" (1991: vii). Likewise, Gordon Allport observed that "two separate disciplines have evolved around the same subject matter...scarcely aware of the other's existence" (Allport 1960: 18).

Flanagan initiates the character debate by arguing that ethics should have some contact with empirical psychology; he cites G.E.M. Anscombe as the source of his

concern. Anscombe claimed that moral philosophy needs "an adequate philosophy of psychology" (Anscombe 1981[1958]: 26). Flanagan notes deficiencies in the psychology of VE, where "[i]t is natural to think of personality as something which is powerfully immune to situational instances" (Flanagan 1991: 260). Flanagan doubts that this view is coherent; "[o]n any reasonable view traits are situation sensitive" (*ibid*: 280).

Flanagan argues that traits are "dispositional modules, which...vary in the degree to which they are penetrable or impenetrable, and in terms of their functional role(s) and hierarchical position in an overall psychological economy" (*ibid*: 277). The 'penetrability' of traits refers to our 'lay ability' to understand them; penetrability is noted because Flanagan advocates a narrative approach to psychology (see *ibid*: 56-78 and recall the criticism of narrative work in 1.3). In terms of the role and hierarchy of traits, Flanagan's account recalls an interpretation of Aristotelian psychology whereby traits capture all the psychological mechanisms necessary to explain behaviour (e.g. dispositions to feel, think, and perceive).

Flanagan's account is problematic because in Aristotle's account meditating psychological processes seem to play a role in behaviour (recall 1.1). Furthermore, Flanagan is somewhat ambiguous regarding the distinction between things and properties- he notes that traits "are psychologically real phenomena...[b]ut they are not in a person the way, say, her shin bone or hypothalamus is" (Flanagan 1991: 277). Similar ambiguity has plagued research on CT (see 5.1). The emergent account (1.4) distinguishes between things and their properties; for example, traits describe *properties* of people, while brains *are* things.

Flanagan uses evidence from social psychology to arouse doubts in others about the psychology underlying VE. Virtue theorists "are insufficiently aware of the degree to which the virtues... [have] high degrees of situation sensitivity" (*ibid*: 15). "[E]ven our more refined [personality] theories fail to prepare us for a situation [i.e. the OA experiments] ... with such a dramatic effect" (*ibid*: 295). Flanagan warns virtue ethicists away from simplistic refutations of OA. It "would be a mistake ... for the defender of traits to claim that those who comply lack some global trait which those who refuse possess" (*ibid*: 295). If what caused obedience was the lack of a character trait, then 65% lacked the trait in variation 1, 62.5% in variation 2 and only 30% in variation 3. A trait explanation has to show why groups of randomly drawn subjects displayed similar obedience in the first two trials, and a different level of obedience in the third. Was the third group randomly filled with virtuous people?

Flanagan suggests that in the case of OA, affective states may have led people to disobey. Perhaps those who disobeyed felt sorry for the learner, their pity aroused by past experience with electric shocks. This particular example must be disregarded; Milgram made sure that all 'teachers' got a sample shock of 45V immediately before the trial began. Nonetheless, Flanagan's explanation might work in other cases; a person may have their helping responses dampened when confronted with the object of a phobia (e.g. spiders). Perhaps authority, and subordination to it, provokes its own behavioural patterns. Social hierarchy plays a role in other social species; its role in human nature also requires consideration (Krebs 1998).

I believe that Flanagan's overall point is that behavioural generation involves a complex system (i.e. the human organism), and may rely on several brain sub-systems.

Unfortunately, Flanagan cites virtually no research on character traits and makes neuropsychology merely a peripheral part of his account. For example, Flanagan notes the 'modularity of the moral'; i.e. people could have the capacity for certain types of moral actions and not others (Flanagan 1991: 268-275). However, cognitive neuroscience suggests only 'weak modularity' (see 5.2); I will later argue that there are neurological systems that are essential to morality.

Flanagan's oversimplification of psychology is perhaps an effort to make his project less forbidding to novices. Yet, in my opinion, neuropsychology provides a better way to state Flanagan's case. Systemic functioning (i.e. several brain and physiological systems interacting at once) may involve cases whereby a particular system 'wins out' in the generation of behaviour (e.g. a voluntary effort to steady the hand suppresses the involuntary reflex to pull it away).

Although Flanagan believes that most people have dispositions to help others, the "worrisome thing is that such a... powerful disposition could be neutralized so easily by certain subtle environmental manipulations" (Flanagan 1991: 298). I think that identifying, and overcoming, these 'subtle manipulations' indicates a challenge for VE, not a defeat. However, to meet this challenge, VE will need to rely on a more sophisticated psychological approach than Flanagan offers.

### 3.2 The End of Character

Gilbert Harman (1999a) argues that Flanagan's optimism about VE is empirically groundless. Social psychology reveals a minute role for character and a large role for the situation. Character counts for little in the generation of behaviour;

"[w]hat a person with a seemingly ideal moral character will do in a particular situation is pretty much what anyone else will do in exactly that situation, allowing for variation" (Harman 1999b: Objection to Reliance on Character Traits). Harman opposes virtue theories based on character and supports one based on virtuous acts (Thomson 1997 c.f. Harman 1999b). Act-based virtue theory can be dismissed here. This would be a functionalist psychology (i.e. ignores the 'inside' of the agent); psychology has passed through its functionalist stage.

Harman draws an analogy between our everyday intuitions about physics and our everyday intuitions about psychology- an analogy borrowed from social psychologists Nisbett and Ross (1991). People make mistakes in estimating the path of an object dropped from a moving car; they also make errors in predicting behaviour. Our attribution errors foster a belief in traits, which are "relatively long-term stable disposition to act in distinctive ways" (Harman 1999a: Section 2), and correspondingly, we are fascinated with virtues and vices.

Harman notes that the virtue ethicist, armed with a naïve view of personality, would interpret the Milgram Experiment as demonstrating a vice and conclude that "everyone [has] this character defect" (Harman 1999a: Section 5.1). Similarly, when we look at the Good Samaritan trial we overlook "how much of a hurry the various agents might be in" (*ibid*: Section 5.1) and instead affix CT to their behaviour. Mischel (1968) provides further proof of the dismal predictive power of CT. Harman declares that VE is in trouble: "if we know that there is no such thing as a character trait and we know that virtue would require having character traits, how can we *aim* at becoming virtuous agents?" (Harman 2001: 224).

However, Harman misstates his case. Firstly, he confuses research on 'implicit trait theories', which are actually patterns of attribution (recall 2.5), with actual theories of CT. 'Folk physics' is useless to physics, folk psychology cannot imprison scientific psychology, nor folk ethics inform scientific ethics. However, applied VE will have to contend with our tendency to falsely attribute behaviour.

Secondly, the task of prediction (e.g. from CT to a particular behaviour) and that of explanation (e.g. the role CT play in the generation of behaviour) must be distinguished. The failure to predict a phenomenon signals that a given theory is incomplete rather than a failure; inaccurate models can predict where truer models fail (Chaplin 1997). For example, my hunch that if the weather is cold today it will be cold tomorrow will often predict the weather, but explains nothing. In contrast, a meteorological model that incorporates manifold variables may fail to predict tomorrow's weather, yet will be far superior in terms of its explanatory resources and ability to predict general trends.

Harman also oversimplifies Milgram; Harman claims that the variation where "all subjects were willing to go at least to the 300 volt level" was typical of Milgram's trials (Harman 1999: Section 5.1). Harman is actually quoting an initial trial of OA (Milgram 1963); this trial involved the Remote Condition where the subject could neither see not hear the learner. In other experimental conditions (Milgram 1974), subjects began to disobey at lower voltage levels (105V – 135V).

Harman neglects to investigate research on CT. He states that "there is no empirical basis for the existence of character traits" (Harman 1999a: Section 1.1) and claims that CT "must be distinguished from... innate aspects of temperament such as

shyness or being basically a happy or sad person" (Harman 1999a: Section 2). Yet, there is empirical evidence for CT and this research incorporates neurobiology (see 5.1).

Harman proposes to solve the character debate by annihilating it: "[w]e need to abandon all talk of virtue and character, not find a way to save it by reinterpreting it" (Harman 2001: 224). Charitably, I suppose that Harman wants to destroy facile accounts of character. Yet, simplicity is something that neither Aristotelian VE, nor personality psychology, offers.

### 3.3 The Inadequacy of Character

John Doris (1998, 2002) delves into evidence for, against CT. Doris argues that Aristotelian CT are robust and produce "regular behavioral manifestations" (Doris 2002: 1). Furthermore, he finds that "globalism runs far and wide through both characterlogical moral psychology and personality psychology" (*ibid*: 23). Personality psychology, due to its reliance on global traits, has "failed to find a convincing explanation of the Milgram results" (*ibid*: 39). Yet, 'situationism' also fails to explain OA; I submit that the resources needed to explain OA are possibly being developed in neuropsychology.

Doris claims that, "the systematic observation of behavior...has revisionary implications for ethical thought, particularly for ... neo-Aristotelian ethical theory" (Doris 1998: 504). I agree with this statement. Doris then argues that "the approach to moral psychology suggested by situationism enjoys certain advantages over Aristotelianism as a foundation for normative thought" (*ibid*: 505). Here, I disagree.

Situationism is not a psychological theory; 'situationist' work demonstrates the complexity of behaviour, not its causes.

Doris' views the cause of behaviour through a simple causal model (i.e. situation or trait x causes behaviour y) rather than a complex systemic one. Like Harman, Doris sees the cross-situational stability of behaviour as the *raison d'être* of personality psychology and ignores that stability is not required of dynamic systems.

Consequentially, he dismisses the relevance of neuropsychology; "[i]f there is... a solution [to the problem of behavioural consistency] I have not seen it in biopersonality literature any more than I have elsewhere" (*ibid*: 89).

Although Doris claims that situations suffice to explain behaviour, he also introduces a 'local trait theory' wherein "personality [is] conceived of as *fragmented*" (*ibid*: 64). Local trait x describes a person's behaviour in situation x while local trait y describes behaviour in situation y. Drawing on Hartshorne and May (1928), Doris suggests that local traits may be as specific as "answer key honest' and 'score-adding honest'" (Doris 2002: 64). Fragmented personality theory accommodates the observation that people behave in different ways in different situations. For example, a person may be brave towards incoming soccer balls, but cowardly towards spiders. Local traits can be iterated to allow something similar to, but not entirely as global as, global traits. Someone might be honest on most kinds of tasks, yet dishonest on test-taking tasks. Doris states that the local model would not allow for virtue; virtue requires on robust CT that lead to good in every circumstance.

Doris admits his model is embryonic and might contain imperfections; nonetheless, he states that: "to conclude that local trait theory is impoverished as a psychological theory, a fuller argument is required" (Doris 2002: 66). One point against Doris' model is its failure to explain how to parse traits (i.e. fails to give a reason for localising a trait description at a particular level). For example, why is 'score-adding honest' preferable to 'score-adding a math test honest'? A second is that Doris' account suggests 'local neuronal systems', e.g. isolated to 'score-adding honesty'. Yet brain systems are only weakly compartmentalised (see 5.2); the neuropsychological isolation of 'score-adding honesty' seems implausible<sup>16</sup>. Doris also fails to explain how novel behaviours generated from localised traits (e.g. a person encountering a new situation for which they have no traits) or conversely how localised traits are generated from novel situations. I suspect Doris' theory has been designed to refute cross-situational stability rather than explain personality and behavioural generation.

Doris turns to attack other elements of VE. He states that on "an *intellectualist* account, virtue consists in a distinctive 'way of seeing'" (Doris 1998: 509). On this view, virtue consists of more than just behaviour; what and how people view their actions is important. Doris acknowledges the perception argument, noting only that "if intellectualism de-emphasizes the importance of overt behavior too much, it begins to sound a little strange" (*ibid*: 510). Virtue ethicists also claim that, "virtues are extremely rare" (Doris 1998: 511). This should dampen our enthusiasm for the virtue approach; why teach virtue if no one can ever get it right? One answer is that achieving continence, i.e. good behaviour through reflection, is an admirable goal. A second answer is that the rarity of virtue is not a necessity, i.e., the possibility for improvement exists.

<sup>&</sup>lt;sup>16</sup> A mainstay of behavioural neuropsychology is that "[t]wo concepts may acquire a latent 'association' without ever having occurred together in the subject's past experience" (Hebb 2002: 132).

Doris notes another reason to abandon VE; an ethics based on character seems loaded with elitism. Aristotle praised good breeding (Doris 2002: 168) and VE, dogmatically applied, may risk racism and eugenics. Aristotle's praise for good breeding reflects his faulty view that certain people were 'natural slaves'. I note that Aristotle is contradicting himself; elsewhere he stresses the importance of habit and education.

Doris offers situationist ethics as an alternative to VE. Yet, a situationist account, dogmatically applied, is as malefic as a 'racist VE'. If people are determined by their situations, they can adapt to any situation. A 'situationist' approach to societal planning dominated in Maoist China, where people were uprooted from their homelands, and Stalinist Russia, where people were expected to the accept orders of the Communist Party (Pinker 2001).

Furthermore, the claim that a situationist ethics offers "the promise of substantial advantages in the practice of deliberation" (Doris 2002: 516) merits scepticism.

Declarative knowledge often fails to guide behaviour (e.g. obedient people in OA knew that hurting people was wrong). The challenge may actually be to encode moral lessons at a procedural level and discovering ways to teach people to 'switch over' to their declarative categorisation systems (recall 2.2).

Flanagan, Doris and Harman are guided by the desire to expel naïve interpretations of psychology from ethics. However, the latter two manage to overlook the qualities of the Aristotelian approach and all have failed to note the sophistication of cognitive neuroscience in which behaviour is mediated by a complex system.

## **Chapter 4: The Qualities of Virtue**

As critics rise to attack character, virtue ethicists confront them. Athanassoulis (2000) and Kupperman (2001) concentrate on Harman (1999a); Sreenivasan (2001) engages Doris (1998, [and an in-press copy of] 2002). The virtue ethicists erect their defences on the broader aspects of Aristotelian virtue theory and counter-attack by questioning the applicability of social psychological research. However, they decline substantive reforms to virtue ethics and neglect to draw on existing psychological resources.

#### 4.1 Emotion and Virtue

Nafsika Athanassoulis (2000) explains that Harman (1999a) views CT as either a minor or negligible element in the explanation of behaviour. Those who think that the "behaviour of agents is due to their distinctive character traits... [are] committing the fundamental attribution error and the main moral theory guilty of committing this error is Virtue Ethics" (Athanassoulis 2000: 215). Harman believes that naive observers attribute behaviour to character and that naive observers are especially prominent in VE.

Athanassoulis counters that the Milgram Experiment was "designed to test the hypothesis that most people would remain compassionate...even when under pressure from orders to do otherwise" (*ibid*: 216). In other words, Milgram examined, at best, the existence of specific CT; his results cannot dismantle the field of personality, only knocks out lower-level hypotheses, e.g. that people are reliably compassionate. OA

"examined a specific reaction to a specific situation and did not reveal much about the subjects' longterm dispositions" (*ibid*: 217).

Athanassoulis notes that Aristotelian resources are available with which to examine OA, notably the distinctions between vicious, virtuous, continent and incontinent people (recall 1.1). For example, while vicious people might behave similarly to incontinent people, VE predicts that their emotions will differ. I note that Milgram (1974) seems to note this sort of variability. A subject in the Vocal Feedback Variation, "despite ...numerous, agitated objections, ...continuous and persistent dissent, ...continues to administer the shocks...by no stretch of the imagination can it be said that this man wanted to administer shocks to the learner" (Milgram 1974: 77). In contrast, a subject in the Touch-Proximity Variation has his "hard impassive face show total indifference as he subdues the screaming learner and gives him shocks. He seems to derive no pleasure from the act itself, only quiet satisfaction at doing his job properly" (*ibid*: 46).

Athanassoulis comments, in passing, that Milgram's findings could suggest character differences, as "there were differences between different people to the extent to which they were willing to continue with the experiment" (Athanassoulis 2000: 217). She posits that this could be the result of an obedience trait; some people may have a disposition to follow orders. However, she fails to explore research on CT. In sum, "there is no reason to assume that [the Milgram Experiment] threatens the viability of any version of virtue ethics which relies on character traits" (*ibid*: 217).

Athanassoulis also turns to the distinction between virtue, continence, etc, to counter the Good Samaritan experiment. She claims that non-helpers were incontinent,

or not fully virtuous, people unable to resist the 'temptation' of lateness whereas virtuous people are not "side-tracked by great temptation or under difficult circumstances" (Athanassoulis 2000: 219). The virtuous person "is kind and compassionate in all circumstances...no matter how difficult it is to do so" (*ibid*: 219), whereas those who did not help the victim "could not resist the self-centred desire to present [their] lecture" (*ibid*: 219).

Here the continence/incontinence explanation fits less well. Darley and Batson observe that for 'non-helpers', "it would be inaccurate to say that [subjects] realized the victim's possible distress, then chose to ignore it ... because of the time pressures, they did not perceive the scene in the alley as an occasion for an ethical decision" (1973: 108). Perception, rather than temptation, may be at issue (recall 2.4).

While Athanassoulis notes the resources of VE, she fails to restore them.

### 4.2 The Rarity of Virtue

Joel Kupperman notes that Harman (1999a) attacks "the idea of virtuous character" (Kupperman 2001: 239). Although Harman's arguments "raise interesting and important issues in the border area between social psychology and moral philosophy...[they are] misconstrued" (*ibid*: 240). Specifically, Harman's arguments "gain much of what plausibility they have from ... picking a soft target: a strain within folk psychology that offers an excessively simple view of what character is" (*ibid*: 240)<sup>17</sup>.

<sup>&</sup>lt;sup>17</sup> In fact, Harman identifies no clear target; he mislabels the Fundamental Attribution Error (FAE) as a 'folk theory'.

Kupperman remarks that a "major strain in current American folk psychology... regards virtue as roughly equivalent to 'niceness', and that tends to think... that most people simply are virtuous" (*ibid*: 241). Milgram concurs: he notes that for some, "there is an image of man that simply does not admit the type of behavior observed in the experiment ... [and they] are doubly convinced that American in particular do not act inhumanely against their fellows on the orders of authority" (Milgram 1974: 169).

Kupperman denies that the 'people are nice' view is universal and notes the existence of more sophisticated accounts. He cites Plato's story about Glaucon's ring as a view of character that posited "very few genuinely virtuous people" (Kupperman 2001: 242). The ring can grant its owner invisibility; Plato recounts how this power corrupts a humble and habitually good shepherd. Kupperman voices the idea that most of us are like the ring-bearer: 'good' until put to the test. The Greeks would acknowledge the Milgram study as proof that, given a difficult situation, few are virtuous. Perhaps Greek philosophers, experienced in military service, had a better idea of the vile acts people are capable of.

Kupperman cites modern literature for another view of character, a view where people are continually "getting things wrong and then learning from mistakes" (*ibid*: 243). Our first encounter with situations may lead to mistakes; people behave poorly, and sometimes badly, in new situations. Kupperman notes that Milgram makes an effort to show that his experiment taught many subjects to become better people. I note that one participant wrote Milgram to say that:

Participation in the 'shock experiment'... has had a great impact on my life...[t]o permit myself to be drafted [into military service in Vietnam]

...submitting to authority's demand...would make me frightened of myself...I am fully prepared to go to jail if I am not granted Conscientious Objector status (Milgram 1974: 200).

Kupperman's point about moral learning is well taken; however, neuropsychological resources will better serve its development. Firstly, neuropsychology distinguishes between declarative and procedural learning; a lack of the requisite procedural knowledge may explain why people cannot perform tasks on their first try. Neuropsychology will also note why some people learn moral lessons and why certain people fail to do so (see Churchland 1998). Although Kupperman acknowledges the difficulty of studying personality, which changes as people learn and grow, I see this as a needlessly abstract stab at the dynamic nature of personality.

Kupperman suggests that the study of character be expanded to include axiology, i.e. the study of why (and what) people value. "[C]ontemporary ethical philosophers make a sharp separation between the study of morality...and ...axiology" (*ibid*: 245). Axiology can determine why people do seemingly contradictory things; perhaps those who failed to rebel in Milgram's study had "a desire to fit in" (*ibid*: 247), i.e. they valued conformity. However, Kupperman fails to note that psychologist study axiology under the heading of *motivation* (e.g. Deci & Flaste 1995).

I suspect Kupperman's account would benefit from neuropsychological input, as he seems to hold by dynamical approach to character, and one that includes axiology (known to psychologists as motivation). Unfortunately, Kupperman, an advocate of the narrative approach, finds most scientific psychology 'uninteresting' (see Kupperman 1991).

#### 4.3 Cognition and Virtue

Gopal Sreenivasan centres his efforts on refuting Doris (1998, 2002) through a refutation of Mischel (1968). In Sreenivasan's view, both Mischel and Doris fail to incorporate a wider view of CT that incorporates cognitive factors. In contrast, Sreenivasan argues that what a subject thinks about their behaviour must play a role in how researchers study it<sup>18</sup>. Sreenivasan has accepted that "the debate about character traits primarily concerns the dimension of cross-situational consistency [of behaviour]" (Sreenivasan 2001: 50). However, as noted in 1.4, cross-situationally stable behaviour is not actually required of complex systems.

Sreenivasan notes that experiments have "operative definitions of the responses and the situations being studied...fixed or coded by the observer" (Sreenivasan 2001: 50). The standards set for what qualifies objective behaviour as, for example, 'honest' or 'dishonest' are determined before empirical evidence is collected. These standards may be flawed, especially if they fail to incorporate cognitive factors. For example, an experiment on politeness might rate a subject who fails to hold a door open for a confederate with an armful of books 'impolite'. Later we determine that the subject's eyesight is impaired, or that in culture *x* helping someone with a door is considered uncouth. The operational definition failed to capture cases where 'failing to hold the door' was done for reasons other than 'impoliteness'.

Therefore, Sreenivasan argues that the "failure to predict a person's behaviour on the basis of 'objective' behavioural measures…is not always good evidence that the

person's behaviour is actually inconsistent across the situations in question" (Sreenivasan 2001: 58). There may be cases where "the intention to mislead serves to achieve a genuine good" (*ibid*: 60); e.g., a lie may be part of a plan to surprise a friend on their birthday.

To accommodate cognition in the assessment of behaviour, Sreenivasan introduces three requirements needed to classify a character trait as a virtue:

- (i) each behavioural measure must specify a response that represents a central or *paradigm case* of what that trait requires;
- (ii) the concrete situation each specifies must *not* have any features that *defeat the reason* on account of which that trait requires the response in question; and
- (iii) the subject and the observer must agree on these characterizations of the specified responses and situations (*ibid*: 61-62).

In terms of offering viable refinements to VE, I find Sreenivasan's approach unhelpful. His plans are at odds with existing psychological research (see 5.1); CT do not appear to have 'paradigm cases'. Furthermore, it's unclear what kind of 'reasons' would legitimately defeat virtuous behaviour; if behaviour is generated within a complex system (recall 1.4) then a myriad of 'reasons' to behave may exist in any situation. On a meta-ethical note, Sreenivasan's last criterion introduces a large- and I would say undesirable- role for convention in morality. For example, a subject and observer could agree that a particular behaviour is 'kind' (e.g. killing an animal in order to return its spirit to the realm of deities) and yet both could be incorrect.

<sup>&</sup>lt;sup>18</sup> Ironically, Sreenivasan's desire for cognitive variables coincides with Mischel's (1968)! Mischel helped to found a school of psychology known as 'Social Cognitivism' (see e.g., Williams & Cervone 1998) which advocates a cognitive approach to behavioural study.

Sreenivasan confounds 'moral behaviour' with 'behavioural consistency', so that social psychology's threat to the latter is a threat to the former. This confusion originates in a reading of Aristotle where traits are 'robust' (recall 1.1); i.e. virtues are traits that lead to consistently expressed behaviour. Distinguishing virtues from CT is a legitimate possibility in the Aristotelian account, where the role of CT is unclear. The two methods of behavioural classification (i.e. moral vs. consistent) are distinct.

Virtuous behaviour is classified with moral terms (e.g. 'honesty') whereas consistency uses descriptive similarity (e.g. 'reading'). For example, a person who drives a car each day has cross-situationally stable behaviour that is neither good nor bad. If a person drives their car through a stoplight or into a pedestrian, or even regularly violates traffic laws, their stable behaviour is unlikely to be classified as virtuous.

Sreenivasan's desire to refurbish VE with a more sophisticated psychology is well intentioned but his attempt to do so outside of existing psychological research is misguided.

The virtue ethicists succeed in showing that there is a case in favour of retaining VE even in the light of social psychology. Athanassoulis notes that Aristotle's account is more complex than critics grant. Kupperman finds Harman's depictions of 'lay views' overly simple. Sreenivasan attempts to show that VE can survive reworking to include cognitive factors. Yet each of these ethicists has offered only minor and misguided reforms. I hope that all of these ethicists could appreciate a revised VE, which preserves Aristotle's intentions and yet updates his theory.

# Chapter 5: Personality Psychology and Cognitive Neuroscience

Psychology is a heterogeneous field and character trait research has relied upon various approaches. In general, this research has progressed from a linguistically derived descriptive account of traits to one that integrates neuropsychology. After a review of the history of character trait research, findings derived from neuropsychology, and relevant to moral psychology, are presented.

# 5.1 A Brief History of Research on Character Traits

For some, "[t]he contemporary notion that the self can be objectively investigated is the culmination of a very long and complicated historical process" (Gold & Bacigalupe 1998: 75). Dominant theories are victors in a social power struggle, gaining currency through persuasive promotion rather than intrinsic merit. Scientific claims are "are only transformed into knowledge by an acceptance process that involves a number of individuals...who share norms and interests" (Danzinger 1990: 180).

For others, an objective approach to psychology was in place 2000 years ago with Galen, Aristotle, and progressing through Descartes, Pavlov, Broca, Penfield, Hebb, and Sperry. For this group, scientific psychology weaves out of the philosophy of mind and into neuroscience and medicine, only to reunite in cognitive neuroscience of the 20<sup>th</sup> century. The field of psychology is undeniably heterogeneous; yet, this does not mean that all approaches work equally well. I attempt to present the variety found within psychological research on CT in what follows and seek to identify successful methods.

Early personality theories were linked to physiology. Hippocrates posited that sickness arose from imbalance in the body and Galen that imbalances in the four bodily humours caused personality differences called temperaments. An excess of blood led to a sanguine (cheerful) temperament, phlegm to phlegmatic (calm), yellow bile to choleric (aggressive), and black bile to melancholic (depressive). These four paradigm personality types formed a circumplex (a compass configuration) where the cardinal points and their intermediates define temperaments with physiological correlates.

Aristotelian psychology, stressing both vegetal and rational aspects (recall 1.1), was interpreted within theology to emphasise (divinely inspired) human reason over the psychological properties possessed by animals. This approach was formalised in the dualism of Descartes (Descartes 1991 [1637]). Rational functions of the mind were more important, and more certain, than the existence of the world. Descartes' view has long dominated the philosophy of mind, leading to a near exclusive examination of function (e.g. thinking) over mechanism (e.g. the biological processes that underlie thought)<sup>19</sup>. At this point, it is convenient, although overly simplistic, to bifurcate the history of psychology. I will present an account of character that traces the functional approach and then return to detail a neuroscientific account.

The late 19<sup>th</sup> century saw William Wundt establish the first university psychology department, heralding the birth of 'psychology' as a field distinct from the traditional philosophy of mind. Personality psychology emerged in the 20<sup>th</sup> century with the publishing of *Personality* (1937) by Gordon Allport- the younger brother of social psychologist Floyd Allport (see 2.1). The field of personality was a conceptual

<sup>&</sup>lt;sup>19</sup> Descartes' legacy is unfortunate; evidence suggests that he withdrew a physiological account of the mind in fear of religious persecution and offered a philosophical account instead (Leahey 2000).

mess, incorporating millennia of philosophy and decades of psychology. Allport advanced a two-part 'lexical hypothesis' to organise the clutter. Firstly, he postulated that the terms required to describe personality are found in natural languages. Secondly, he supposed that these words capture a limited number of personality variables.

Allport and his colleagues collected over 18,000 terms from the English language: 4,500 of these described 'character'. 'Character traits' were limited to individual differences (e.g. excitable, lethargic) as opposed to talents, temporary mood states, physical characteristics etc. A near exclusive focus on 'individual difference' terms contravened Allport's initial desire that psychologists "regard the human personality...as centred in the organism" (Allport 1960: 20).

The huge task of organising trait adjectives was greatly bolstered by factor analysis, a statistical approach championed by Raymond Cattell. Factor analysis converts masses of data into manageable clusters by extracting the variables that underpin data. For example, in a study of depression, we might rate mood in variable settings: in the snow, in the rain, in hail, on sunny days, and indoors at various illuminations. Carrying out a factor analysis finds that two factors underlie reports of strong moods: precipitation and lighting.

Using factor analysis, Cattell found 35, later revised to 12, personality factors. The appropriate number of factors results in part from the number of times factor analysis is performed. The problem is that how many times factor analysis should be performed is unclear from a mathematical perspective alone; it requires theoretical justification. Factor analysis without a robust theory risks illusory accuracy; i.e., factor analysis looks precise even when incorrect. Critics of the exclusive reliance on factor

analysis note that is a technique, not a decision procedure (Block 1995), and cannot resolve the appropriate number of factors unaided by theory (Eysenck 1992).

The theoretical interpretation of personality factors remains primitive.

Personality factors are 'super-clusters' of the more specific trait descriptions used to compile them (e.g. Costa & McCrae 1998, John & Srivastava 1999). In other words, the role that CT play within an individual, as opposed to between individuals, is unknown.

This situation is perhaps analogous to Aristotle's use of CT (recall 1.1).

The lexical hypothesis resembles the Wittgensteinian 'linguistic toolbox' for its reliance on lay terms. Also of philosophical import is its framing of character in a Western language, i.e., English. Certain languages, i.e., non Indo-European ones, may have views of character that would lead to new personality variables. However, the lexical approach is merely a springboard to scientific research; language describes, rather than explains, character. This taxonomy is perhaps akin to biology's birth in naturalist observations (Saucier & Goldberg 1996).

Nonetheless, the lexical project perseveres; psychologists have investigated Dutch, German, Chinese (see the review in John & Srivastava 1999) and Japanese (Murakami 2002). The study of personality through questionnaires keeps lexical work prominent; questionnaires require translation for international use. Furthermore, personality questionnaires are used in personnel evaluation and employment counselling.

Some researchers have supplemented the lexical approach with a correlational hypothesis. If existing personality questionnaires measure a limited number of personality traits, then correlations between these questionnaires will uncover traits.

However, this program cannot integrate the research of personality theorists who do not use traits (Williams & Cervone 1998).

Efforts have converged on a five-factor model (FFM): colloquially known as 'The Big Five'. The five traits are (I) Extraversion/Surgency, (II) Agreeableness, (III) Conscientiousness, (IV) Neuroticism, and (V) Openness to Experience/Intellect. The various names assigned to each trait reflect that 'the model' is actually a collection of models; appropriate trait names are somewhat arbitrary.

According to the FFM, CT have poles (e.g. Extraversion is bounded by extreme extraversion and extreme introversion) and each trait is normatively distributed throughout the human population. "About 38% of the population will lie within the average range; another 24% each will be in the high and low ranges, and about 7% will be in the very high and the very low ranges" (Costa & McCrae 1998: 104-105). Finally, traits are hypothesised to be orthogonal, so that having a particular score in one trait is not correlated to a particular score in another.

Characteristics of a high-score on a trait are described with adjectives such as:

<sup>1)</sup> Extraversion: warmth, gregariousness, assertiveness, activity, excitement seeking

<sup>2)</sup> Agreeableness: trust, straightforwardness, altruism, compliance, modesty, tender-mindedness

<sup>3)</sup> Conscientiousness: competence, order, dutifulness, achievement striving, self-discipline, deliberation

<sup>4)</sup> Neuroticism: anxiety, hostility, depression, self-consciousness, impulsiveness, vulnerability

<sup>5)</sup> Openness: fantasy, aesthetics, feelings, actions, ideas, values (Adapted from McCrae & John 1992: 178-179)

In their 'pure forms', i.e. high-scores on traits, some FFM traits, especially Agreeableness, resemble virtues (Cawley, Martin, & Johnson 2000). Yet as compelling as the five-factor descriptions are, I think that it is too soon to effect a one-to-one translation from trait to virtue. FFM advocates claim that "every aspect of individual differences in personality is related to one (or sometimes more) of these five factors" (Costa & McCrae 1998: 107), yet the FFM provides sparse insight into the personality of individuals. FFM traits are conceptual properties emerging from group data that capture differences between individuals, i.e., as compared to one another (John & Srivastava 1999). FFM traits do not explain the significance of these differences in the individual. The FFM also lacks an account of the systematic organisation of traits within individuals, i.e. an account of the functioning of several traits in a personality system and their role in behaviour.

Theories with a high degree of generality and little specificity (i.e. purport to explain everything while stating little) are either proto- or pseudo-sciences (Bunge & Ardila 1987). To the extent that the FFM is uncritically applied, I would label it a pseudoscience; however, certain trends lead me to believe that it is on the path to becoming part of a mature science. While many FFM claims are unsurprising; e.g., extraverts are by definition warm and gregarious, the FFM has begun to make unintuitive claims as it is linked to neuroscience. For example, extraversion is correlated with positive affect (Watson & Clark 1997) and may correlate to individual differences in the reward-centres in the brain (Lucas *et al.* 2000).

The attempt to link FFM to neuroscience actually follows an earlier effort focussing on arousal levels in the nervous systems of extraverts and introverts. A

notable finding is that introverts are more sensitive to low and medium levels of stimulation than extraverts; introverts' brains are more active at lower levels of stimulation (Zuckerman 1998).

Efforts to integrate the remaining FFM traits into neuropsychology may signal a shift to the explanation of the role of CT within individual personality rather than mere description of individual differences (Eysenck 1997, Stelmack 1997). As this research progresses, some formerly optimistic FFM advocates have tempered their support and wonder if character traits capture only two-traits (Digman 1997). In a two-trait model, one trait is related to reward structures, i.e. how a person responds to reward stimuli; this subsumes Extraversion and Openness. Another trait would be linked to emotional reactivity, subsuming Agreeableness, Neuroticism, and Conscientiousness. Research interests are gradually shifting away from CT and towards the "subcomponent neural processes that determine ... traits" (Grigsby & Stevens 2000: 189).

#### 5.2 Moral Psychology and the Brain

Neuroscientific psychology has progressed slowly and quietly. There are a few reasons for neuroscience's operation 'under the radar'. Firstly, many characteristics of the brain, such as its location inside the skull and its lack of 'moving parts', renders post-mortem anatomical studies relatively easy, but physiological studies (i.e. of function) quite difficult. Even today, knowledge of the function of specific brain regions remains relatively low (Kingsley 2000). While general functions have been allocated to general areas (e.g. a region found to control many aspects of auditory

processing is dubbed the 'auditory cortex'), research on the specific mechanisms of each area is slow to appear.

Furthermore, direct brain experimentation on humans is both difficult and unethical; manipulation of the brain can easily result in massive cognitive deficits, personality alteration, or death. Animal studies (e.g. using primates and rats), emergency surgery, and 'natural experiment' (i.e. where disease or accident damage the brain) stand in for direct experimentation. Comparative anatomy (e.g. between other mammals and humans) is straightforward for certain brain regions but difficult to apply to others. For example, what are neuroscientists to make of humans, compared to other primates, substantially enlarged frontal lobes? Accidents and surgery are subject to happenstance, imprecision, and provide only a limited sample of subjects. Only recently, beginning approximately in the 1980s, have advances in imaging technology permitted non-invasive *in vivo* observation of the brain (see e.g., Katz & Grinvald 2002).

With the discovery of brain regions linked to speech, rage, and voluntary decision-making, neuroscience began to reattach itself to the study of cognitive functions. The result of this 'fusion' is called *cognitive neuroscience*<sup>20</sup>. I'll note two neuroscientific principles that I suspect are relevant to moral psychology. Firstly, although 'mental functions' (i.e. the processes of neural-systems) are distributed throughout the brain, these processes converge on 'hubs', i.e. the brain is 'weakly modular'. Neuropsychologists focus on brain areas that are especially active during

<sup>&</sup>lt;sup>20</sup> I have glossed over the role of cognitive science (i.e. computational models of the mind/brain) in cognitive neuroscience; the latter originates in 'pre-computational' work (e.g. Hebb [1949] 2002). Whatever the role of cognitive science in developing neuroscience, none would deny the usefulness of

certain functions; it is, however, incorrect to say that a particular brain function is *isolated* to a particular area.

The corollary is that certain brain areas may be particularly relevant to moral behaviour. One such area is the pre-frontal cortex. People with pre-frontal cortex damage may have relatively unimpaired intellectual abilities, yet show massive deficits in their social behaviour and a marked lack of compassion towards others (Anderson *et al.* 1999, Dolan 1999).

A second point of interest to moral psychology is that the brain is (roughly) divided into autonomic and voluntary functional regions. The Autonomic Nervous System controls and co-ordinates involuntary functions such as organ function (e.g. speeding up heart rate with the perception of fearful stimuli) and reflexes (e.g. eyeblinking). Many autonomic functions, such as sexual response, also have a voluntary aspect (Kingsley 2000). It seems probable that CT characterise the autonomic nervous system rather than the voluntary system, although the line between the two is crude. For example, whether a stimulus is rewarding is determined by non-voluntary systems; yet this can be 're-interpreted' by voluntary effort over time (Grigsby & Stevens 2000). Conversely, an involuntary reaction may become part of person's voluntary decision making. For example, a person who reacts negatively to novel social stimuli may generally choose to avoid them, e.g. purposefully avoiding crowds (Kagan 1994).

Voluntary action is controlled to the forebrain, although many voluntary functions, e.g. co-ordinating speech, are soon relegated to 'habit', i.e. no longer require conscious control. Aristotle's stress on the importance of correct habit formation was a

computational models despite certain limitations (e.g., the failure to examine emotions, Kosslyn & Koenig 1995).

good one; in general, only unusual circumstances (e.g. learning a new language, the loss of a spouse) will force us to unearth and relearn our habits. Whereas most ethicists exclusively emphasise the voluntary aspect of moral behaviour, i.e. rational thought and planning, I see part of Aristotle's legacy as stressing the important role of autonomic systems and habit.

Behavioural generation involves voluntary and involuntary systems that, roughly stated, include a person and an environment. Environmental stimuli and the current state of the brain (e.g. learning, arousal, memory) feedback on each other to create a 'situation'. Therefore, a situation is a *system*, i.e. an interrelation of neural, physiological and environmental conditions, rather than a mere aggregate, i.e., a collection of environmental stimuli with a person standing in the middle.

Within neuropsychology, a one-to-one relation between a particular psychological component (e.g. character) and behaviour disappears and is replaced by a systems view. Unfortunately, there are yet no comprehensive theories of behavioural generation, although many are trying to develop them (e.g. Block 2002, Cisek 2001). For the time being, rule-of-thumb generalisations are probably better predictors of the behaviour of specific individuals, e.g., Ben ate tuna today, and he'll probably eat tuna tomorrow. However, neuropsychology provides predictions that 'lay systems' cannot offer, e.g., that a person with pre-frontal lesions will display irresponsible behaviour.

More significantly, cognitive neuroscience de-stigmatises people who display certain maladaptive behavioural patterns, even as the behavioural patterns continue to be seen as maladaptive. In my work tutoring learning disabled students, I met teenagers derided as 'slow', 'stupid', or 'lazy'. Some of these teenagers actually had localised

neurological deficits that impeded their ability to, for example, understand speech or read sentences. Likewise, people usually seen as 'bad' may actually have deficits in particular neurological areas. Cognitive neuroscience provides the precision to examine the systems that generate and mediate behaviour; some behavioural problems may have an isolated neurological origin. Unrecognised local deficits may 'avalanche' into global problems; for example, a child with poor eye-site may appear intellectually slow, when all they need to behave normally is glasses. Identifying these deficits is especially important in the case of young children, whose brain often have the plasticity needed to develop normally if initial effort is made to accommodate deficits (Kagan 1994).

Technology derived from neuroscience may allow the treatment of adults and their reintegration into society. Unfortunately, our society seems to moving towards an exclusive use of *chemical* (i.e. pharmaceutical) technology as a means to overcome psychological deficits. However, educational technology and the redesign of social systems can also promote psychological health. Educational and management technology focus and changing both people and social systems.

What is worrisome about pharmaceutical technology is that it leaves existing social structures unexamined and unimproved. If being subject to an authoritarian decision-making processes in the workplace (i.e. at the bottom of a top-down organisational structure) brings on depression, treatment of this depression with medication leaves the organisational structure unchanged. If post-traumatic stress disorder in soldiers is brought on when they witness, or commit, brutal atrocities, is the best course of action pharmacological treatment, e.g. erasing stress with drugs, or prevention, i.e. peace?

Recall (from the introduction) that moral principles have a place in directing technology, tacitly or explicitly. In the case of pharmaceuticals, I fear that the moral principle is tacit and flawed (e.g. 'your duty is to work efficiently no matter the conditions'). In any case, overcoming neurological problems may help people reintegrate into society and live good lives; this is well within the mandate of a humanist ethics.

Modern psychology preserves important features of Aristotelian psychology.

The importance of education in mediating character, such as in the development of CT such as introversion and the formation of habits, i.e. procedural learning, are preserved. Voluntary behaviour, mediated by the frontal lobes, also plays a crucial role in moral behaviour.

If virtue is not, and perhaps never was, merely a character trait, what is it? In concluding, I offer a few speculations.

## Conclusion: Research Programs and Applications for Virtue Ethics

In the hands of virtue ethicists, VE has remained divorced from revision. In the hands of zealous reformers, VE is rejected entirely. I have sympathy for both camps. I applaud the critics of VE for attempting to integrate psychology into ethics, while I support the virtue ethicists for conserving a fruitful ethical theory. Whether any of these ethicists would accept the modifications to VE that I have presented is an open question.

Social psychology should serve as motivation for virtue ethicists both to understand human moral psychology and to apply their moral theory; authority, and even simple hurry, can cause people to behave poorly. Personality psychology -linked to neuropsychology- should help virtue ethicists to achieve both goals.

I propose that virtues are best conceived of as emergent properties of humans in social systems (i.e. virtues are processes, not things). This reformulation is in one sense unsurprising. Aristotle makes it clear that virtues form from biological properties moulded by education. Furthermore, many ethicists have noted that societal factors must play a role in virtue (e.g. Hursthouse 1999, Merritt 2000). An extremely important factor for virtue is the quality of education that children receive (e.g. Nussbaum 1990).

However, the emergent account, in stipulating that virtues are properties of dynamic systems, clears up some mysteries, namely the relation of virtues to CT. Many virtue theorists assume that CT (and virtues) are static traits that indicate a property that people 'possess' (e.g. Doris 2002, Harman 1999a, Kupperman 2001, Sreenivasan 2001). Only from a static point of view can CT be 'robust', i.e. consistently expressed<sup>21</sup>. In the

<sup>&</sup>lt;sup>21</sup> Some accept this view of CT even as they find it an implausible; Kupperman notes that "traits...cannot be the whole truth...[they leave us] the problem of the fluidity of self" (2001: 248-249).

static approach, virtue is like mass; it is a property that defines a person as long as they exist. A static trait should express itself behaviourally in a reliable fashion, perhaps mediated by surrounding conditions as mass is by gravity (i.e. to form 'weight'). The expression of virtue could be weakened by 'situational gravity', yet the property never disappears.

In contrast, I see virtue like health; it is an emergent property that depends on processes within a thing. The primary difference between static and dynamic versions of virtue is that in the latter, virtue only appears during certain processes, whereas in the former, a person either has virtue or they do not<sup>22</sup>. If virtues are dynamic, they can appear robust (i.e. the property often expresses itself) but cannot be robust (i.e. the emergence of the property is conditional on the operation of other systems). Interestingly, the initiator of the character debate, Flanagan (1991), dissents from the 'robust' view of CT and virtue, although he fails to provide a clear alternative.

In humans health requires processes that underlie 'life' and 'consciousness'. What does virtue require? Aristotle gives us some clues: voluntary action (i.e. co-ordinated by processes within the pre-frontal cortex), perception, habit and knowledge (i.e., procedural knowledge and declarative knowledge), emotions. Perhaps all of the systems are required for virtue, perhaps only some. Tentatively, it seems unlikely that people with severely damaged pre-frontal cortices have much hope of virtue; although whether such people are 'vicious' is another question.

An interesting corollary of a dynamic approach is that if habit and learning are major parts of virtuous behaviour then as human learning progresses (i.e. people

<sup>&</sup>lt;sup>22</sup> Hursthouse claims that it may be plausible to conceive of possessing virtue in gradients, such as 'fairly virtuous' or 'nearly virtuous' (Hursthouse 1999).

discover new things) we discover situations in which few people can be expected to behave virtuously- because no one knows how. In other words, dynamic VE indicates the possibility of moral learning in individuals and moral progress in societies (Churchland 1998). Adhering to VE may oblige a person to become an amateur scientist, i.e. to learn about the world in order to act well within it. In stating that virtuous people seek excellence, Aristotle seems to have had this in mind.

In its neo-Aristotelian formulation, the application of VE is guided by the question "Who should I be?" Applied virtue ethics can involve reflection on what a virtuous person would characteristically do in a situation, emulating virtuous people, or actually seeking out the help of virtuous people (Hursthouse 1999). In other words, VE is applied through self-reflection and peer guidance and is aimed at one's own person; VE has few roles to play in institutions or society.

A revised VE is applied with questions such as "What allows virtuous behaviour?" and "What prevents virtuous behaviour?". Ethicists and social scientists co-operate to discover the biological, psychological, and social properties that allow, or prevent, the emergence of virtue. Virtue ethics is directed towards others and through society. For example, if virtue emerges from basic health (e.g. adequate nourishment and shelter) then virtue ethicists put a prime on ensuring that basic health needs are met through social policy, i.e., political reform.

Biologically, a person's constitution may make it difficult, even impossible, for them to act well, e.g., someone who is paralysed or blind. Virtue ethicists seek to allow disabled people to act well (e.g. promoting surgery, mechanical aids), to change societal attitudes to be accepting of disabled people (e.g. to convince firms to hire disabled people to allow them the opportunity to take on rights and responsibilities, and to behave morally, rather than remaining isolated). Temporary biological states may also impede virtue; for example, extreme hunger might activate the autonomic nervous system and exclude a large place for voluntary control of behaviour. Aristotle recognised that there are "things terrible even beyond human strength" (EN 1115b: 7-8)- whereby 'preventative virtue ethics' would seek to prevent terrible occurrences (e.g. prevent famine, accidents, war).

Ethicists could also work in medical settings as 'preventative ethicists', seeking to prevent disorders and syndromes that block good behaviour. An example of such a syndrome- and one whose prevention is well within our reach- is Foetal Alcohol Syndrome. This syndrome develops in children whose mothers consume alcohol during pregnancy; it is a leading cause of mental retardation in children and linked to criminality (Davison & Neale 1997). Ethicists' task is to work to educate mothers on the dangers of consuming alcohol during pregnancy.

In educational psychology, VE promotes the importance of 'internalising' moral habits as procedural knowledge. This could involve teaching people how to be ethical through role-playing. A second area of interest is avoiding patterns of learning, e.g. illiteracy, that make virtue behaviour extremely difficult to manifest in modern society. A third area of interest is therapy, whereby habits that prevent virtuous action (e.g. anxiety or phobias) are reduced. For example, an 'introvert' might function well under low-stimulus conditions (e.g. in a library) but incontinently under a high degree of stimulation (e.g. the emergency room).

In society, ethicists and engineers could co-operate to promote 'flourishing projects', such as repairing sewer systems, and decline frivolous ones, such as the design of sports utility vehicles. Whereas human flourishing manifests amidst an educated populace, a peaceful society, and clean water, VE is intimately linked to individual, societal, and environmental issues. Virtue is an emergent property based on biological, psychological, and social processes. Researchers identify these processes and work with technologists to modify biological, psychological, and social systems in order to increase the likelihood of the emergence of virtuous behaviour.

Looking forward is crucial for ethics; ethics guides our gaze, our plans, and our future. An ethics deprived of science sees little. Ethicists must take their place on the shoulders of giants.

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