Abstract
Recent debate over the empirical psychological presuppositions of virtue ethics has focused on reactive behavioural dispositions. But there are many character traits that cannot be understood properly in this way. Such traits are well described by attitude psychology. Moreover, the findings of attitude psychology support virtue ethics in three ways. First, they confirm the role of habituation in the development of character. Further, they show virtue ethics to be compatible with the situation manipulation experiments at the heart of the recent debate. Finally, they show how the cognitive-affective theory of personality and the two-system theory of behavioural cognition are compatible, thereby undermining the current empirical challenge to virtue ethics. Empirical research into the nature and development of attitudes should therefore be central to philosophical discussions of virtue and character.
Many philosophers argue that ethics should be concerned with the character of the agent. One argument is that consideration of character is essential to addressing the question of how one should live, which is the proper concern of ethics (e.g. Williams 1985: chs 1, 10). A second is that neither actions nor intentions can be normatively fundamental, but must derive their value from the character traits they express (e.g. Hursthouse 1999: ch. 1). A third is that moral goodness cannot be captured in principles, but must be understood as the way someone of virtuous character responds to the full complexity of each situation (e.g. McDowell 1979). Finally, in opposition to this third reason, it has been argued that developing the right character traits is the best way to ensure that one’s decisions and actions abide by moral principles (e.g. Driver 2001: ch. 4). These positions share an empirical commitment. Although they need not assert widespread possession of virtues, or even of stable character traits, they are committed to the psychological possibility of someone possessing the stable character traits they consider virtuous.
The recent debate over the implications of empirical psychology for virtue ethics addresses this commitment. This debate currently comprises two opposing positions. In defence of virtue ethics, it is argued that the leading theory of personality psychology, the ‘cognitive-affective system theory’, confirms the possibility of virtue. Personality consists in a network of cognitive and affective mental states linked by associative connections that vary in degrees of strength, on this view, and behaviour is the result of the flow of activity across this connectionist system. Since connections between mental items are strengthened only a little with each activation, the system develops but is generally stable. This theory of personality is supported by a very substantial body of data (Mischel and Shoda 1995). It has been argued that becoming virtuous is a matter of gradually tuning this personality system in the right way (Miller 2003; Kamtekar 2004; Russell 2009; Snow 2010).

Philosophers opposed to this view are sceptical about the possibility of tuning personality according to values. Their scepticism is rooted in the two-system theory of behavioural cognition, which contrasts automaticity with deliberation: the former is the fast, associative, unconscious production of intuitions and behavioural responses, whereas the latter is slow, conscious reasoning towards a decision (Kahneman 2003). Experimental subjects who obeyed instructions to deliver electric shocks to fellow participants did so despite consciously reasoning to the contrary. People whose behaviour was influenced by passive bystanders denied that this was so. It has been argued that these findings suggest that behaviour is governed not by the consciously endorsed values drawn on in deliberation, but by the automatic system (Webber 2006b; Doris 2009; Merritt 2009; Merritt, Doris, and Harman 2010).

Both positions in this debate are designed to address the results of situation manipulation experiments that track reactive behavioural dispositions, experiments that have dominated the debate over the past decade. This paper aims to show that this focus on reactive dispositions is misplaced and misleading.
It is misplaced because reactive dispositions are not generally central to the character traits of interest to virtue ethicists. It is a more significant question whether character traits can play the non-reactive role that virtue ethicists ascribe to them. This is investigated by attitude psychology, the findings of which support the idea of character employed in virtue ethics in three ways: they affirm the role of habituation in character formation, they show the results of the situation manipulation experiments to be compatible with the psychological possibility of robust character traits, and they show that the two-system theory of behavioural cognition is consistent with the cognitive-affective system theory of personality.

The debate’s focus on reactive dispositions is misleading because it has steered philosophers away from the area of empirical psychology that studies the psychological structure of character traits, both those that do not centrally include reactive dispositions and those that do.

2. Character and Reactive Dispositions

The debate has focused on a handful of experimental results, all of which are discussed by John Doris in the book that set the agenda for the recent debate (2002: ch. 3). Someone in a hurry is a lot less likely to help a distressed stranger than is someone not in a hurry. Passive bystanders significantly reduce the likelihood of someone helping to pick up dropped books, or checking on the person in the next room who might need help, or leaving the room because of the smoke coming under the door. People in the same room as the experimenter are much more likely to obey that experimenter’s instructions to deliver high voltage electric shocks to another participant than are people given instructions by telephone.

These experiments are designed to track the subjects’ dispositions to react to particular situational stimuli. All participants in the recent debate agree that such dispositions are
essential to character. Someone lacking the disposition to respond helpfully, compassionately, prudently, or honestly when the need arises in front of them cannot count as helpful, compassionate, prudent, or honest. The central debate was generated by differing accounts of what the output of such dispositions should be. Those who initially raised this problem for virtue ethics assumed that the output should be relevant action (Doris 1998; Harman 1999; Merritt 2000; Doris 2002, chs. 1-3). Their opponents mostly argued for variations of the claim that it should be a stable contribution to behavioural cognition (Sreenivasan 2002; Miller 2003; Kamtekar 2004; Annas 2005; Webber 2006a).

Both sides agree, at least tacitly, that character traits essentially involve some kind of response to situational stimuli. What this overlooks, however, is that there are many traits of interest to virtue ethics that cannot be understood in this way. We can divide such traits into three categories.

First, there are those that cannot be understood as elicited by particular features of situations. Circumspection and considerateness consist in acting on a general concern to take situational details into account. Recklessness is lack of this concern. Spontaneity and impulsiveness involve deliberate disregard for such planning and control. The generally energetic and unruly activity that characterises the boisterous, the rambunctious, and the rumbustious is not a response to particular features of situations, though it can be constrained by them.

Second, there are traits that are primarily characterised by the kinds of situations that one aims to bring about, regardless of the situation one is in when one does this. The adventurous seek out novelty and excitement, the timid seek familiarity and security, and the shy are timid in dealings with other people. The vain are too concerned with ensuring that others approve of them, while the modest are not. The cruel aim to make people unhappy, while the kind aim to make people happy.
Third, there are traits concerned with one’s own commitments. Constancy is the trait of retaining a commitment despite difficulties involved in doing so, fidelity is the trait of respecting one’s commitments in action, and tenacity is fidelity to the commitment of bringing about some end despite significant setbacks. Integrity essentially involves a commitment to getting one’s commitments and actions right, though there is more to it than this. The stubborn and the inflexible, on the other hand, retain and respect commitments when they ought not, while the feckless fail to retain or respect commitments that they should retain and respect. (This account of the virtues of constancy, fidelity, and integrity is elaborated in Rees and Webber 2013.)

Neither side in the current debate over the empirical aspect of virtue ethics has the resources to explain the psychological structure of any of these traits. For both sides have been concerned exclusively with the subset of traits for which reactive dispositions to particular kinds of stimulus are essential. It might seem that these existing positions therefore capture only some of the traits that virtue ethicists are interested in. We will see, however, that neither position is needed, since reactive dispositions are perfectly well explained by the same psychological structures that underpin the traits to which reactive dispositions are not central.

3. Attitudes, Content and Strength

Traits in which reactive dispositions do not play a central role and traits in which they do can all be understood as instantiated in what psychologists call ‘attitudes’, clusters of cognitive and affective states that together make up an overall evaluation of an object. There are no constraints on what can serve as the object of an attitude. Psychologists measure people’s attitudes towards objects at all levels of abstraction. For example, an experiment might measure attitudes towards electoral democracy, or coffee, one’s own weight, or a particular discussion group. The content of an
attitude, the evaluation of the object, is a function of the contents of its constituent states and the relative strengths of the associative connections between them.\(^1\)

This use of the term ‘attitude’ in psychology is thus distinct from its use by analytic philosophers. This latter sense is related to the term ‘intentional attitude’, which denotes any mental state that is directed towards an object. The desire for cake is an intentional attitude whose object is cake, for example, and the belief that there is cake is an intentional attitude whose object is the proposition that there is cake. When the object of an attitude is a proposition, which is to say it can be captured in a declarative sentence, the intentional attitude is known as a propositional attitude. Many philosophers hold that every intentional attitude is either itself a propositional attitude or comprised of propositional attitudes, though this view has recently been challenged (e.g. Crane 2001: 112-4; Montague 2007; Merricks 2009; Grzankowski forthcoming). But irrespective of that dispute, when analytic philosophers of mind use the term ‘attitude’ they are usually referring to intentional attitudes. Strictly speaking, the term ‘attitude’ in this sense refers to the aspect of the mental state other than its content. So if I desire to lose weight this month then the attitude is one of desire, and if I believe that I will lose weight this month then I have an attitude of belief towards that same content ‘I lose weight this month’. But analytic philosophers also sometimes use the term ‘attitude’ as an abbreviation of ‘intentional attitude’ or ‘propositional attitude’, so referring to the whole mental state.

The relation between this use and the psychologists’ term ‘attitude’ is complicated. Some intentional attitudes are attitudes in the psychologists’ sense. The desire to lose

\(^1\) The account of attitude psychology provided here is drawn from the experiments in attitude psychology discussed in this paper and from three literature reviews by leading psychologists in the field: Cooper 2007; Fazio and Olson 2007; Maio and Haddock 2010.
weight this month is, in the psychologists’ sense, a positive attitude towards losing weight this month. The belief that electoral democracy is a good thing is an intentional attitude, but is also a positive attitude towards electoral democracy. But intentional attitudes that include neither desiderative nor evaluative commitment, such as believing that there will be coffee at the conference or supposing that the discussion will be detailed, are not attitudes in the psychologists’ sense.

Moreover, an attitude in the psychologists’ sense is likely to be composed of intentional attitudes. Some of these intentional attitudes will be desiderative or evaluative and therefore will themselves be attitudes in the psychologists’ sense. But others will be neither desiderative nor evaluative, though they may well be connected to desiderative or evaluative states concerning objects other than the object of the overall attitude. For example, one’s positive attitude (in the psychologists’ sense) towards electoral democracy might comprise a desire for participation in governance, a belief that widespread participation in governance is a good thing, and a belief that electoral democracy is the best form of such participation. It might also comprise a belief that democracy is necessary for sustained peace, and a further belief that sustained peace is a good thing. That some of these constituents are themselves attitudes in the psychologists’ sense is precisely what we should expect, since there are no constraints on what can count as the object of such an attitude. (From here on, the term ‘attitude’ will refer solely to attitudes in the psychologists’ sense.)

An attitude’s content, then, is determined by its constituent mental states. In addition to its content, an attitude has a strength. This is the degree of firmness with which it is held. The possession of an attitude does not imply that one endorses or approves of that attitude. Indeed, such approval would consist in a further attitude with the original attitude as its object. So this strength, this degree of firmness, is not equivalent to degree of reflective endorsement. It is rather a function of the collective strength of the connections between the constituent mental states. The more strongly these are
associated with one another, the more easily the whole set is activated when a member of it is activated.

Each component is associated with a range of mental states beyond the attitude, each of which is associated with a further range of mental states, and so on. The stronger an attitude is, therefore, the more likely it is to be brought to bear across a wide range of situations. This is why the strength of an attitude is correlated with its overall degree of influence over cognitive processing and resulting behaviour in general, not just in response to the presence of the object of the attitude: the course of cognition is determined by the strengths of the connections between the agent’s mental states, some of which are clustered into attitudes.

A strong attitude in favour of caution, for example, will lead to behaviour that is usually, if not always, circumspect. If the attitude is specifically towards caution with respect to people’s feelings, one’s behaviour would be generally considerate without being circumspect in other ways. A strong attitude in favour of unruly exuberance, or at least the absence of any strong attitude of restraint, will result in boisterous, rambunctious, or rumbustious behaviour.

When planning holidays, career moves, or life changes, positive attitudes towards novelty and excitement would regularly result in adventurous decisions, unless stronger attitudes in favour of familiarity and security led to more timid choices. Likewise, an unduly strong or untempered attitude in favour of approval or praise will regularly tinge decisions with vanity, whereas a similar attitude against will generally lead to more modest behaviour. A strong attitude in favour of other people’s suffering would result in cruel behaviour. A strong attitude in favour of other people’s happiness, by contrast, would result in kind behaviour.
Constancy, fidelity, tenacity, integrity, stubbornness, and inflexibility can be understood in terms of attitudes towards one’s own commitments strong enough to influence behaviour across a wide variety of situations. Of the examples of nonreactive character traits listed earlier, only recklessness and fecklessness are not properly understood in terms of particular attitudes possessed. But the reckless and the feckless can be understood as lacking in strong attitudes that they ought to possess, attitudes towards acting in the knowledge of relevant details and towards overcoming setbacks respectively.

4. Attitude and Character Development

Research into the development of attitudes supports the idea, common to many virtue ethicists following Aristotle, that habituation is central to character formation. Two of the roles that Aristotle assigns to habituation are instantiated in aspects of the development of attitudes.

One role Aristotle assigns to habituation is to ensure that evaluative commitments are embedded in behavioural cognition sufficiently to withstand temptations to act against them. People act against their considered judgment when under the influence of a strong bodily appetite or a strong habituated character trait (NE: 1147a29-35, 1146a21). In either case, the failure to enact the decision is due to its not being supported by a character trait sufficiently firm to withstand the countervailing force of a strong appetite or trait (NE: 1152a25-33). The decision was thus no more a reflection of the person’s convictions in that situation than are the recitations of scientific proofs or verses of Empedocles by someone asleep, mad, drunk, or acting on stage (NE: 1147a10-24, 1147b9-19).

In the terminology of attitude psychology, the judgment did not express attitudes sufficiently strong to withstand the influence of the countervailing desires or attitudes.
Because an attitude’s strength is a function of the strengths of the connections between its constituent states and these connections strengthen each time they are activated, an attitude becomes stronger each time it is brought to bear on behavioural cognition. Each application of the attitude, therefore, increases both the readiness with which it will be applied in future situations and the degree of influence it will have when it is applied.

This is well illustrated by an experiment aimed at strengthening attitudes towards weight loss (Axsom and Cooper 1985). Subjects were divided into three groups. One would perform difficult and boring cognitive tasks, one would perform much simpler cognitive tasks, and one would perform no cognitive tasks at all. All subjects attended five sessions over three weeks. At each session, they were weighed and those in the first two groups were given their tasks. By the final session, those who had been engaged in difficult and boring tasks had lost significantly more weight than could be accounted for by normal variation, but those in the other two groups had not. Six months later, the effect was more dramatic: those given difficult and boring tasks were an average of eight pounds (3.6 kilos) lighter than at the start of the experiment, whereas the other participants on average had not lost weight beyond chance variation. Another six months later, this result was found to have remained stable.

Clearly, difficult and boring cognitive tasks themselves have no direct effect on body weight. However, participants undertaking these tasks need to motivate themselves to do so far more than do those undertaking easier tasks or no tasks at all. They remind themselves far more frequently that they are doing this for the sake of losing weight, and therefore that the goal of losing weight is worth all of this effort. Through this continual application of the attitude in favour of weight loss, the attitude becomes significantly stronger, with the consequence that it exerts much greater influence over behavioural cognition in their lives more generally. It is this strengthening of the attitude, argue the experimenters, that makes these participants much more likely to
resolve to take regular exercise or to go on a diet, and more importantly to stand by those resolutions in the face of temptations to break them.

A second role that Aristotle assigns to habituation is in the development of ethical knowledge. It is not enough simply to be told that justice is good, for example, or that this action would be unjust. For without a detailed understanding of justice, these beliefs would lack content. Such learning might be necessary for developing virtue, but it is not sufficient: ‘if those who have learned something for the first time can string the words together, they don’t yet know what they have learned – because they have to assimilate it, and that requires time’ (NE: 1147a21-2). Assimilation takes time because it requires repeatedly trying to understand situations in terms of justice and injustice, and reflecting critically on one’s performance at this, in order to give content to one’s understanding of justice.

If we understand character traits in terms of attitude psychology, then this role of habituation is confirmed. The content of an attitude is determined by the contents of its constituent cognitive and affective mental states. The contribution a particular state makes to that overall content is weighted according to its centrality in the set, which is a matter of the number and strengths of its connections to the rest of the set. Bringing a new mental state into the set that constitutes the attitude refines the overall content of the attitude, as does strengthening the connection between a given mental state and the rest of the attitude. Each new application of an attitude towards justice therefore adds to the stock of mental states that make up that attitude, and hence to the overall content of the attitude. The greater the experience of applying the attitude, the more sophisticated the content of that attitude.

During the three weeks of the weight loss experiment, participants whose attitude in favour of weight loss was being strengthened would also have been refining this attitude’s content through interactions with their everyday environment outside of the
experimental situation. Between the experimental sessions, that is to say, these subjects’ attitudes towards weight loss would have taken on more specific content concerned with taking exercise, such as taking the stairs rather than the lift, or with dieting, such as not buying the chocolate bar on the counter. It is not simply the strengthening of the original attitude that explains these subjects’ weight loss over the following year, but also the continual refinement of this strong attitude to include the right evaluative responses to specific environmental cues.

5. Attitude Accessibility and Situation Manipulation Experiments

Although the general influence of an attitude over cognition is a function of its content and strength, these do not wholly determine its influence on a particular occasion. An attitude’s influence on a particular occasion is determined by its content and its accessibility. A mental item’s accessibility is the degree of influence it has over cognition, measured by the speed with which it is brought to bear on cognition. An attitude’s strength provides it with a baseline level of accessibility known as chronic accessibility. But activating an attitude temporarily increases its accessibility relative to this baseline, just as activating any mental state temporarily increases its accessibility. Together, these two aspects of attitude accessibility can explain the results of the situation manipulation experiments.2

The bystander experiments can be understood purely in terms of chronic accessibility. When there are no passive bystanders, one’s response to someone else’s distress is determined by attitudes towards helping other people, and one’s response to smoke entering the room is determined by one’s attitudes towards one’s own safety. But the passivity of bystanders brings other attitudes into play, such as a negative attitude.

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2 This conception of accessibility is prominent throughout the attitude psychology literature, but see especially Powell and Fazio 1984.
towards looking foolish in front of others, which would reduce confidence in one’s own judgment of appropriate action (Sabini et al 2001). Whether or not one will help the stranger, or will report the smoke coming under the door, depends not only on the contents of the attitudes for and against doing so, but also on their strength or chronic accessibility.

The Milgram experiment involves temporary increase in accessibility. Many more subjects obey when in the same room as the experimenter than do so when the experimenter gives instructions by telephone. In both conditions, attitudes of compassion and justice weigh against following the instructions, while attitudes of obedience and deference weigh in favour. Since subjects are assigned to one condition or the other at random, there is no reason to postulate different attitude contents or strengths between the two conditions. But the visible proximity of the experimenter would temporarily increase the accessibility of attitudes of obedience and deference. Thus, many subjects obey because this temporary increase in accessibility is sufficient to overcome the strength of the opposing attitudes. Without the temporary increase, or where attitudes of compassion and justice are sufficiently strong, or where attitudes of obedience and deference are sufficiently weak, the subject does not obey.

The samaritan experiment is more complicated. For it seems unlikely that merely telling someone they are late will raise the accessibility of their attitude in favour of punctuality sufficiently to override any compassionate response to a distressed stranger they subsequently encounter. However, there is evidence that attitude accessibility influences perception. Undergoing an embarrassing screening task before joining a discussion group makes the discussion seem more interesting than it does to people who joined without doing the task. The task strengthens the positive attitude towards the discussion group, just as engaging in boring cognitive tasks for the sake of weight loss strengthens the attitude in favour of weight loss. As a result, subjects focus on the positive aspects of the discussion group at the expense of the negative aspects
(Aronson and Mills 1959). Similarly, objects of highly accessible attitudes attract attention in a way that interferes with the ability to track other items in the visual field, a finding which holds both where high accessibility is purely a matter of attitude strength and where it is the result of recent activation of the attitude (Roskos-Ewoldsen and Fazio 1992). A temporary increase in accessibility of attitudes towards punctuality can therefore reduce the likelihood of noticing a distressed stranger and raise the likelihood that the stranger will be seen simply as an obstacle if they are noticed.

Attitude psychology, therefore, not only provides a framework for understanding those character traits to which reactive dispositions to particular stimuli are not central. It also explains the reactive responses to the situation manipulation experiments. This approach to the psychology of character and virtue has greater explanatory power than any approach focused solely on reactive dispositions. The traits that have been the focus of the debate over the empirical commitments of virtue ethics should therefore be understood as instantiated in the same way as the traits that have been entirely overlooked in that debate.

6. Automaticity and Deliberation

Attitude psychology also provides a response to the current psychological criticism of virtue ethics. This criticism draws on the the ‘two-system’ theory of behavioural cognition to cast doubt on the idea that the automatic system that produces intuitions and behavioural responses can be directed by the deliberative system in the way required for the deliberate inculcation of ethical virtues (Webber 2006b; Doris 2009; Merritt 2009; Merritt, Doris, and Harman 2010). The findings of attitude psychology, however, suggest that the relation between automatic and deliberative behavioural cognition poses no difficulty for virtue ethicists, but rather confirms their psychological picture.
The correct understanding of this ‘two-system’ distinction is matter of controversy among psychologists (see Frankish 2010). The fact that deliberation and automaticity can produce different outcomes, so that an agent can act against their own deliberative conclusions, does not entail that the two processes occur in different cognitive architectures. Indeed, since the distinction is drawn in scalar terms, such that automaticity is faster than deliberation and requires less attention and effort, it is difficult to see how the matter of degree this implies could be accounted for by the difference between two distinct structures.

We have already seen how attitude psychology can explain the disparity between deliberation and action in the case of the Milgram experiment without postulating parallel cognitive structures. The attitudes themselves may lead to a particular deliberative conclusion, but if some of these attitudes subsequently have their accessibility raised by an aspect of the environment then the behavioural outcome need not reflect the deliberative conclusion.

We have also seen that highly accessible attitudes can influence the aspects of the environment that a person notices and the way those things seem to that person. These perceptual effects occur through the automatic processing of information under the influence of the same attitudes that are involved in deliberative decisions, such as the decision to join a discussion group. The success of the cognitive weight loss programme is perhaps in part due to this perceptual influence of highly accessible attitudes. If the attitude in favour of weight loss is sufficiently strong, and thus chronically highly accessible, then the person possessing the attitude is less likely to notice the chocolate bars in the shop, and less likely to be tempted to take the lift instead of the stairs. It is not solely a matter of resisting conscious temptation, but also a matter of evading it in the first place.
All of this constitutes indirect evidence that attitudes involved in deliberation are also activated in automatic behavioural cognition. Direct evidence is supplied by a set of experiments designed to demonstrate that highly accessible attitudes are automatically activated (Fazio et al 1986). Subjects are briefly presented with a word that either names an object of a highly accessible attitude or does not. For example, one might have a positive attitude, a negative attitude, or no attitude in particular, towards coffee. This stimulus, such as the word ‘coffee’, is presented for less than half a second, so that the subject does not consciously notice it. The subject is then asked to respond to a series of words such as ‘awesome’ or ‘horrible’ by pressing one button if the word is positive and another is the word is negative. If the attitude had been automatically activated, the experimenters reasoned, then it ought to influence the subsequent cognition such that a positive attitude would lead to a faster identification of positive words than negative ones, a negative attitude would lead to a faster identification of negative words than positive ones. Cases where no attitude had been automatically activated should show no difference in reaction times for positive and negative words.

In the first experiment, the subjects’ attitudes towards a range of objects were measured by asking them to respond to an image of the object by pressing one button if they liked it, another if they disliked it. The strength or chronic accessibility of the attitude was inferred from the speed with which the button had been pressed. In the subsequent three experiments, the experimenters temporarily raised the accessibility of particular attitudes by repeatedly asking the subjects for their attitudes towards these items within the sequence of attitude objects. In all four experiments, therefore, the measure of attitude strength was through the subjects’ conscious reports of those attitudes. All four experiments found that the more accessible an attitude is, the greater the effect of a brief presentation of its object on the speed with which the subject can subsequently identify the valence of words whose valence is congruent with that of the attitude. Highly accessible attitudes, therefore, can be activated automatically, by a presentation of their object too brief to register consciously. This is true irrespective of
whether the high degree of accessibility reflects attitude strength or is merely temporary.

Therefore, we should not construe the distinction between automaticity and deliberation in such a way that the attitudes drawn on in one ‘system’ are unavailable in the other. Whether an attitude that can be reported and drawn on in deliberation is also capable of being activated automatically seems rather a matter of the attitude’s accessibility, which over an extended period of time is the same as its strength. Since attitudes are strengthened by habituation, as we have already seen, virtue ethicists are right about the kind of control people have over the automatic, rapid, intuitive aspect of behavioural cognition: one cannot simply decide how future automatic processing will go, but one can train one’s automatic responses through habituation (see also Kahneman 2003: 699). Moreover, this account allows automaticity and deliberation to be different processes occurring through the ‘cognitive-affective personality system’ drawn on by recent advocates of the psychological commitment of virtue ethics. All that is required is that attitudes are clusters of the mental states that this theory of personality describes, held together as clusters by strong associative connections between them.

7. New Directions

The debate over the empirical commitment of virtue ethics has been premised on the assumption that character traits are essentially dispositional, where this has been taken to mean that they essentially include the property of responding in a particular kind of way to a particular kind of situational stimulus. This assumption is false. Many character traits can only be understood as tendencies towards a particular kind of behaviour, where these tendencies do not require a particular kind of stimulus to bring them into action. Once we view these character traits in this way, as we have seen, we can use the same model for those traits that do essentially involve characteristic
reactions to particular kinds of situation.

This does not mean that character traits are not essentially dispositional. For one need not think of a disposition as a state that lies dormant until activated by its stimulus and only then has its effects. Dispositions need not be essentially reactive. We can rather understand a disposition as a power or tendency towards some outcome. On this ‘vector’ view, a disposition is continuously active, bringing about its outcome only when countervailing pressures are not stronger than the disposition itself in conjunction with any further dispositions that tend towards the same outcome (Mumford and Anjum 2011). The idea that character traits should be understood on this model, moreover, does not entail that all dispositions are best understood in this way. So this point about the psychological reality of character does not entail any position in the more general metaphysical debate about the nature of dispositions.

Attitude psychology provides empirical confirmation of the reality of character traits understood as powers, tendencies, or vectors. It also affirms the view that such traits become stronger and more sophisticated through repeated expression in thought and action. Ethicists interested in the empirical instantiation of virtues and other character traits should therefore turn their attention to attitude psychology. Two examples of areas of current research in attitude psychology that should be of particular interest to virtue ethics are the influence of individual personality traits and the influence of cultural background on the capacity for attitude formation and strengthening.

One personality trait that plays an important role in attitude development is ‘cognitive need’. Individuals differ in their tendency towards attentive, effortful cognition and in the enjoyment they take in this activity. People who are more inclined to engage in such conscious thought and who take more pleasure in it are classified as ‘high in cognitive need’ compared with those less inclined to do so or who take less pleasure in doing so. Research has found that people higher in cognitive need tend to formulate
attitudes more slowly and carefully than those lower in cognitive need and that they are subsequently more likely to behave in accordance with the attitudes they have formed (Cacioppo et al. 1986). Given the structure of attitude content and strength, the correlation between these two features of high cognitive need is not surprising. The longer one thinks about a given object, the more the connections between one’s mental states relevant to that object will be strengthened, so the more one’s overall attitude towards that object will be strengthened.

This personality difference has important ethical implications. For it implies that the injunction to develop virtuous character traits would be more easily followed by people with higher need for cognition. One important ethical question, then, is whether the personality trait of need for cognition is within its possessor’s control. If so, then perhaps high need for cognition should be encouraged as an achievable intellectual virtue. But if not, then virtue ethicists seem to have two options. One is to argue that there is a single set of virtues to which all should aspire and that the difficulty of doing so for any given person is just a matter of ethical luck. The other is to argue that there are different virtues appropriate to individuals with different degrees of need for cognition, so the role of ethical luck is restricted to determining which set of virtues is appropriate.

In addition to personality differences, there are cultural differences that have been found to influence the development of attitudes. A recent study found that subjects who hold university degrees generally take more positive attitudes towards objects they have already chosen than towards the same objects prior to choosing whether or not to keep them, whereas subjects who left the education system after high school do not display this tendency (Snibbe and Markus 2005). The objects in the experiment were various music CDs and pens. Since the subjects are unlikely to have had strong attitudes towards these particular items prior to the experiment, the results pertain to the initial formation of attitudes rather than to the persistence of firmly embedded
attitudes. Nevertheless, they do indicate that the higher one’s level of education, the more likely one is to form attitudes that justify one’s prior choices.

The experimenters argue that these results reflect differing experiences of agency between the two groups. Although all subjects were American citizens of European descent, there is a key cultural difference between them. The higher one’s level of education, the more one influences other people and events. People with a lower level of education experience the world more as something to be navigated rather than changed. As a result, those with a higher level of education tend to view their agency in terms of influence over the world, whereas those with a lower level of education tend to view their agency in terms of consistency and integrity. The experimenters present evidence that this culturally variable aspect of one’s view of one’s own agency influences the degree to which one’s previous choices are taken into account in forming attitudes.

As with personality differences, such cultural differences seem to present the ethicist with two options. One is to argue for a particular kind of cultural background as preferable for the development of virtue. It might be argued, for example, that the political and economic order ought to be changed so that all people experience a high degree of influence over their world. The other option is to argue that the correct strategies for developing virtuous character traits differ with cultural background. The strategies that work for the highly educated and influential differ from those to be pursued by the less educated and influential.

It may turn out that these kinds of cultural and personality considerations cannot be disentangled from one another. Or it may be that the two kinds can be considered independently of one another, but each kind comprises a range of issues that cannot be treated separately. Or, finally, it may be that the ethical implications of each cultural and personality influence on attitude development can be treated on its own. However
this turns out, ethical discussions concerning which character traits ought to be
developed and how to go about developing them should pay careful attention to the
findings of attitude psychology. Since this research is essentially concerned with
caracter, however, and since virtue ethicists have developed a highly sophisticated
contceptual and normative understanding of character, this engagement with empirical
research into the formation and effect of attitudes should not be mere consumption.
The concepts and concerns of virtue ethicists, that is to say, have much to offer future
research in attitude psychology.³

³This paper is derived from presentations given during 2011 at departmental seminars
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References


Fazio, Russell H. and Michael A. Olson. 2007. Attitudes: Foundations, Functions, and 


