

2015

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This conference paper was originally published as:

Younis, R. (2015). Neuroscience, virtues, ethics, compassion and the question of character. *PESA Conference 2015*.

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Original conference paper available here:

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This conference paper originally published online on the *PESA Conference* website in *2015 Papers*.

Younis, R. (2015) Neuroscience, Virtues, Ethics and the Question of Character. *PESA Conference 2015 Papers* Retrieved from <http://pesa.org.au/conference-2015/papers>

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Neuroscience, Virtues, Ethics, Compassion and the Question of Character

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Abstract

There has been much debate recently about the meaning, place and function of “character” and “character traits” in Virtue Ethics. For example, a number of philosophers have argued recently that Virtue Ethics would be strengthened as a theory by the omission of talk of character traits; recent neuroscientific studies have suggested that there is scope for scepticism about the existence of such traits. I will argue that both approaches are flawed and unconvincing: in brief, the first approach tends to be predicated on a narrow or insufficient conception of “character” and “character traits”; the second approach tends to go well beyond the available (empirical) evidence. Finally, I will argue that it is possible to point to a philosophy of education that is deeply informed by an understanding of virtue and ethics in which the concept of character has a coherent and meaningful role.

Keywords: virtue ethics; character traits; neuroscience; compassion; eudaimonia.

1 Introduction

There has been much debate in ethics about the meaning and place of character traits in virtue ethics recently. Some like Robert Audi have argued that cognitive and motivational elements are of central importance; others such as Gilbert Harman and Christian B. Miller have argued that character traits are elusive and perhaps, illusory, things. Drawing on recent research in neuroscience on virtues (such as compassion), I will argue that the empirical evidence tends to support the former view, and that there are reasons to believe that virtues understood at cognitive and meta-cognitive, not just (conscious) motivational or deliberative levels, may run much more deeply in us than we have hitherto realised.

There is relatively little work in philosophy (in the western tradition) on compassion, and especially on the relationship between compassion, virtue and character. But neuroscientists have recently shown great interest in compassion (and virtue more broadly) and its neural correlates (see, for example, Corn, 2014; Condon, Desbordes, Miller and DeSteno, 2013; Bernhardt and Singer, 2012; Brown, Brown and Penner, 2012; Cozolino, 2012; Della Sala and Anderson, 2012; Brockman, 2011; Porges, 2011; Goodman, 2009; Racine, 2010; and Rolls, 2012; among many others).

It will be argued here that if compassion can be understood as a virtue, then compassion can be understood as a trait of character, and further, that recent research in neuroscience reinforces such a view. Moreover, in light of this research, virtues such as compassion can be thought of as robust in a sense that significantly extends our traditional conceptions of virtues as robust traits (or dispositions or habits); such research suggests that virtues may run “all the way down”, in us, so to speak (that is to say, run deeper than traits, habits, dispositions and/or activities as they are conventionally understood).

2 On Compassion (and Eudaimonian Ethics)

There has been much debate about compassion and the virtues recently, in neuroscience and in the philosophical literature. Nussbaum provides an illuminating account of compassion in relation to a lack of well-being.

‘Compassion is an emotion directed at another person's suffering or lack of well-being. It requires the thought that the other person is in a bad way, and a pretty seriously bad way. (Thus we don't feel compassion for people's loss of trivial items like toothbrushes and paper clips.) It contains within itself an appraisal of the seriousness of various predicaments. Let us call this the judgment of seriousness.’ (2003, p.15).

Compassion also entails an ‘appraisal’ and three kinds of judgment, not one: first of all it entails the ‘judgment of seriousness’, that is to say, the seriousness of the predicament in which the other finds themselves (‘in a seriously bad way’); second, she notes that the tradition neglects the

‘judgment of similar possibilities: Aristotle, Rousseau, and others suggest that we have compassion only insofar as we believe that the suffering person shares vulnerabilities and possibilities with us. I think we can clearly see that this judgment is not strictly necessary for the emotion, as the other two seem to be. We have compassion for nonhuman animals, without basing it on any imagined similarity - although, of course, we need somehow to make sense of their predicament as serious and bad’ ((2003, p.15).

The point is well made. The ‘vulnerabilities and possibilities’ do not in any obvious way have to be those we share; we can feel compassion for *total* strangers; we can have compassion in theory for creatures who have *little or nothing in common* with us, for compassion,

fundamentally, is a response to evident suffering and pain, not necessarily to our experience of suffering and pain mediated through some consideration of common or shared characteristics or attributes – one only has to consider the fact that we are often not in a strong epistemic position, for example, to make a determination about the things that the suffering other has in common with us; nor are we always in a strong position to accurately gauge shared vulnerabilities and, especially, shared possibilities. We can have compassion for a non-human, no-animal and, in theory, we can make some sense of their predicament even if they strike us as radically other. Indeed we may want to help them because they are so different! There is necessary logical or ethical contradiction here.

Finally, Nussbaum argues that there is room for something which is often omitted, but which is required to “make the account complete”,

‘the eudaimonistic judgment, namely, a judgment that places the suffering person or persons among the important parts of the life of the person who feels the emotion. In my more general analysis of emotions, I argue that they are always eudaimonistic, meaning focused on the agent’s most important goals and projections’ (2003, p.12).

It is arguable that this provides a *complete* account however. Notwithstanding the fact these may be required, there is room for others. Compassion may also ‘contain’ within itself a judgement of what is *right for these suffering beings* and a *judgment of what outcomes would be appropriate* without denying them their dignity, their autonomy, their rationality and without compromising their integrity and its associated emotions. Compassion may also “contain” within itself a *desire, a will* and an *impetus*, for example, towards some *eudaimonian* end.

Nussbaum then links this virtue to the tragedy of September 11:

‘Indeed, the events of September 11 make vivid a philosophical problem that has been debated from the time of Euripides through much of the history of the Western philosophical tradition.

This is the question of what to do about compassion, given its obvious importance in shaping the civic imagination, but given, too, its obvious propensity for self-serving narrowness. Is compassion, with all its limits, our best hope as we try to educate citizens to

think well about human relations both inside the nation and across national boundaries?’ (2003, p.12).

But what is it about compassion that gives it ‘its obvious importance in shaping the civic imagination’ (if we grant for the purposes of argument that it does indeed have this importance)? Its ‘obvious propensity for self-serving narrowness’, it has to be said, need not be so obvious, or so evident, and the proposition has not really been demonstrated in Nussbaum’s essay (the examples are hardly sufficient to do this) - though it should be said that compassion, if it is a virtue, is open to excess and deficiency like other virtues, and as such, may be expressed in a form that is self-servingly narrow. However, it is hard to see how it would count as a virtue at all once that kind of compassion is actualised. Certainly compassion is or ought to have limits- that point is not in dispute. What is in dispute is the proposition that compassion as a virtue, especially when related to the Cardinal Virtues, like justice and *phronesis*, has an ‘obvious propensity for self-serving narrowness’.

Compassion may *be part of our best hope*; it is doubtful that it can be our *best hope*, simply because our *best hope* arguably needs to integrate many things: connections, desires, fellow-feelings, mindfulness, emotion, concepts, judgments, plans, virtues certainly, strategies, co-operation, clear objectives, among many other things, but also without forgetting eudaimonian deliberation, ends and goals, especially if educating citizens ‘to think well about human relations both inside the nation and across national boundaries’ is the focus.

Nussbaum argues convincingly that

‘the enemies of compassion hold that we cannot build a stable and lasting concern for humanity on the basis of such a slippery and uneven motive; impartial motives based on ideas of dignity and respect should take its place. The friends of compassion reply that without building political morality on what we know and on what has deep roots in our childhood attachments, we will be left with a morality that is empty of urgency – a ‘watery’ concern, as Aristotle put it.’ (2003, p.12).

Certainly her argument against the claim that ‘we cannot build a stable and lasting concern for humanity on the basis of such a slippery and uneven motive’ is a strong one, for there are

no compelling reasons either in the scientific literature or in the philosophical debates, to believe that compassion is predominantly, or even fundamentally or primarily, 'a slippery and uneven motive. Her argument is strong also because the question of another agent's *motive* is not always clear or straightforward, or easy to read, so to speak, either in ethical, epistemological or metaphysical contexts - and certainly not as clear or as straightforward as the position which she is attacking implies or suggests. She adds, with a focus on the 'thoughts and imaginings on which it [compassion] is based', that it *will give us a clearer perspective on how and where it is likely to go wrong*, and a good basis upon which to examine

'the counter-tradition's proposal that we can base political morality on respect for dignity, doing away with appeals to compassion. This proposal, at first attractive, contains, on closer inspection, some deep difficulties.' (2003, p.14).

Certainly her analysis is lucid and her argument against the view that we in some sense *need to base 'political morality on respect for dignity'* thus necessarily 'doing away with appeals to compassion', is a persuasive one. In defence of her argument against the 'counter-tradition's proposal', one could argue that, at the very least, there is no *logical* contradiction in affirming on the one hand, that we *can* 'base political morality on respect for dignity' and maintaining, on the other hand, a meaningful part for an appeal to compassion. (Just what such a part would look like is beyond the immediate scope of this article, though ripe for analysis and development in a further article). The reason for this is quite clear: a respect for *dignity*, in relation to political morality, in the sense that it entails some awareness or acknowledgment, of worthiness, desert, merit or moral worth, poses no necessary contradiction or logical inconsistency, when coupled with a sense of another's desert or merit or moral worth - indeed, this is what a sense of compassion may highlight well and truly, that is, a sense of another's desert or merit or moral worth. Moreover, in an empirical sense, it is hard to see how basing 'political morality on respect for dignity' is sufficient to exclude any kind of (meaningful or legitimate) appeal to compassion.

Finally, Nussbaum adds that the task of *teaching* compassion requires asking some hard questions:

‘So to begin the task of educating compassion as best we can, we need to ask how and why local loyalties and attachments come to take in some instances an especially virulent and aggressive form, militating against a more general sympathy. To answer this question we need a level of psychological understanding that was not available in the ancient Greek and Roman world, or not completely. I would suggest... that one problem we particularly need to watch out for is a type of pathological narcissism in which the person demands complete control over all the sources of good, and a complete self-sufficiency...’ (2003, p.24).

This is strong stuff and it needs to be said. ‘Local loyalties and attachments’ in their ‘virulent and aggressive form’, one might argue, require ethical deliberation, analysis and evaluation, especially in relation to virtues like courage, temperance, justice, practical wisdom and honesty, and especially in relation to ends like flourishing, broadly conceived. If ‘pathological narcissism’ is the operative mode, then virtue ethics, with its philosophical roots in the analysis of character, dispositions, (virtuous) habits, means and avoidance of (moral) excesses and deficiencies, might just play an important analytic and therapeutic role, so to speak, especially since the origins of such forms of narcissism may highlight questions of character and habits which may or may not be deliberative. The fact that it is pathological serves only to suggest that virtue ethics play an important role again, since what is suggested is that the condition is excessive and at least potentially vicious.

3 The Question of Character (Neuroscience, Compassion and Virtue)

There have been some notable critics of the role of character in ethics recently and numerous neuroscientific studies have contributed much to our understanding of compassion as a virtue (and its roots in one’s character). For example, Yoni K. Ashar, Jessica R. Andrews-Hanna, Sona Dimidjian and Tor D. Wager argue that compassion is ‘comprised of multiple component processes, including the generation of affective feelings, inferences about others’ mental states, and appraisal of the meaning of another’s suffering in relation to oneself. These component processes are supported by distinct brain systems, which represent content—

specific feelings, judgments, and meaning representations—in the form of unique spatio-temporal patterns of neural activity.’ (2012, p.2).

Helen Y. Weng, Andrew S. Fox, Alexander J. Shackman, Diane E. Stodola, Jessica Z. K. Caldwell, Matthew C. Olson, Gregory M. Rogers and Richard J. Davidson found that

‘compassion training increased altruistic redistribution of funds to a victim encountered outside of the training context. Furthermore, increased altruistic behavior after compassion training was associated with altered activation in brain regions implicated in social cognition and emotion regulation, including the inferior parietal cortex and dorsolateral prefrontal cortex (DLPFC), and in DLPFC connectivity with the nucleus accumbens. These results suggest that compassion can be cultivated with training and that greater altruistic behavior may emerge from increased engagement of neural systems implicated in understanding the suffering of other people, executive and emotional control, and reward processing.’ (2013, p.1171).

Weng’s team concludes first, that with virtues such as compassion, not only do the roots of compassionate behaviour run deep cognitively or psychologically, so to speak, they run as deep, at least, as the level of neurons and neural circuits and neural activity in our brains and nervous systems; second; that virtues such as compassion can be cultivated with training or teaching; third, that increased virtuous or altruistic behaviour ‘may emerge from increased engagement of neural systems implicated in understanding the suffering of other people, executive and emotional control, and reward processing’ (2013, p.1170). They also

‘hypothesized that greater altruism resulting from compassion training would be predicted by training-related changes in the neural responses to images of suffering. .. [tests showed] training-induced changes in right IPC activation were differentially associated with altruistic redistribution in the two training groups... In compassion trainees, greater IPC activation due to training was associated with greater redistribution...’ (2013, p.1176).

In other words, the brains of those who had been taught compassion techniques (that is, techniques that instantiate compassion as a virtue, that is, as a disposition to fellow-feel, to distinguish between self and other, to relate with pity or sorrow to others who are being treated unjustly, and intervene to help them on this very basis) showed marked changes in neural activity (for example, ‘increased engagement of neural systems implicated in understanding the suffering of other people, executive and emotional control, and reward

processing' (p.1170) ; these changes were apparent in neural responses for example when these subjects were shown images of suffering; the levels of neural activation were observably greater in subjects who had been taught compassion techniques; further, training related changes in neural patterns of response to suffering could help to predict increased levels of activity geared towards helping others (for example, by giving away money in order to address cases in which an unjust

It is quite conceivable (if the study discussed above is sound) that virtues, or at any rate, some virtues, are more deeply rooted in us than we believe; and if they run this deep, so to speak, that is, to the extent that our neural structures and mechanisms are involved or implicated in increased behaviour which is in accord with such virtues, after 'training', then it is also possible to argue that desirable traits (such as those that instantiate compassion), in so far as they are virtuous, can be strengthened in us not just at the level of disposition, reflection, activity and practise, but at a more fundamental level which is itself characterised by plasticity – that is to say, dynamic, modifiable, and measurable or observable, in a sense, and as a corollary, describable, at least in terms of neural activation and significant correlations.

However, the further conclusion drawn by Weng *et al.*, is not conclusive: for example, they claim that these 'findings support the possibility that compassion and altruism can be viewed as *trainable skills* rather than as stable traits' [emphasis added]. This lays the groundwork for future research to explore whether compassion-related trainings can benefit fields that depend on altruism and cooperation (e.g., medicine) as well as clinical subgroups (Hofmann, Grossman, & Hinton, 2011) characterized by deficits in compassion, such as psychopaths (Blair, 2007). But 'the possibility that compassion and altruism can be viewed as trainable skills' does not necessarily rule out the possibility that compassion, and other such virtues, can be viewed as robust or 'stable traits' or habits. The two are not necessarily exclusive.

Moreover, the study, strictly speaking, does not demonstrate the distinction that is being made by the researchers.

There are strong reasons to reject a number of objections to the existence or meaningfulness of character traits, their place and/or function in virtue ethics. Some might object and argue that what such neuroscientific studies show is not the existence of a 'trait' but a correlation only – 'trait' in the sense that Gilbert Harman sets out: 'robust habits of perception, motivation and action' (Harman, 1999, p.1) and further that the existence of such correlations does not show that 'virtue' is learned.

This argument however is not convincing: first of all, a character 'trait' (like compassion) is not merely a *robust habit of perception, motivation and action*. Such definitions do not capture the complexity here sufficiently: if a person is compassionate (genuinely) and acts accordingly (genuinely), the analysis needs to go well beyond talk of 'habits' in this sense, as neuroscience has shown us - for example, with a 'trait' like compassion, there are also robust neural activity and levels of neural activation, deep levels of processing, involved in the instantiation of the 'trait' and conceivably, in the existence of the 'trait' itself; just as there are robust neural networks as well as robust ways of thinking, discrimination and deliberation (evident for example in the considered and one would hope, accurate, differentiation of self and suffering other, just and unjust situations).

Second, there is a correlation, but it is a correlation between increased levels of activation in neural circuits, associated with cognitive and emotion regulation, for example, and changes brought about by training in compassion techniques, that is to say, robust changes (which means: marked, strong and/or potentially and actually enduring changes - at the neurophysiological level - at the very least, that allow some successful predictions to take place as Weng's team has shown, for example, concerning increased 'giving' after compassion training).

Harman also argues

‘Some versions of virtue ethics connect virtues with human flourishing. In one version, a virtue is a character trait that contributes to the flourishing of the agent. In another version, the virtues are character traits that contribute to the flourishing of people in general. In either version... it is not easy to provide a noncircular account of human flourishing that leaves the resulting view sounding plausible.’ (1999, p.168).

However, Harman does not capture sufficiently here the complexity of the term ‘virtues’ and as a consequence, his argument cannot do the work that he wants it to do. It is at best incomplete. For example, Aristotle understood virtues in terms of means, dispositions *and* robust habits or characteristics; Annas understands them as persistent features of one’s character *and* as a *deep feature* of a person with *affective* and *intellectual* aspects (2011, p.8); Hursthouse understands virtues in terms of emotions *and* emotional reactions, ‘choices, values, desires, perceptions, attitudes, interests, expectations and sensibilities’ (in short, a ‘complex mindset’) (2012, n.p.); there are many other accounts. Unless one considers virtues in the light of such complexity, in relation to flourishing, it is difficult to see how Harman’s claim, namely that the connections between virtues and flourishing are circular, can be defended in any conclusive way.

Moreover, Miller argues:

‘(B*) On the basis of observing helping behavior, most people infer (whether consciously or not) that certain individuals—perhaps family members, friends, community leaders, politicians, or the like—are compassionate people.

To this it adds the metaphysical claim that:

(M*) Few people actually have the virtue of compassion, and what instead plays a significant role with respect to most helping is often a Mixed Helping Trait.

Thus it follows that:

(C*) Most of our actual moral judgments involving the ascription of compassion to one or more individuals turn out to be false.

Less formally, think about the people in your life whom you think are compassionate.

Perhaps they include some of your friends, or a leader in the community. If the argument for (C*) is correct, then it is likely that these people do not really have the virtue of compassion, but instead a Mixed Helping Trait. So while you might think you know their character well, many of your beliefs in this area actually turn out to be mistaken.’ (2014, p.8).

This argument is problematic; it is difficult to progress beyond the very first step in the argument. This first claim is that, on the basis of observing helping behaviour, *most people*

infer (whether consciously or not) that certain individuals—perhaps family members, friends, community leaders, politicians, or the like—are compassionate people. First, there is an epistemic question: Miller does not explain how one can know what ‘most people’ infer unconsciously, or subconsciously (if one assumes that such things are possible), and how this happens from mere observations of ‘helping behaviour’. Without such a bridging account, it is difficult to accept this (unsubstantiated) premise. Second there is a logical question: his understanding of inference is questionable. For example, it is not clear what subconscious or unconscious inferences look like, so to speak, for in conventional usage an ‘inference’ involves a conscious process of reasoning and logical argumentation. It is of course possible that processes of reasoning and logical argumentation may take place at a subconscious or unconscious level, but the onus is on Miller to show that this is the case. He does not do this. Third, there is sceptical question: he does not provide any conclusive grounds for believing that the claim that family members or friends are compassionate, in reality, is generally or fundamentally doubtful. (Basing these assertions on studies with very limited samples, that is limited in number and limited in scope, adds to the doubt that arises here.)

The second claim is hardly more secure, especially given its “metaphysical” nature:

‘(M*) few people actually have the virtue of compassion, and what instead plays a significant role with respect to most helping is often a Mixed Helping Trait.’ (2014, p.8).

Miller seems to miss something fundamentally important in the structure of the argument here. This claim is not just a metaphysical claim; it is an unsubstantiated, unjustified, metaphysical claim. If some people have the virtue of compassion, in fact, then most people need not necessarily infer wrongly - regardless of whether the inference is conscious, subconscious or unconscious - ‘that certain individuals (perhaps family members, friends, community leaders, politicians, or the like) are compassionate people.’ Second, the role that a Mixed Helping Trait plays is rather unclear: what sort of a role does it play and what sort of significance applies here? It could play a very minor role and that role could still be

significant, conceivably; it could play a secondary role and that role could still be significant, conceivably. It is difficult to say which Miller has in mind at times in the argument. In any case, if traits do exist, as a Mixed Helping Trait apparently does exist, then how it is difficult to see how one can rule out categorically, on the basis of the evidence provided above and discussed in the book, other traits like compassion. Much work remains to be done in these areas of inquiry.

The conclusion Miller draws from this series of questionable and/or problematic premises is:

‘(C*) most of our actual moral judgments involving the ascription of compassion to one or more individuals turn out to be false.

Less formally, think about the people in your life whom you think are compassionate.

Perhaps they include some of your friends, or a leader in the community. If the argument for (C*) is correct, then it is likely that these people do not really have the virtue of compassion, but instead a Mixed Helping Trait. So while you might think you know their character well, many of your beliefs in this area actually turn out to be mistaken.’ (2014, p.8).

The conclusion though does not seem to follow. Miller’s reliance on (weak) inductive generalisations is quite problematic: for example, he has not produced strong evidence that sheds light on what ‘most of us’ (leaving to one side the question of what this phrase might mean) ascribe to others when we make ‘actual moral judgments’ concerning compassion; nor does he produce compelling evidence that sheds light on why most, and not merely some, ascriptions of compassion ‘to one or more individuals’ should turn out to be false. It must be said that there is no compelling reason to assume that the evidence from the available studies can and should be generalised or extrapolated in order to apply to most beings who are capable of making such ascriptions.

If we do think – ‘most’ of us (leaving aside the significant degree of vagueness here) - about the people in our lives whom we think are compassionate, and include, perhaps, some friends, or a ‘leader in the community’, then the flaws in the argument would suggest that it is likely that Miller’s claim that ‘these people do not really have the virtue of compassion’ seems doubtful at best, and underdetermined at worst. The final part of his conclusion is doubly

flawed: while he might assert that we only think (mistakenly) that we know their character well, and that many of our beliefs ‘in this area actually turn out to be mistaken’, he nonetheless does not produce sufficient evidence to show that the argument he is presenting is conclusive, just as he does not show that the position he is affirming is one that is clearly and demonstrably true.

If all of this is sound, then the following argument becomes possible. If compassion *is* a virtue, and virtues are traits, then compassion training *is* virtue training and traits can be taught; if compassion training is virtue training, and if compassion training *promotes* compassionate activity (or better, compassionate intervention), if it allows neuroscientists to produce accurate predictions about the likelihood of compassionate activity or intervention (which can be tested neuro-scientifically) and allows us to predict accurately neuro-physical changes and increased activation in known neural circuits associated with the regulation, for example, of emotions or states such as compassion, as well as the expression of compassionate activity or intervention, then it follows that increased activation in these known neural circuits correlates with increased activity (either mental or physical) which may be described as virtuous. Further, if compassion *is* a virtue and compassion *can* be taught effectively, then virtue *can* be taught effectively (in one sense, at least).

Robert Audi argues that that virtues do ‘vary along many dimensions... [and] may be more or less deeply rooted’ (2012, pp. 273-274). It is possible to go further: if compassion is a virtue and if compassion has deep connections in us, for example, at the level of neural circuits, structures and systems, then virtues, in at least one sense, are more ‘deeply rooted’ than we may have imagined.

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