March 2018 marks the 10th anniversary of *Neuroethics*. To mark the occasion, we have decided to compile a special virtual issue: an online only compendium of papers previously published in the journal, to showcase the range and strength of the journal.

This virtual issue collects papers with a common theme: moral responsibility. The papers address two kinds of questions: how neuroscience can contribute to our assessment of the moral responsibility of individuals, and the extent to which various departures from neurotypicality may affect the responsibility of individuals.

Claims that empirical data can help us to make progress on philosophical questions are often resisted. Some philosophers invoke the (supposed) naturalistic fallacy in this regard. The naturalistic fallacy is supposed to consist in drawing normative conclusions from factual claims. Since moral responsibility is a normative concept, it appears that such strictures apply here too, if they apply anywhere. In “Neuroimaging and Responsibility Assessments,” Nicole Vincent sets out some of the grounds for concern, and shows how such worries may be assuaged.

Vincent focuses her discussion on a capacitarian account of moral responsibility, according to which a necessary condition for an agent being (directly) morally responsible for an action is that she possesses the requisite set of capacities at the relevant time. Since capacities depend on brains (at least in very important part), there is a prima facie case for thinking that we can assess whether the agent possessed the relevant capacities using the tools of neuroscience, like functional neuroimaging. Opponents point to a series of problems. How, for instance, can we be sure that any deficit reflects absence of capacity rather than absence of motivation? Mightn’t differences between the brain of the person accused of a crime (say) and normal controls reflect not her lack of capacity but rather the realization of the capacity by different neural mechanisms? Vincent shows that some of these objections don’t target neuroimaging specifically, and some will become less pressing as the science progresses. The main point of her paper, however, is to focus on the motivation question: how can we tell that someone possesses a capacity when they might simply lack the motivation to exercise it? She gives two responses to the worry. One focuses on the fact that the exercise of certain capacities is automatic. Psychopaths may lack motivation to respond to moral stimuli, but that fact doesn’t explain their reduced autonomic response to such stimuli. The second response invokes inference to the best explanation. The best explanation for a pattern of behavior may be that the agent lacks a certain capacity.

To Vincent’s discussion I would add two points. First, people who worry about the evidential value of neuroscience often seem to set the bar unreasonably high. Neuroimaging can contribute to the assessment of moral responsibility if it provides evidence that makes hypotheses about capacities more or less likely than they would be in the absence of the evidence. Certainty, or even very high levels of probability, are not demanded for other sources of evidence, and rightly so. Second, in science it is often better to invoke convergent evidence. It is likely that the assessment of agents’ capacities is best done not by neuroimaging alone, but utilizing a number of different sources of evidence. Behavioral and biographical data, for instance, can and should guide our interpretation of the neuroimaging, and vice-versa.

In the course of her discussion, Vincent briefly considers Heidi Maibom’s “The Mad, the Bad, and the Psychopath.” Maibom’s primary purpose is to assess whether psychopaths are excused criminal responsibility on the grounds of moral incapacity. In the first half of the
paper, Maibom argues that though psychopaths have deficits with the kind of affective responses that some have thought necessary for grasping the moral significance of harms to others, they do not completely lack these capacities. Moreover, even if some lack them entirely (or lack them to a degree sufficient to prevent them grasping the moral concepts), there are alternative routes to justifying moral norms. Maibom argues that were we to excuse agents who justified their moral norms in these alternative ways, we would be excusing very many people, not just psychopaths. In response, we may wonder whether those who offer alternative justifications for moral concepts nevertheless have these concepts at all due to their possession of affective capacities.

Maibom acknowledges, in any case, that psychopaths lack “values as we understand them”. Should they be excused on this basis? She argues they should not. She argues that their deficit is specifically moral, and being bad should not excuse agents. To motivate this claim, she highlights an important difference between psychopaths and those who are excused on the grounds of insanity. Typically, at least, the actions of the latter would not be wrong at all were their (delusional) factual beliefs true. This is not the case with psychopaths: only their moral views are false, not their factual.

Vincent replies that this should be construed as an objection to a capacitarian approach to moral responsibility: if we maintain that lacking the capacity for responding to moral reasons is not an excuse, then we must reject extant capacitarian accounts. Conversely, if we find such theories convincing, we may have to bite the bullet here and excuse psychopaths. Another response, which Maibom considers, is that people might be excused because their moral views are false (on the grounds that were their false moral views true, they would not be acting wrongly). She thinks that limiting excuse to those who act contrary to their own moral views is unacceptable. As a matter of fact, several philosophers (for example Gideon Rosen 2004) have defended just this view. It is important to note, however, that Maibom is primarily concerned with criminal responsibility. The relation between criminal and moral responsibility is, as she says, complex and considerations from debates over the second may have limited application with regard to the first.

Marga Reimer’s “Psychopathy Without (the Language of) Disorder” continues the examination of psychopathy. Psychopathy is usually characterized as a disorder, and its causes are equally described as pathological. Neuroscientists cite deficits in autonomic system response caused by a dysfunctional amygdala, for instance. However, as Reimer points out, there is a respected theory of the cause of psychopathy that understands it as adaptive in an evolutionary sense. According to this frequency-dependent selectionist account, a disposition to exploit others is adaptive as long as most people are trusting: if psychopaths are rare, they can do well through exploitation (whereas if psychopathy becomes common, psychopaths encounter other psychopaths too often and non-psychopaths become too suspicious for easy exploitation). But if psychopathy is adaptive – if it is produced by mechanisms functioning as they were designed (by evolution) – then describing it as a disorder seems inappropriate.

One way to read Reimer’s paper (though she does not frame it this way) is through the lens of the neurodiversity movement. The neurodiversity movement has powerfully argued that we ought to see at least some of the differences in cognition we currently tend to stigmatize as disorders as reflecting differences, not deficits. The prime case here is the autism spectrum: people who are diagnosed as on this spectrum may (often) plausibly be seen as having different strengths and weaknesses to the rest of us, not as having defective minds. Could the
neurodiversity movement embrace psychopathy, which (entirely unlike autism) is characterized by a disposition to flout the rights of others?

Reimer’s case that psychopathy reflects difference and not disorder depends in important part on what the best account of ‘disorder’ turns out to be. One might see her argument as putting pressure on harmful dysfunction accounts (Wakefield 1992), which understand ‘dysfunction’ evolutionarily, rather than as showing that psychopathy is not a disorder. An alternative approach is to embrace a harmful dysfunction account but understand adaptive function more broadly than she does. Reimer explicitly distinguishes between harms that stem from biology and those that stem from environmental factors, arguing that something counts as a disorder only if it biologically harmful. But that’s not the only way of carving up the territory. Some philosophers and biologists have argued in favour of what is called the extended phenotype, according to which the distinction between environmental causes and internal causes is not relevant for evolutionary theorizing.

Reimer concludes her paper by asking what the implications of the view she urges would be for whether psychopaths are held responsible. She plausibly suggests that it would have a significant effect: were we convinced that psychopaths are not disordered, we would be less inclined to mitigate than if we were convinced they suffered from a pathology. But should it have any such effect? As she suggests, this is a difficult question. One response might be as follows: agents can be held morally responsible only if they are able to guide their behavior by moral reasons (such a claim has often been defended by those who hold capacitarian accounts of moral responsibility, such as Vincent). Since psychopaths cannot track moral reasons, they are not morally responsible. This would seem to mitigate or exculpate independently of the question of disorder. However, Reimer’s principal target is criminal responsibility, and perhaps only the capacity to know what the law demands of one and to regulate one’s behavior accordingly is required for criminal responsibility. Settling this issue requires settling the precise relationship between criminal and moral responsibility, which remains a vexed question (as we mentioned with regard to Maibom’s paper).

In “On the Criminal Culpability of Successful and Unsuccessful Psychopaths”, Katrina Sifferd and William Hirstein focus on the executive capacities of psychopaths (notice that this, too, is a capacitarian account of responsibility). They argue that successful and unsuccessful psychopaths (roughly, those who avoid jail and those who don’t) differ significantly in their executive capacities: that is, in their capacities for planning, deliberation and choice. Both groups of psychopath have significant emotional deficits, which explain why they tend to engage in anti-social behaviour. But due to their differences in executive function, successful psychopaths should be held fully criminally culpable, while unsuccessful should have their culpability mitigated (their target is criminal culpability, but they suggest that much the same conclusion is true with regard to moral responsibility as well).

The reason successful psychopaths should be held fully responsible is that they can compensate for their emotional deficits with their fully intact executive capacities. They can learn the rules and abide by them, though they have to make more of an effort than normal to do so. This is not true with regard to unsuccessful psychopaths, who are therefore due mitigation.

While it may be true that successful psychopaths can learn the rules and abide by them, it might be thought that this is insufficient for moral responsibility and perhaps for full criminal culpability as well (depending on one’s theory of the latter, of course). While they can learn
the rules, they may not fully understand the point of the rules, given their deficits, and an inability to grasp this point might seem to be mitigating. If rule violations are all of a piece – if assault is no different to illegal parking, in that all that is wrong with each, according to psychopaths, is that it is against the rules – then it seems that culpability is reduced. Or so, at any rate, I have argued (Levy 2007).

Marko Jurjako and Luca Malatesti take issue with Sifferd and Hirstein on empirical grounds. They argue that the best interpretation of the available data suggests that any differences in the executive functions of different psychopaths do not map onto the distinction between successful and unsuccessful psychopaths. More importantly, perhaps, they deny that the executive deficits exhibited by psychopaths are significant enough to warrant reducing their culpability: they think that psychopaths typically (at very least) have the capacity to compensate for these deficits; a capacity Sifferd and Hirstein reserve for successful psychopaths.

Jurjako and Malatesti’s paper illustrates one of the central difficulties of neuroethics: we can’t simply ‘read’ our ethical conclusions off the empirical data. It takes interpretive work, and this work is difficult (all participants in this debate are sophisticated users of psychological data). I won’t attempt to settle the dispute here. I will just advance an alternative hypothesis, assuming that Jurjako and Malatesti are right. They point to the context-specificity of the deficits they mention. Why not think, in that case, that there is no one answer to the question “are psychopaths responsible for wrongdoing”? Perhaps we should think the answer is itself context-specific: did the person have the opportunity and the cognitive resources available, in the particular circumstances in which they acted (or in the lead up to finding themselves in those circumstances) such that it is reasonable to expect them successfully to exercise the capacities to compensate for their deficits? In some circumstances (when they must react quickly, or when they take themselves to need to act quickly, for example), the fact that they have these capacities may not be a fact that is relevant, it seems to me.

In “Psychopathy, Ethical Perception, and Moral Culpability”, Ishtiyaque Haji examines the question of the responsibility of psychopaths from a different angle. Ethical perception, a notion that Haji adapts from Aristotle, is a kind of seeing. The appropriately cultured moral agent sees what matters in a particular context. She perceives who needs help, for instance, and in what ways. Aristotle emphasised the importance of the right kind of education in bringing us to have the right percepts. No amount of inculcation of rules or principles can compensate for faulty perception, on the Aristotelian view. Haji argues that psychopaths’ affective deficits will make such perception difficult for her. They will tend not to notice ethical reasons that are perceived by others. Even if a psychopath has the capacity for seeing the ethical stakes at issue in a context, they will not be salient to him, and because they lack salience will not feature in his deliberation.

It is important to recognize that it requires a great deal more for well-functioning ethical perception than the bare possession of the right capacities. The bare capacities might enable the person to understand moral reasons when they are made salient, but won’t be sufficient by themselves to make those reasons salient. For this reason, Haji’s paper may function as an effective riposte to those authors who (as we have seen) have argued that there are other routes to the acquisition of moral knowledge (though of course the matter is hardly settled: perhaps there are other routes to salience too). In particular, Haji provides plausible grounds for excusing (or significantly mitigating) the responsibility of psychopaths for actions and
omissions that are partly explained by their failure to notice certain facts, if not for actions taken in full awareness of moral facts. His paper provides a powerful riposte to those people (like Sifferd and Hirstein, and Jurjako and Malatesti) who invoke psychopaths’ capacities to ground their responsibility: salience may provide a necessary trigger for the exercise of these capacities.

Daniel Sharp and David Wasserman’s “Deep Brian Stimulation, Historicism, and Moral Responsibility” tackles an issue that is very practical – under what conditions does deep brain stimulation (DBS) mitigate moral responsibility – in way that engages deeply with difficult debates in philosophy. DBS, which is used to treat a variety of otherwise intractable pathologies, especially Parkinson’s disease, sometimes induces personality changes in patients, and these changes sometimes result in them engaging in risky behaviors like gambling. Sharp and Wasserman argues that historicist accounts of moral responsibility (those that maintain that moral responsibility depends not only on agents’ capacities but also their histories – are well placed to explain when such induced changes mitigate responsibility.

More specifically, they develop an account of autonomy they find in the work of John Christman into a historical account of moral responsibility. On their attractive account, an agent has their responsibility mitigated if she would not be alienated from her newly induced psychological traits on sustained and appropriately informed conditions under deliberative-conducive conditions. It is not necessary that she would identify with the traits, only that she would not be alienated from them. This account is a powerful and plausible one, and deserves consideration by philosophers concerned with moral responsibility more generally. It also deserves further elaboration that Sharp and Wasserman can give it here. One worry concerns whether hypothetical reflection is supposed to converge on a unique view. If, as seems plausible, it would be reasonable for some agents but not others to feel alienated from a manipulated trait, then we might get an apparently unacceptable subjectivism about moral responsibility. That is, agents A and B might perform similar acts for similar reasons, while possessing identical capacities, and yet one is responsible and not another because one reasonably repudiates the manipulated trait while the other (equally reasonably) does not. Further potential problems arise from the fact that the traits that lead an agent reasonably to accept manipulation might themselves be induced.

The final paper is Kenneth Richman’s “Autism and Moral Responsibility: Executive Function, Reasons Responsiveness, and Reasons Blockage.” This paper nicely illustrates both the ways in which we must make empirical commitments in neuroethics, and how the work we do in it can make contributions to philosophy (somewhat) independently of those commitments. Most accounts of autism highlight deficits in theory of mind; our capacity to understand the mental states (beliefs, hopes, desires, and so on) of other agents. Autism is allegedly characterized by a reduced ability to understand these mental states. Richman focuses on a rival (though somewhat complementary) view: that autism is characterized by deficits in executive functions: the same set of capacities that Sifferd and Hirstein focus on in their discussion of psychopathy. Sifferd and Hirstein, recall, argue that these capacities are those centrally required for moral responsibility; if autism involves deficits in executive functions, then it too might mitigate moral responsibility.

The heart of Richman’s paper is a typology of way in which we may fail to satisfy the conditions of what Fischer and Ravizza (1998) have influentially called reasons responsiveness and reactivity (it is this typology that is Richman’s major contribution to
debates about moral responsibility generally, beyond the specific question explored in his paper). He then goes to suggest ways in which deficits in executive functions may non-culpably give rise to such failures. For instance, problems with cognitive flexibility may impair the ability to compare the consequences of different alternative actions, or problems with online update of information could cause perseveration of response. As Richman suggests, assessing the moral responsibility of individuals with autism seems to require going beyond mere reference to reasons responsiveness and reactivity: we require a more fine-grained typology.

Richman also suggests, however, there is nothing specific to autism that requires such a typology. In fact, the deficits seen in autism are not different in kind from those that neurotypical people exhibit. They are of the same type and mitigate in the same way. Neurotypical people may have impaired executive function in certain circumstances (when they are tired or stressed, for example). People with autism exhibit the same problems in a broader variety of circumstances. We should not think, however, that autism excuses or even mitigates for all individuals in all contexts. Rather, different people – even different people with a diagnosis of autism – will have different strengths and weaknesses, and exhibit impaired reasons responsiveness in some contexts but not others. Richman even suggests that some such individuals might have superior capacities with regard to some tasks in some contexts. Perhaps they will have increased moral responsibility. Individuals with autism are not outside the bounds of the moral community, Richman suggests. At least many of them are capable of responsible action in many contexts.

Putting together this virtual issue was an informative and pleasurable experience for me. In the day to day busyness of editing (and other work) it is easy to lose sight of the health of the journal as an ongoing enterprise. The papers collected here attest to the strength of the contributions. Neuroethics looks forward to the next decade with confidence.

References.