



Unique Ethical Challenges for the 21st Century: Online Technology and Virtue Education

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It can sometimes seem as if the digital world presents us with a perpetual phantasmagoria of immoral or morally dubious human activities. Not only does the Internet and the digital devices through which we access and produce online content offer a vantagepoint onto many kinds of age-old vices (and greater opportunity to pursue wickedness), it creates healthy conditions for new vices and moral misdemeanours to emerge. Both kinds of moral erring must be of interest to 21st century ethicists. One reason for this is because traditional moral wrongs gain an increased force and severity when their consequences are no longer locally restricted but achieve an Internet-enabled global reach. Moral questions that academic ethicists had thought were long settled must be unearthed and re-examined in the light of the new digital context in which we all now exist. In addition to this, ethicists must attend to morally-questionable actions that would be impossible without the Internet. Cyberbullying, trolling, online humiliation, revenge porn, and digital harassment must be understood as an object of ethical concern. These issues need urgent ethical attention as they are quickly blighting our lives. Clearly they can have a pernicious (often devastating) effect on those who are the victims of these crimes, but rather more obliquely they can also blight the lives of the perpetrators insofar these individuals often act with very little understanding of the consequences of their actions, and can quickly regret an action that was effectively done at the click on their trackpad or online device. Furthermore, these harms are often permanent. They create a living scar in the lives of the victims, as well an indelible black mark against the names of those who act immorally (although not necessarily illegally). Emerging technologies could be said to provide the conditions for a new kind of moral misery on a scale and with a pervasiveness that humanity has rarely witnessed in recent years.

The aim of this article is to show why the moral problems of emergent technology requires us to adopt a virtue-ethical approach to ethical practice and theory. To do this, we circumscribe the conditions under which new moral and technically-orientated challenges could be addressed in practice, before showing how these practices could be bolstered using theoretical resources from virtue education. We begin by looking at why the rule-based theories of Kantian ethics and consequence-based ones of Utilitarian traditions are badly-equipped to help us navigate on the precipitous and ever-changing moral terrain of the 21st century. We do not claim that these traditions have no role in guiding us, but that the serious moral challenges that we encounter today – and those that emerging technology will inevitably precipitate in the future – require a supplementary approach. Instead, we claim that this can be provided by the agent-based conceptual resources from the virtue tradition, especially in the domain of practical ethical guidance. The focus, we argue, should be on the cultivation and honing of cyber-*virtues* and in particular the human quality of cyber-*wisdom*. We end with some thoughts on how these qualities of character could be integrated into a more comprehensive virtue education for the 21st century.

2. Rival 21st Century Ethical Theories

In their recent study on the moral problems of emergent technology, Dean Cocking and Jeroen van den Hoven introduce us to what they call the ‘many faces of evil online’ (2018: 1). For those of us who are not *au fait* with the latest developments in digital technology (or do not have teenagers to keep them abreast of them), we may well find it shocking reading. The authors bring their analysis with a fast-paced tour of some of the most dreadful and appalling behaviour that the Internet has facilitated. Hackers who installed flashing images onto the Epilepsy Foundation of America website to deliberately trigger photosensitive epilepsy patients (2018: 1); the Vlogs of the Martin family that went viral after pranked their 9-year old child and reduced him to tears (2018: 9); so-called ‘happy slappings’ of randomly chosen pedestrians by teams of youths who then upload the material to YouTube (2018: 11); video blackmail and homophobic shaming (2018: 12); unwanted celebrity when the child star of the video did not – indeed, could not – consent to their image making them globally infamous (2018: 13); the group glorification of life-threatening conditions such as anorexia or bulimia (2018: 16–7); and multiple forms of online radicalisation (2018: 25–28). These are only a selection of a veritable treasure trove of 21st century vices that Cocking and van den Hoven unearth to illustrate their contention with which the online world presents us. The claim of their study is that not only do these specific cases need a new moral vocabulary, but that ethicists need to understand that the digital world has created a ‘moral fog’ that obscures and complicates the moral terrain upon which we all now conduct our lives.

Cocking’s and van den Hoven’s account of moral fog describes a key feature of 21st century life. As they argue, we often err or act badly because the digital environment in which many of us operate does not allow to discern which moral rule to apply in any given case, while often occluding the severity (and often the permanence) of the consequences of our online behaviour. Cocking’s and van den Hoven’s moral fog could be said to engender what Shannon Vallor’s recent book terms ‘acute technosocial opacity’, a similarly disorientating feature of 21st century digital life (2016: 6). Compared to moral fog the effect of technosocial opacity is even further reaching; it does not just limit our ability to discern the appropriate moral rule to act on, but cuts us off from, in Vallor’s words, ‘identify[ing], seek[ing], and secur[ing] the ultimate goal of ethics – a life worth choosing; a life lived *well*’ (emphasis in the original; 2018: 6). Taken together, these analyses present us with an aggregate of problems for our practical lives. On the one hand, the conditions of the online environment hampers how we can respond ethically to moral problems. On the other, our understanding of what it is to live well is constantly skewed by a lack of clarity of what it means to live well.

Vallor offers a persuasive account of why the two main paradigms upon which moral philosophers are situated within Kantianism and Utilitarianism, are badly equipped to respond to the ever-changing online environment (2016: 7–9). As well as what we initially termed the ‘perpetual phantasmagoria of immoral or morally dubious human activities’, the online space is difficult to navigate with the conceptual resources of these two traditions precisely because of the ‘moral fog’ and ‘technosocial opacity’, mentioned above. Vallor’s remedy for this situation is now well known, and her early work on this topic has inspired others to offer virtue ethical accounts (see Brey *et al* 2012, Poel 2012, Verbeek 2012). Vallor claims that we need a ‘profile of *technomoral* virtues for 21st century life’ (emphasis in the original; 2016: 10), but her details of these character traits has attracted much plausible criticism, especially from those who claim that her account does not do justice to the true character traits we need to flourish in the online space (McRae 2018: 277–82, Curzer 2018: 283–92, Howard 2018: 293–304). She defines technomoral virtues as ‘alignments of our

existing moral capacities' that are 'consistent with the basic moral psychology of our species' (2016: 10), but the character traits she proposes as candidates to take on this task are not as comprehensive as is required.¹ Nevertheless, even if we do not agree with Vallor's precise account of the technomoral virtues completely, we can still accept her claim that a character-based approach is the best way to orientate ourselves (and navigate within) the strikingly new environment that the online environment confronts many of us with. So what advantages might an alternative character-based account of the virtues hold? And how might this help virtuous behaviour in the online space specifically? The next section aims to show that the what is interesting about Vallor's account is not any of the virtues she lists. Rather, a character-based ethics is superior to Kantian or Utilitarian concerns because of the high degree of resilience to a changing world that this kind of system offers.

3. Cultivating Cyber-wisdom

Character education should be understood as any form of moral education focusing on the development of virtues as stable dispositions with the aim of promoting human flourishing ethics (Kristjánsson, 2015). As well as its well-documented rise in virtue ethics moral philosophy since the 1950s, this approach is increasingly underpinning educational practice, for example in the UK education system (Arthur, 2019). Whilst not exclusively Aristotelian in nature, over the last decade, there has been a growing awareness on the part of educative institutions that character education has a key role to play in education and pedagogic policy. For example, past Secretaries of State for Education Nicky Morgan and Damien Hinds and government institutions including Ofsted and the Department for Education have all prioritised character education in recent years. Despite these efforts, there has been little interest in applying these educative techniques to the online environment, both in general pastoral education and more specialised subjects like computer science and Personal, Social, Health Education (PSHE). We believe that there is a gap. Filling the gap demands that we think more creatively about the character traits that the current online environment requires, what affordances this environment creates, how it precipitates certain behaviours, and most practically how we can educate next generation of users to be able to flourish in an online environment.

When thinking about how the virtues might be able to contribute to the flourishing in a 21st century environment that strongly features online technologies, we believe that the best approach is to show how cyber virtue can be *cultivated*. Contra Vallor's account of the *techno-moral* virtues, criticised above, we propose that it better to show how existing moral virtues – especially honesty and compassion – can well equip us to function or even thrive in the online moral environment. We argue here that particular attention needs to be focussed on the cultivation and honing of the meta-virtue of *cyber-wisdom*. Understanding cyber wisdom as comprising traditional virtues that have been modified to meet the demands of the online space has distinct advantages, both hermeneutical and pedagogical. On the one hand, it allows us to isolate what the traditional understandings of honesty and compassion have to add to functioning well in an online environment (and allows us to adapt our understanding of these virtues in line with the affordances that this environment offers). On the other hand it , provides us with a clear mandate for teaching these virtues.

¹ Vallor lists her technomoral virtues as: '1) Honesty. 2) Self-Control. 3) Humility. 4) Justice. 5) Courage. 6) Empathy. 7) Care. 8) Civility. 9) Flexibility. 10) Perspective. 11) Magnanimity. 12) Technomoral Wisdom.' (2016: 120)

Nevertheless, the term ‘*cyber-wisdom*’ is not merely a flashy moniker used to describe the exercise of this virtue in the modern world: it regulates the existing moral virtues in new and important ways. So what exactly are the parameters of *cyber-wisdom*, and what advantages does this virtue have over Vallor’s existing account of techno-moral virtues?

The modern day virtue of *cyber-wisdom* is best understood as an elaboration of Aristotle’s virtue of *phronesis*. In this sense, like its Aristotelian forebear, it is an overarching or second-order virtue, governing the application of the first-order excellences. Like Aristotelian *phronesis*, *cyber-wisdom* enables us to do the right thing, at the right time, in the right way online – even doing so when no one is witnessing this (Harrison, 2016b). *Cyber-wisdom* could be said to orchestrate the virtues, bind them together, and operationalise them. For this reason it could be described as a ‘meta-virtue’, and this gives it the flexibility to be a virtue that enables us to respond to an uncertain online terrain that children and young people will meet in the 21st century. Possessing *cyber-wisdom* depends on possessing at least some of the virtues. These include moral, civic and intellectual virtues (Jubilee Centre, 2017), but less so performance qualities such as teamwork and resilience as they are essentially amoral.

Our research shows the virtues of honesty and compassion are the most pertinent to children living well with digital technologies as they relate to their most pressing online moral concerns (Harrison, 2014). The virtue of honesty is a key *cyber-virtue* because of how we represent ourselves in the digital space. We know that many people seek to augment their online personas – not always giving truthful accounts about who they are. Identity construction has become big business as evidenced by the popularity of apps such as Facetune. Concerns about honesty also relate to issues on the rise such as online plagiarism, fake news and piracy. Similarly, the virtue of compassion is linked to persistent moral concern for most parents, teachers and children today including; cyber-bullying, trolling and sexting. Research shows that cyber-bullying is rife in the UK and globally with surveys showing that at least 20% of teenagers are bullied online. A recent meta-analysis of studies showed that those who experience cyber-bullying are 2.3 times more likely to self-harm, 2.1 times more likely to exhibit suicidal behaviour and 2.5 times more likely to attempt suicide than those who don’t (Glendenning et al, 2018). Cyber-bullying is, at its core, the expression of unkind and uncaring behaviour online.

We argue there is a need for more intentional, planned and thought through educational approaches to close the gap. These should focus on the cultivation of the *cyber-virtues* in children more generally and specifically seek to hone the quality of *cyber-wisdom*. We now turn to how this vision might be achieved; first, by focusing on some more general educational principles and conditions required for carrying out this task; second, by focusing more specifically on the education of *cyber-virtue*.

4. Education for Cyber-Wisdom

Before turning to questions about what intentional efforts to cultivate *cyber-wisdom* designed for 21st century living might consist of, we must first say something about the conditions required for carrying out this task. These are the principles and positions that educators, including most importantly parents and teachers, should adopt if they are to be successful in their efforts to implement virtue-ethics based approaches to character education designed to address some of the more pressing moral issues of the day.

Technology determinists contend that technology follows a predictable path that is beyond cultural or political influence and that technology's 'effects' on society are inherent rather than socially conditioned. Modern day virtue ethicists must refute this position, as to be technological deterministic is to render character as irrelevant. We must help educators come to the view that digital technologies such as smartphones, laptops and tablets are essentially morally neutral (although the applications they host provide the conditions for an expansion of moral erring); it is the purposes they are made for and how they are used that is of moral importance. For example, although the affordances that the Internet offers, such as the ability to communicate with others anonymously, might increase the likelihood of immoral behaviour – this does not have to be the case. Adopting a non-deterministic position not only creates the space for, but also legitimates educational approaches that seek to cultivate character virtues compatible with living well online. Further, such an approach renders a common criticism of character education, that it can be indoctrinating, as largely irrelevant as the emphasis is put on critical thinking and personal agency. Educators should ensure focus is placed on cultivating character virtues and wisdom that helps children become more critical and discerning *users* the technology, rather than on the features of the technology itself. As Shannon Vallor (2018) argues, we will need more than just better technologies, we will also need better humans. Technology, is after all, only as good as the people who use it.

Whilst this article calls for a greater focus on virtue ethics in contemporary education to address the moral concerns raised by emerging technologies, it is not seeking to be reductionist. We agree with Bernard Williams (1985:19) when he says about ethics that '*Perhaps we need as many concepts to describe it as we need and no fewer.*' Life, and in particular life living with digital technologies, is complex. The approach we outline does not dismiss the usefulness of deontological and utilitarian philosophical moral theory, rather it puts some of their central tenets to use in service of a resurgent neo-Aristotelian virtue theory. As such, it is incumbent on educators not to adopt reductionist accounts but draw on all aspects of moral theory that are deemed to be useful. For example, a parent will likely want to impose some rules when giving their child their first smartphone. Likewise, many schools ban phones in the classroom for good reasons. These are necessary and proper ground rules, but they might better be viewed as the foundations on which character and *cyber-wisdom* can be built upon. In a similar vein, it is good if children are encouraged to think about the consequences of their online actions, their so-called digital legacies. This may prove challenging for the reasons outlined in the section above but could provide a source of evidence to help make better judgements about what the 'right' virtuous action is, in any given online situation. Our call is to not be overly reductionist and for educators to draw on principles contained in deontological and consequentialist theory when they serve a useful purpose.

There has been a tendency by some commentators to focus on technological dualities. By this we mean that they either reject all digital technology out of hand, insisting that it is damaging individuals and society more broadly. Such accounts can contribute to an unhelpful moral panic. Or, at the other end, there are accounts that are overly positive and skip over the genuine moral concerns that emerging technologies pose for all of our futures. Neither positions are helpful, nor representative of the day to day life experiences of children born in the digital age. Virtue educators must reject this duality and seek strategies that help children to live more wisely. This means making them aware of both the risks and opportunities associated with living in the digital era. In Prensky's (2001) language, if children today are considered to be digital natives (although this concept is highly contested in the literature) it is incumbent on educators born before the Internet was invented to view themselves as digital immigrants. Immigrants must learn new social rules, new languages and adapt to new cultural and social norms, and ideally do so

because they choose to – voluntarily. This means seeking out opportunities to learn from and alongside children, trying to understand their lives online and the ethical dilemmas they face. Educators, who voluntarily migrate into the digital worlds of children, bring their values, experience, expertise and wisdom with them and seek to adapt and apply these in different contexts.

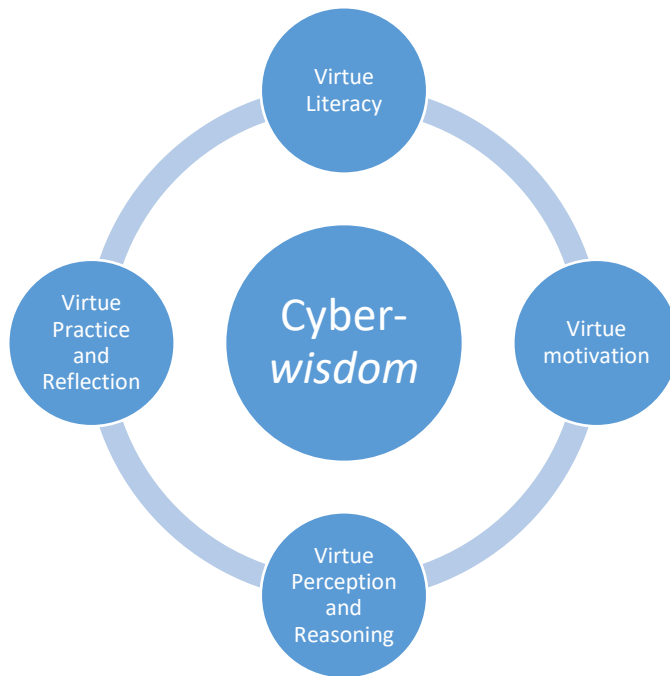
If virtue education, designed to address online moral wrongdoing, is to be successful then those tasked with undertaking this education must strive to not be deterministic, overly reductionist or overly focussed on technological dualities. Having said something about the conditions for a new educational approach, we now address the *how* question. How should we undertake intentional and purposeful educational efforts to cultivate the *cyber-virtues* and *cyber-wisdom*?

5. Educating Cyber-wisdom

The aforementioned resurgent interest in character education in the UK and elsewhere provides a good vehicle for explicit and intentional efforts to cultivate character and *cyber-wisdom* in children and young people. Established neo-Aristotelian character education pedagogical approaches can be focussed on honing these qualities. We conclude this article by outlining some of the core components that should be included in a curriculum designed for living well now, and, in the future. The discussion focuses on character *taught*. Although it is widely believed that character is largely *caught*, given the pressing concerns outlined in this article, we argue that we need formal educational activities that intentionally aim at providing children with a language and grounding in basic virtue ethical principles. Given that virtue language and principles are not currently dominant in the discourse of most young people's online lives, it is doubtful that they will be *caught*. The ultimate aim of 'teaching' about character, virtue and *cyber-wisdom* is that it leads towards character *sought* (Jubilee Centre, 2017). This is that children and young people habituate qualities of character that make it more likely they will formulate wiser moral judgements when faced with ethical dilemmas.

We propose that a taught course, designed to meet the moral challenges associated with current and emerging digital technologies, should prioritise five areas that contribute to becoming cyber-wise. These are virtue literacy, virtue motivation, virtue perception and reasoning and virtue practice and reflection and together they form a new educational model (see figure 1). These are five of the components of virtue detailed in the Jubilee Centres *Framework for Character Education* (Jubilee Centre, 2017). We briefly discuss each of these components below and detail promising pedagogical approaches that will contribute to the cultivation and / or honing of them.

Figure One: An educational model for the cultivation and honing of *cyber-wisdom* in children



A taught course must start with a focus on cultivating a 21st century virtue literacy. This should aim at providing a thick, virtue rich language, that children can use to evaluate and discuss their digital lives. The aim here is to help children understand not only what *cyber-wisdom* and key virtues including honesty and compassion mean, but more importantly how they play out in the online space. Moral theory should be taught as part of this approach. This will help children to better understand the moral motivations behind their own and other people’s online interactions. It will also show children ‘under the bonnet’ of the online (im)moral world – exposing the limitations of rules and consequence-based approaches whilst highlighting why character matters. We recommend the use of stories to cultivate virtue literacy. There is a long tradition of using stories to teach moral character (Carr and Harrison, 2015) and more recently evidence is emerging to show that targeted stories can enhance virtue literacy (Arthur, Harrison and Davison 2014). Educators should adopt or develop stories that showcase how different moral theories, and virtue ethics in particular, effects our online behaviour.

Virtue motivation is defined as having a strong desire to act on the virtues. When interacting online (as well as offline), we want children to seek out the honest and compassionate course of action. This requires them to prize living online with virtue. It is the difference between them utilising the Internet for moral reprehensible behaviour such as bullying and using it for morally praiseworthy behaviour such as running an online citizenship project. Educational efforts designed to enhance moral motivation might be seen as contributing to what is often called ‘*a general blueprint of the good life*’ that can be conveyed ‘*through teaching: a consciously accessible, comprehensive and systematic – if also flexible and open-textured – conception of what makes a human life go well*’ (Kristjánsson, 2015: 99). We suggest that exemplar and role models are utilised to engender a greater sense of moral motivation. Exemplar theory, applied to character education, can be a stimulus for eliciting greater virtue motivation through admiration and emulation (Zagzebski,

2017). Technology itself can be used to introduce exemplars. For example, in Nigeria two separate projects are introducing moral exemplars through virtual reality and online gaming to secondary school students.

We need to undertake deliberate educational activities that seek to prepare and prime children to deal virtuously with ethical dilemmas relatable to their digital lives. These activities should focus on fulfilling two aims; honing virtue perception and honing virtue reasoning. Virtue perception is defined as '[n]oticing situations involving or standing in need of the virtues' (Jubilee Centre, 2017: 8). Here educators should be tasked with helping children notice the morally relevant and virtue salient aspects of their digital lives. Virtue reasoning can only take place once a situation has been recognised to have a moral dimension to it. Reasoning involves making and justifying decisions based on virtue. Reasoning must also be reflective, allowing for the empowerment of the ethical self through autonomous decision making. Here, we recommend the use of ethical dilemmas in a taught course. For example, the *Making Wiser Choices Online* programme was designed to hone virtue perception and reasoning in 11-14 year olds. It was delivered through a structured four-week course and taught in computer science lessons. The programme involved students exploring real life ethical dilemmas that relate to their interactions on social media. A trial of the programme showed that it improved the virtue perception and reasoning of those who participated in it, compared to a control group (Harrison, Burns and Moller, 2018).

A taught course cannot be abstract, it must allow for experiential and reflective learning. Space and support should be given to children so that they can talk about their experiences of living with technologies in the 21st century. It is also important that children are exposed to examples of where technology has been used to further the common good. These experiences should be both critical and reflective. Activities that encourage formative self-evaluations of character and *cyber-wisdom* should be utilised here. Experiential learning and reflection are common pedagogical approaches in character education and there is much to be learnt from them which can be adopted and reapplied for the present purposes.

6. Concluding Comments

It is hypothesised that literacy, motivation perception, reasoning, practice and reflection, applied to the relevant virtues, contribute to the cultivation and honing of *cyber-wisdom* in children. Deliberate attempts to enhance these qualities will not, however, *make* children act with *cyber-wisdom* or indeed more virtuously (Blasi, 1980). The approach briefly explored above, will nevertheless contribute to a virtue-based education designed for 21st century living, in at least four ways. Firstly, it will bring awareness and raise the importance of virtue theory for a generation of young people to utilise throughout their lives. Secondly, it will counter concerns about 'technosocial opacity'. Thirdly, it will provide children with some important tools that will hopefully pre-empt unvirtuous behaviour and actions and provide them a path through the 'moral fog'. Fourthly, it will encourage children to reflect on their own expressions of character, virtue and *cyber-wisdom*. These are empirical claims which need testing in practice. However, the claims are based on presumed *conceptual* links between understanding, perception, reasoning, motivation and wisdom as laid out in an Aristotelian theory of virtue and practical wisdom (Darnell, Gulliford, Kristjánsson, Paris, 2019). The task at hand is to think about how conceptualisations and the components of virtue and *phronesis* need

to be reconsidered and applied to address the specific moral concerns of the day that are increasingly related to new and emerging technologies.

We end the article by calling for more theoretical, empirical and practical research to test out the claims we make above. This requires that funding is directed not just at developing new technology but developing new technological and educational interventions that will help educate the next generation of children to live well in an online world worth living in.

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