Why Confucianism Matters in Ethics of Technology

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ABSTRACT
There are a number of recent attempts to introduce Confucian values to the ethical analysis of technology. These works, however, have not attended sufficiently to one central aspect of Confucianism, namely Ritual ('*Li*'). *Li* is central to Confucian ethics, and it has been suggested that the emphasis on *Li* in Confucian ethics is what distinguishes it from other ethical traditions. Any discussion of Confucian ethics for technology, therefore, remains incomplete without accounting for *Li*. This chapter aims to elaborate on the concept of Confucian *Li* and discuss its relevance to ethics of technology. Particularly, by referring to *Li*'s communicative, formative, and aesthetic function, I formulate an approach to ethics of technology with an emphasis on community, performance, and the aesthetic and demonstrate how this approach proceeds with the ethical analysis of technology. In doing so, I attempt to answer the question: *why Confucianism matters in ethics of technology*.

KEYWORDS: *Confucian ethics; Ritual; Rites; Ethics of technology; Aesthetics; Body; Community*.

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Why Confucianism Matters in Ethics of Technology

The idea that Confucianism matters to ethics of *technology* may seem peculiar, as it has long subordinated the interest in science and technology to the pursuit of ethical perfection, and thus undervalued the role of science and technology. However, with the contemporary New Confucianism (re-)affirming the importance of democracy, science, and technology, alongside Confucianism, for the future of Chinese culture in the mid-twentieth century, they have not only defended the compatibility of Confucianism and modern science and technology, but also argued for the possible contribution of Confucian values for a more humane development in science and technology (He 2018). Hence, the idea that Confucianism does matter to ethics of technology should not be too surprising.

Indeed, there are recent attempts to introduce Confucian values to ethical analysis of technology (see, e.g. Wong 2012; Vallor 2016). These works, however, have not attended sufficiently to one central aspect of Confucianism, namely Ritual ('*Li*'). *Li* is central to Confucian ethics, and it has been suggested that the emphasis on *Li* in Confucian ethics is what distinguishes it from other ethical traditions (see, e.g. Fan 2010; Bockover 2012; Stalnaker 2016; Olberding 2015, 2016). Accordingly, any discussion of Confucian ethics for technology remains incomplete without accounting for *Li*. The aim of this chapter, therefore, is to elaborate on the concept of Confucian *Li* and discuss its relevance for ethical reflection of technology.

I begin with Joel Kupperman's critique of mainstream analytic ethical theories as being irrelevant and incomplete, and then suggest that his critique also applies to the existing discussions in ethics of technology. Kupperman's critique usefully reminds us of the ethical importance of styles of interaction and, relatedly, the role of Confucian *Li* in informing and guiding the styles, which have so far escaped the attention of philosophers and ethicists of technology. Hence, I shall elaborate on the idea of Confucian *Li* and examine its role in ethical reflection. After illustrating the idea of Confucian *Li*, I shall discuss different ways in which it is relevant to the ethical analysis of technology. Particularly, by analyzing *Li*'s communicative, formative, and aesthetic function, I formulate an approach to ethics of technology with an emphasis on *community*, *performance*, and *the aesthetic* and demonstrate how, based on Confucian *Li*, a Confucian ethics of technology may work. In doing so, I hope to have answered the question: *why Confucianism matters in ethics of technology*.

Big Moment Ethics, Ethics of Technology, and the Ethical Importance of Style

Joel Kupperman (2002, 2007, 2010) argues for the importance of Confucian ethics by noting a significant gap in mainstream analytic ethical theories. He characterizes mainstream ethical theories as "big moment ethics" that centers on high stake ethical decisions for infrequent, one-off situations, which are often presented in a decontextualized manner. An

obvious example is the trolley problem, where we are asked to decide whether one should sacrifice one life to save five, but have been provided artificial and/or minimal details of the scenario.[1] Kupperman (2007) argues that the "big moment ethics" is unsatisfactory, as the ethical judgments derived from the decontextualized cases often do not generalized once contextual details are supplied. "Big moment ethics", therefore, is unhelpful in guiding our judgments and behaviors in the contextualized and richly textured ordinary life. More importantly, Kupperman points out that, by focusing on the infrequent, one-off situations, the "big moment ethics" has truncated ethical reflection and left out most of our everyday life from it as "ethical free-play zone, in which one can do whatever one likes [and] yields an ethics that does not make demands at all often [nor] continuously" (Kupperman 2002, 40). It thus omits ethically significant issues in everyday life that demand a sustained effort, such as a person's style of life, personal relationships, and self-improvement. In short, Kupperman criticizes mainstream ethical theories as *irrelevant* and *incomplete*, that is—the decontextualized examples discussed in mainstream ethical theories offer little guidance for ordinary situations, and they also neglect meaningful ethical questions in everyday life that require on-going reflection by focusing on the rare, one-off cases.

In ethics of technology, while there are discussions focusing on rare, one-off scenarios, e.g. existential risks (Bostrom 2002) or debates highly speculative in nature (cf. Nordmann 2007; Nordmann & Rip 2009) that are susceptible to Kupperman's critique, the field has undergone a number of 'turns' that seems to have addressed Kupperman's charge to the mainstream ethical thought. For example, since 'the empirical turn', philosophers and ethicists of technology have paid close attention to how technologies are *actually* created, how they *actually* work, and how they *in reality* co-shape the self and society with their designers, users, and other related parties (Kroes & Meijers 2000; Brey 2010). Also, 'the design turn' (van den Hoven 2008) and 'the axiological turn' (Kroes & Meijers 2016) have invited philosophers and ethicists to explicate values in technology and proactively embeds them into technologies to make technologies conducive to human well-being and to a good society. So construed, current discussions in the ethics of technology do attend to the specifics of technology and everyday life and allow a much broader scope of ethical reflection than the "big moment ethics".

For instance, postphenomenology, i.e. one of the most elaborated approaches in philosophy and ethics of technology since the empirical turn (see, e.g. Ihde 1990; Verbeek 2005; Rosenberger & Verbeek 2015), can be viewed as an answer to Kupperman's critique. Postphenomenology examines and evaluates how technologies mediate the relations between human beings and the world, and it discusses ways to improve individual and societal well-being through different forms of technological mediation via the design and (everyday) use of technology. In effect, Peter-Paul Verbeek's postphenomenological

[1] The trolley problem has generated an enormous scholarly discussion, and it is not my intention to discuss it (and other similar ethical dilemmas) in this chapter. The intention is to point out, as Kupperman also does, that mainstream analytic ethical theories often refer to decontextualized cases that are highly unlikely to be encountered by people in their everyday life. For a recent overview of the trolley problem, see, e.g. Kamm (2015).

approach proposes deliberately using and designing technologies to shape human subjectivity and establish oneself as an ethical subject, which is taken to be a continuous (self-)practice (Verbeek 2011). To ethics of technology—at least, to those approaches that take seriously the various 'turns' in philosophy of technology—Kupperman's critique does not seem applicable anymore.

Yet, Ike Kamphof (2017) recently argues that the postphenomenological approaches have overemphasized the role and power of individuals in shaping human subjectivity through the use and design of technologies, and those approaches have underplayed the significance of relations between individuals in incorporating (new) technologies into practices. She argues that the need to maintain good relations with the others, i.e. in Kamphof's case, the good relation between caregivers and elderly clients, should inform how technologies are to be used, and it could be achieved only by carefully balancing users' feeling, the feeling of others in the relation, and the environment where the technologies are being used. Here, Kamphof's argument usefully draws our attention to the fact that a proper use (and design) of technology does not merely amount to the shaping of *oneself* or establishing *oneself* as an ethical subject, but it must include the thoughts and feelings at the recipient end, and thus it is *inevitably* relational.[2]

Although Kamphof has not explicitly formulated her argument in terms of *styles of interaction*, she rightly emphasizes that good relations between individuals, e.g. the caregivers and the elderly clients, are maintained as much by using (or non-using) technology for suitable ends as by an appropriate style of interaction with others through technology. By emphasizing the self and subjectivity, it is this style of interaction with others through technology that postphenomenological approaches have not sufficiently accounted for.[3] In this respect, Kupperman's critique remains applicable to ethics of technology to the extent that the existing approaches fail to sufficiently integrate people's style of interaction, personal relationships, and self-improvement in the ethical reflection of technology.[4]

[2] Unless, of course, the consequences arising from the use (and design) of technology is entirely personal. Yet, even then it is questionable whether the person who uses this 'purely' personal technology can avoid the consideration of others, as his interaction with others may have been altered by the 'purely' personal technology.

[3] For a defense of the postphenomenological approach from Kamphof's critique, see Sharon (2017). It is useful to point out that Sharon does not reject Kamphof's focus on personal relations, but argues that it offers a supplement but not an alternative to the postphenomenological approach. In this sense, Sharon too acknowledges an emphasis on the role and power of individuals in existing postphenomenological approaches.

[4] Here, one may argue that the approaches to ethics of technology inspired by Aristotelian virtue ethics do include personal relationships in their ethical reflection, e.g. Vallor (2016); and, thus even if Kupperman's critique applies to postphenomenological approaches, it does not apply to them. Kupperman's response to this objection comes in two parts: firstly, he notes that Aristotelian virtue ethics has, in fact, paid little attention to the style of interaction, understood as the expressions of attitudes and behaviors for specific scenarios (Kupperman 2002); and, secondly, Kupperman (2004) argues that Aristotelian virtue ethics views ethical decisions as a one-person game but not a communal, multi-person game, and thus does not sufficiently capture the relational nature of ethical decisions.

If Kupperman's critique remains relevant, his insights on the contribution of Confucian ethics to mainstream ethical thought should also be relevant to the ethical reflection of technology. Before elaborating Kupperman's view in detail, however, it is helpful to explain why Confucian ethics is particularly helpful in foregrounding or capturing the relational dimension of ethics and the on-going nature of ethical reflection which Kupperman deems essential to ethical reflection.

From the Confucian perspective, the notion of personhood is characterized as relational and developmental (Yu & Fan 2007; Wong 2012).[5] The Confucian notion of person is relational, as Confucians believe that human beings are born into a web of familial and social relationships and that they can only mature and flourish within such a web of relationships by fulfilling the role obligations prescribed by their roles and relationships. Roles and relationships, therefore, are necessarily foregrounded in Confucian ethics as they are its normative foundation. Also, the Confucian notion of person is developmental, as Confucians understand personhood to be neither static, i.e. a person is not to be identified by any sets of characteristics, nor given, i.e. human beings are not born as persons, but they learn and practice in everyday life to *become* persons. Hence, Confucian ethical cultivation is necessarily an on-going process that covers every aspect of one's life. Here, philosophers and ethicists of technology can already learn from the Confucian notion of personhood by recognizing the place of personal roles and relationships in the making of ethical judgments and by reconsidering the significance of the mundane in ethical life (Wong 2012).

Kupperman introduces 'naturalness' (or, 'harmony') as another normative concept that the mainstream ethical thought can learn from Confucian ethics. By 'naturalness', Kupperman refers to the idea that "the agent is reasonably comfortable with her or his behavior, and there is no conflict between the behavior and what the agent normally is like" (Kupperman 2002, 44). He illustrates the idea of naturalness (of behaviors) with the expression of gratitude: many of us can say 'thank you' at ease in return for a favor done, but children may have difficulties in their expression of gratitude, i.e. children may forget to do so as they get overwhelmed by the favor, they may be confused and hesitate to say 'thank you', or they may simply be rude and thus have to be reminded. In the case of children who are not at ease and fluent in expressing gratitude, even if they *do* say 'thank you', their behaviors are not natural (or harmonized), and the unnaturalness of behaviors demonstrates something amiss *ethically*. As Kupperman argues, people's style, i.e. *how* something is done and said, presents and reveals their attitudes and who they are, which, in turn, is essential in building and maintaining personal relationships (Kupperman 2002, 2007). So, the children who reluctantly say 'thank you' may have *said* 'thank you', but their style of interaction has failed to convey thankfulness or show themselves *to others* that they are a gratuitous person. Interestingly, the ethical imports of styles of interaction have also been asserted by enactivist philosophers and cognitive scientists, who point out that "different styles of interaction, with their varying affective overtones, will make an ethical difference,

[5] The Confucian notion of personhood is also characterized as virtue-based. For a detail discussion of the Confucian notion of personhood and its implication to ethics of technology, see Wong (2012).

in the sense that they will modulate the ethical colouring of any given situation to which the categories of ethical description or appraisal may apply" (Colombetti & Torrance 2009, 520; also, see Hutton 2006).

The Confucian ideal of naturalness, therefore, compels us to consider the ethical imports of not only *what* we should do and say, but also *how* we should do and say them—or, as Kongzi remarks on filial piety in *The Analects* 2.7 and 2.8,

> The Master said, "Nowadays 'filial' means simply being able to provide one's parents with nourishment. But even dogs and horses are provided with nourishment. If you are not respectful, wherein lies the difference?" (Slingerland 2003, 10).
>
> The Master said, "It is the demeanor [of filial piety] that is difficult. If there is work to be done, disciples shoulder the burden, and when wine and food are served, elders are given precedence, but surely filial piety consists of more than this" (Slingerland 2003, 10).

It is important to act and speak with an appropriate attitude—even when *what* we do and say are already the morally *right* things to do and say, e.g. providing for parents, shouldering teacher's burden of work, or giving elders precedence, as our attitudes and our self are expressed and revealed by *how* we do and say the right things.

In short, Confucian ethics recommends a close look at people's style of interaction for it communicates people's attitudes (about others) and shows themselves to others, which are essential in ethically fruitful connections with others.[6] But what does the shift to the style of interaction as recommended by Confucian ethics mean to the ethical reflection of technology? Or, simply, from the Confucian perspective, how styles of interaction can be introduced to ethics of technology? To answer these questions, it is essential to first discuss what guides people's style of interaction. For Confucians, the answer is ritual ('*Li*'): it is *Li* that informs *what* and *how* people should do and say in different personal and social circumstances.

A Primer on Confucian Ritual ('*Li*')

The Analects 12.1 writes, "[r]estraining yourself and returning to the rites ['*Li*'] constitutes Goodness ['*Ren*']" (Slingerland 2003, 125); Confucian *Li*, often translated as 'ritual', 'rites' or 'etiquette', assumes an essential role in Confucian ethics as a *normative* standard for judgment and behavior, and it also informs and guides people's style of interaction.[7]

[6] I believe the aim of Kupperman's critique is to foreground the 'hows', which have mostly been ignored in analytic ethical theories. So, it is important to note that his critique does not entail that a rejection of the 'whats' in ethical reflection.

[7] The normative priority of *Li* in relation to *Ren*, often translated as 'humanity', 'goodness', 'benevolence', remains a subject of intense discussion. See, e.g. Li (2007). I shall not settle the priority between *Li* and *Ren* in this chapter, as an answer to this question has little implication to the current discussion.

In Confucian philosophy[8], *Li* refers to both ceremonial and formal rituals, e.g. sacrificial offerings, burial ceremonies, and mourning practices, and behavioral patterns for everyday encounters. Accordingly, Confucian *Li* is not a set of *abstract* normative principles, but a collection of *substantive* normative instructions that informs and guides people's judgment and behavior. Some examples from *The Analects* should be illustrative of the substantive requirements it prescribes,

> "When called on by his lord to receive a guest, his countenance would become alert and serious, and he would hasten his steps. When he saluted those in attendance beside him—extending his clasped hands to the left or right, as their position required—his robes remained perfectly arrayed, both front and back. Hastening forward, he moved smoothly, as though gliding upon wings. Once the guest had left, he would always return to report, "The guest is no longer looking back."" (The Analects 10.3, in Slingerlands 2003, 99)
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> "The gentleman did not use reddish-black or maroon for the trim of his garment, nor did he use red or purple for his informal dress. In the summer, he wore a single layer of linen or hemp but always put on an outer garment before going out. With a black upper garment he would wear a lambskin robe; with a white upper garment he would wear a fawn-skin robe; and with a yellow upper garment he would wear a fox-fur robe. His informal fur robe was long, but the right sleeve was short. He required that his nightgown be knee-length. He wore thick fox and badger furs when at home. Except when he was in mourning, he never went anywhere without having all of his sash ornaments properly displayed. With the exception of his one-piece ceremonial skirts, his lower garments were always cut and hemmed. He did not wear [black] lambskin robes or dark caps on condolence visits. On the day of the "Auspicious Moon," he would always put on his [black] court attire and present himself at court." (*The Analects* 10.6, in Slingerlands 2003, 100-102)
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> "He [i.e. Kongzi] would not sit unless his mat was straight ('*Zheng*')" (*The Analects* 10.12, in Slingerlands 2003, 105)

As these examples in *The Analects* demonstrate, Confucian *Li* ranges from the norms for formal occasions, e.g. receiving guests, to the patterns of behaviors in everyday life, e.g. a person's clothing and posture, and it prescribes appropriate responses and behaviors to people, with reference to their role(s) and relations with others, in specific social circumstances. It is useful to emphasize that the instructions, which involve Kongzi as an exemplar, do not only advise *what* is to be done and said but document in minute detail *how* they are to be completed. It is also important to note that, while the instructions in

[8] My discussion of *Li* refers primarily to *The Analects* and *Xunzi*, which are considered to be the key texts for understanding the idea of *Li* in (early-)Confucianism (Radice 2017). I should already point out that this section is *not* intended to be an exegesis or critical (historical-)textual study of the two texts, the modest aim of this section is to introduce a 'workable' idea of *Li* that can enrich the ethical analysis of technology.

Confucian *Li* appear to be extremely rigid, Confucian ethics does have room for (reflective) disregards and exceptions to it (Li 2007; Kim 2009, 2010). Indeed, since Confucian *Li* depends on people's role(s) and their relations with the interacting partners as well as the social circumstances where the interaction occurs, which are contextual and fine-grainedly textured, personalization and improvisation of *Li* will be required for any successful performance (Ames 2002).

In the discussion of the ethical importance of Confucian *Li*, three lines of argument can be discerned. The first line of argument focuses on the *communicative* function of *Li*. For instance, Chenyang Li (2007) conceptualizes *Li* as "cultural grammar" for personal and social interaction within a community. He points out that, like linguistic communication, which is based on languages and their grammatical rules, personal and social interaction takes place against the background of values and is governed by norms of interaction. In other words, *Li* serves as a public, shared and comprehensible medium to interpret people's responses and behaviors at various social circumstances. Moreover, since *Li* is passed down from generation to generation, it embodies the values of the tradition and provides a normative standard in accordance with *that* tradition. Successful performance of *Li*, therefore, expresses the values of a community and its tradition, and those who belong to that community, or who are familiar with that tradition, can grasp the meaning (and values) of the performed *Li*. It is in this sense, Mary Bockover (2012) argues that Confucian *Li* can be viewed as a cultural-specific "body language".

The *ethical* dimension of Confucian *Li*'s communicative function is best described in Kelly Epley's argument for the role of *Li* in caring (Epley 2015). She rightly points out that expressions of need and care are not isolated from social conventions and communal standards of manners. In effect, social conventions and manners play a constitutive role in comprehending needs and realizing care. Imagine a person who fails to attend to another person's need because their expressions of need are different, e.g. a community where requests for help must be *explicitly* stated (Community A) versus one that does not require or discourage explicit requests for help (Community B). The person from Community A may fail to offer help to the person from Community B even when the latter clearly requires help but does not request for it explicitly, and it is the result of their different expressions of need.

Relatedly, a person, who are provided care by other people, may not be sufficiently cared for when there is a mismatch of the expressions of care. It could be so when the person does not recognize the care provided by others as caring because care is expressed differently in his community. In short, *Li* is of ethical import as a shared resource for understanding and interpreting need and care—or, for that matter, other important shared values as well; and, it creates a community of care where the members can recognize the need of each other and respond appropriately.[9] As Ana S. Iltis has argued, rituals create and shape the social reality of ritual participants and observers by establishing and reinforcing their expectations, relationships, and roles (2012, 21-23). Hence, knowing rituals means that

[9] For a discussion on the community-forming and communal bonding potential of Confucian *Li*, see Bockover (2012).

knowing what to expect from others and what others expect from one, and it also means that knowing how one is related to others and what *role obligations* one has. A failed ritual performance, therefore, can be seen at once as a communication, social, and *ethical* failure. Here, it is important to reiterate that *Li*—or, social conventions and manners—does not only prescribe *what* a person should do and say, but also *how* it should be done and said, and that both *what* and *how* things are done and said are essential in understanding and interpretation of people's responses and behaviors.[10]

The second line of argument for Confucian *Li* is based on its *formative* function, namely practice and performance of *Li* is essential to individual and societal flourishing. Here, Xunzi's description of the formative function of *Li* is instructive,

> "Ritual ['*Li*'] cuts off what is too long and extends what is too short. It subtracts from what is excessive and adds to what is insufficient. It achieves proper form for love and respect, and it brings to perfection the beauty of carrying out *yi* ['righteousness'] (Hutton 2014, 209).

Being concerned with human being's natural inclination towards selfishness, Xunzi argues that *Li* is essential to tame our (excessive) desires and heighten our (deficient) ethical feelings by prescribing appropriate emotional responses and behaviors for various circumstances; and, it is through practicing and performing *Li*, people become accustomed to the right emotional responses and behaviors, and thereby transforming their dispositions (Sung 2012; Olberding 2015, 2016; Stalnaker 2016).[11]

The importance of the bodily-performative dimension of *Li* deserves to be reemphasized. As bodily practice and performance, Confucian *Li* must describe *how* it is to be executed to avoid being vacuous.[12] Moreover, the bodily-performative dimension of Confucian *Li* allows people to internalize norms and values and enables them to react ethically to different situations in spontaneity, which is crucial to individual ethical life because many of our everyday ethical judgment and behavior are pre-reflective and influenced by the situations (Olberding 2016; also, see Hutton 2006; Slingerland 2011; Seok 2012). Alternatively, it has also been suggested that the practice and performance of Confucian *Li* creates an "as if" space, in which people's dispositions are trained and refined (Puett 2015). According to this understanding of *Li*, the bodily-performative dimension is also essential because it is through the (re-)enactment of critical events in the "as if" space, individuals acquire the emotional and physiological experience and learn to modulate them. The (re-)enactment, therefore, has to include minute details of the critical events in order to fulfill the purpose of training and refinement.

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[10] Both Buss and Calhoun offer a similar argument for the ethical importance of manners in terms of their expressive function, see Buss (1999) and Calhoun (2000).

[11] Olberding's discussion of Xunzi's defense of ritual mourning against Zhuangzi's critique offers an instructive example for the working of Confucian *Li*, see Olberding (2015).

[12] Here, a comparison with the acquisition of (bodily) skills should be useful. For example, consider learning how to play tennis. It is not sufficient to learn the rules of the game and the techniques and strategies available, one must also learn how to executive those techniques and strategies. Moreover, tennis players improve their game by honing and refining *the ways* they play, i.e. their gesture, strokes, etc. Also, see Stalnaker (2016) for his comparison of ritual with music and cooking.

Finally, there is also an *aesthetic* dimension in Confucian *Li* as illustrated in *The Analects* (e.g. 10.6) and in *Xunzi*, e.g.

> "If your exertions of blood, *qi*, intention, and thought accord with ritual, they will be ordered and effective. If they do not accord with ritual, they will be disorderly and unproductive. If your meals, clothing, dwelling, and activities accord with ritual, they will be congenial and well-regulated. If they do not accord with ritual, you will encounter dangers and illnesses. If your countenance, bearing, movements, and stride accord with ritual, they will be graceful. If they do not accord with ritual, they will be barbaric, obtuse, perverse, vulgar, and unruly." (Hutton 2014, 10)

When one acts and speaks with Confucian *Li*, i.e. the person acts and speaks with appropriate styles, her behaviors will be "congenial and well-regulated" and "graceful"—or, more generally, beautiful. Olberding (2015, 2016) explains the ethical and social implications of the *beautification* function of Confucian *Li* by drawing attention to the power of positive aesthetic properties to mitigate pre-reflective, negative impressions arise from 'ugliness' (or, incivility) of behaviors and social environments. By conforming to Confucian *Li*, i.e. a communal standard of appropriate emotional responses and behaviors, one beautifies her emotional response and behaviors by making them more pleasant and agreeable, thereby reducing the potential for conflict and encouraging social cooperation.[13] Or, as Yuriko Saito astutely notes, "[t]he aesthetic appeal of an elegant body movement thus is not for the sake of aesthetic effect alone but more importantly a sensuous display of one's other-regarding considerations" (Saito 2017, 211).

To summarize, the aim of this section is to introduce a practicable idea of Confucian *Li* and illustrate its relation to styles of interaction. Briefly, Confucian *Li* prescribes *what* a person should do and say, and *how* they should do and say them in accordance with their role(s) and relation(s) with the interacting partners and with the circumstance she finds herself in. To Confucian ethics, *Li* and the style of interaction prescribed by it are essential because they enable individuals in the community, or those who share a tradition, communicate meaning and values appropriately. At the same time, the practice and performance of Confucian *Li*, understood as a bodily activity, allow individuals to refine and modulate their (pre-reflective) sensibilities of others and the environment. Finally, Confucian *Li* also accounts for the power of the aesthetic properties in ethical and social realms and includes an aesthetic dimension.

From Ritual ('*Li*') and Technology to Ritualizing Technology

Referring to Confucian *Li*, we can now rethink ethical reflection of technology. In this section, I shall describe what the communicative, formative, and aesthetic functions of Confucian *Li* emphasize in the ethical analysis of technology. In doing so, I articulate what Confucian ethics can contribute to ethics of technology, namely a different approach to the ethical

[13] Also, see Kim (2012) for an exposition of Xunzi's view on the function of *Li* in relation to the acquisition of civic virtues.

analysis of technology focusing on community, performance, and the aesthetic of technology.

The communicative function of *Li* reminds us of *Li*, i.e. the prescribed styles of interaction, social conventions, and manners, is a shared medium of meaning and values within a community, and thus requires us to consider *how*, and *if*, meaning and values are expressed and revealed through a particular style of interaction at a specific social circumstance. For ethical analysis of technology, this shift to *Li* necessitates an examination not only of *what* values are embedded in technology, but *how* these values are, or can be, manifested through the use of technology and in technologically-mediated interactions. At the same time, this shift to *Li* also implies that we need to consider (i) the recipients, who comprehend and interpret the values expressed and revealed by the use of technology and in technologically-mediated interactions, and (ii) the existing styles of interaction, social conventions, and manners in a community, which provide the common ground of understanding and interpretation of need and care as well as other important shared values. Accordingly, a Confucian ethical analysis of technology has to be both (i) relational and (ii) communal.

Here, Kamphof's discussion of how caregivers adopt tele-monitoring system is instructive (Kamphof 2017). She documents how caregivers use motion sensors in different ways that re-articulate the meanings of privacy *for* and *with* the elderly clients; and, in doing so, the caregivers could respect their privacy while using the tele-monitoring system. Kamphof notices that the caregivers' concern is not only about the value—or, the lack thereof—in the system *per se* but also about *how* the value of privacy and a good caregiver-patient relation are, or can be, realized in use with the elderly clients. Kamphof's discussion is illustrative of the importance of both the 'hows' and the relational dimension in the ethical analysis of technology.

From a Confucian perspective, however, what Kamphof's analysis has still missed is the communal dimension for understanding and interpreting the caregivers' use of the system. More specifically, how—or, through which styles of interaction—care is expressed and revealed in *that* community, how does the introduction of tele-monitoring system enhance or interfere with the caregivers' original style of interaction, and whether the elderly clients understand the altered style of interaction as care and why. Of course, if a good caregiver-patient relation has been maintained after the introduction of the tele-monitoring system, the elderly clients certainly see the new style of interaction, as it has been altered by the technology, as care. However, the major insight from the above discussion of Confucian *Li* is that philosophers, ethicists, and technology designers are still in need of a *normative* standard to think through whether, and to what extent, the *different* styles of interaction introduced by specific technologies are appropriate or not; and, the Confucian ethics of technology answer these questions with reference to *Li*.

What is also missed is the opportunity to use *Li*, i.e. the shared medium of meaning and values, to improve technology use and technologically-mediated interaction by reproducing or extending the *already* appropriate style of interaction in the design and use of

technology.[14] In this respect, the Confucian perspective agrees with Darian Meacham and Matthew Studley's (2017) rejection of the need of robotic 'mental' states for robots to perform caring acts and supports their claim that *robotic expressions* of care, in terms of the robot's gestures, movements, and articulations, are sufficient for a caring relation. They argue that the salient feature of a care environment is the caregivers' expressive behavior but not their mental states, and further point out that in the care environment where caregivers are under stress, they can only maintain the care environment and caring relation through deceptive *expressions* of care.

If the robotic expressions do reflect appropriate styles of interaction of caregivers should have towards the recipients of cares and the recipients do viewed them as care, the Confucian ethics of technology should also see the idea of 'robotic care' as ethically acceptable. It is important to point out that the robotic expressions must *fit* the existing styles of interaction, social conventions, and manners in a community for them to be viewed by the recipients (and the caregivers) as care. Hence, the design and assessment of robotic expressions should be based on the rituals of care in the community.

In other words, a Confucian approach proceeds with the existing styles of interaction, social conventions, and manners, and viewed them as *a* normative basis to evaluate the changes in behaviors and interactions as a result of the use of technology and technological mediation. For example, the Confucian approach may find social media platforms to be ethically problematic because conventional norms of communication are easily breakable due to their design features, and thus renders the expression and comprehension of meaning and values in a community unstable and ineffective (Wong 2013). Alternatively, the Confucian approach also grants that the existing styles of interaction, social conventions, and manners can be employed to improve technology design and use by offering a common medium of meaning and values for designers, users, and recipients, as in the case of robotic care described by Meacham and Studley. Accordingly, referring to its communicative function, Confucian *Li* can assume two different but related roles in the ethical analysis of technology, namely it can act both as a *normative standard* for ethical analysis and also as a *normative resource* for devising technology design and use.

The formative function of Confucian *Li* aims at refining and modulating our emotional and physiological experience, and thereby honing individuals' pre-reflective responses and behaviors to everyday ethical encounters. Moreover, the refinement and modulation of experience are to be achieved through bodily practice and performance. Here, Confucian ethics calls for a return to the role of the body in ethical development, and thus connects it to the recent research on embodied cognition (Seok 2012; Ott 2017). In a similar vein, ethical analysis of technology should be more receptive to the bodily influences of technology, particularly the possibility of structuring bodily movements through technology design and use (see, e.g. Tuuri *et al.* 2017; Parviainen & Pirhonen 2017) and the affective

[14] A similar point has also been made by Pols (2017) in her commentary on Kamphof's analysis without referring to styles of interaction, social conventions, or manners but including practices such as "'being watched' and hence 'looked after'", "say good-night", etc.

influences from different technologies (see, e.g. Slaby 2016). A Confucian approach, therefore, should attend to the *bodily* and *affective* impacts of technologies with reference to *Li* in a community and its tradition. It may even warrant *pro-actively* shaping individuals' bodily and emotional states in accordance with Confucian *Li* through the use of technology and in technologically-mediated interactions (see, e.g. Slingerland 2011; Sarkissian 2017).

Interestingly, Kristina Niedderer (2007, 2014) has advanced the idea of "Mindful Design" and illustrated the possibility to raise users' attentiveness of the relational, social, environmental consequences of their actions through the design of objects. For example, she contemplates a design of mobile phone that "shout back" at its users should they be talking too loudly in public places, thereby alerting the users the disrupting impacts they have on others around them and leading them to adjust the level of their voice (2014). Niedderer's "Mindful Design" approach converges with Confucian ethics' concerns over people's inappropriate emotional responses and behaviors as a result of their inattentiveness to appropriate styles of interaction, social conventions, and manners of the situations, or in the case of Confucian ethics inattentiveness to *Li*. In line with Niedderer's "Mindful Design", we can imagine the Confucian ethics of technology to advocate designing technology that enables individuals to be more attentive to the appropriateness of their performance of actions with reference to specific situations. For Confucians, therefore, technology can be 'ritualized' to support people's ethical development.

Finally, the aesthetic dimension of Confucian *Li* should also draw attention to the ideal of 'beauty' in the ethical analysis of technology. The ethical and the aesthetical are intertwined in Confucian ethics, that is—positive aesthetic features are considered to be *ethically* desirable. Aesthetically pleasing technological design and use are ethically significant because they can reduce potential friction for individuals and in their relationships. Accordingly, Confucian ethics adds an additional layer to the ethical analysis of technology, namely the *aesthetic* features in technology design and use. These aesthetic features, of course, are important to the extent that they make technology more pleasant and agreeable in relations and for the community (see, e.g. Pols 2017).

Conclusion

This chapter aims to explore the contribution of Confucian ethics to the ethical reflection of technology. In this chapter, I suggest that Confucian *Li*, with its emphasis on community, performance, and the aesthetic, provide an alternative approach to ethics of technology. Particularly, I argue that as an embodiment of communal and traditional values, Confucian *Li* can be used as a normative standard for ethical analysis of technology, or it can be used in informing the design of—or, better, the ritualization of—technological use and design. Before ending this chapter, I shall briefly outline some *theoretical* and *ethical* challenges to my Confucian approach to ethics of technology, as they are useful to indicate future research for this approach.

For instance, the communicative function of Confucian *Li* could face two objections, i.e. the *normative basis* of *Li* and the possibility of changes in *Li*. So far, I have bracketed the

debate on the normative basis of *Li*, and assumed that it *is*, and *should be*, the medium of meaning and values for a community and in a tradition. However, one—especially those who are non-Confucians—can reasonably question whether and why Confucian *Li* should be the normative ground for communicating meaning and values. Moreover, if Confucian *Li* indeed assumes the normative ground, whether and when it can be altered. The possibility of changes is particularly important for ethics of technology, as technology is often 'disruptive'; and, the Confucian approach will be inherently dismissive and conservative if changes are difficult. Accordingly, a complete account of the Confucian approach requires an account of Confucian *Li*'s normativity and the mechanisms for changes in *Li.*

In relation to the formative function of Confucian *Li*, a potential concern is about the boundary between ethically permissible and impermissible refinement and modulation of emotional and physiological experience. Here, the Confucian approach must articulate a clearer account of why refinement and modulation of experience are essential to ethical lives of individuals (see, e.g. Sarkissian 2017).

There is much work to be done to fully articulate a Confucian approach to ethics of technology based on *Li*. This chapter, therefore, should be viewed as a modest attempt to introduce the idea of Confucian *Li* to the ethical analysis of technology and describe how it can offer an alternative perspective to ethics of technology.

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