Ethics, Society, and Technology: A Confucian Role Ethics Perspective

Qin Zhu
Division of Humanities, Arts & Social Sciences
Colorado School of Mines
E-mail: qzhu@mines.edu

Abstract: This essay provides a very brief overview of Confucian ethics that focuses on the role-based morality. It compares Confucian ethics with two dominant schools of thought in Western ethics deontology and consequentialism. This essay then discusses how Confucian ethics provides a unique way to think about social and political issues such as how the political leaders are selected and evaluated, the ethical justification of political legitimacy, the prioritization of economic, social, and cultural rights over other rights, and moral egalitarianism. Finally, this essay explores ways in which Confucian ethics serves as a useful intellectual resource for examining the issues arising from the ethical assessment of (emerging) technologies and the professional formation of engineers. The Appendix of this essay includes some teaching resources that instructors can employ to teach students about ethics, society, and technology from a Confucian role ethics perspective.

Keywords: Confucian ethics, Confucian society, Technology and society, Confucian ethics of technology, Global studies

Introduction

In the philosophy of technology literature, there has been an increasing interest in incorporating non-Western especially Eastern Asian ethical traditions such as Confucian ethics into the study of ethical issues associated with technology and engineering (Coeckelbergh, 2020; Vallor, 2016). However, it is rather challenging to find reading materials on Confucian ethics that are accessible to undergraduate students with limited or no prior knowledge of Chinese civilization. Instructors who are eager to include one or a few modules on Confucian ethics and technology in their undergraduate classes have often found extremely difficult to identify appropriate readings for their students. It is even more challenging for these instructors to find teaching resources (e.g., in-class activities or exercises) that students can “apply” Confucian ethical teachings to reflect on realistic social and professional issues.

Therefore, unlike most existing scholarly articles on Confucian ethics that were often written by scholars for their colleagues, this essay serves a different purpose. It provides tangible concepts, tools, and resources that faculty with limited or no prior training in Chinese philosophy can use to teach their undergraduate students: (1) some fundamentals about Confucian ethics and society; and (2) how to employ Confucian ethics to analyze issues in the ethics of technology and engineering.
In doing so, this essay first introduces some fundamental ethical doctrines in the role ethics approach to Confucianism by comparing it with two dominant ethical traditions in the Western context: deontology and consequentialism. It then introduces the fundamental social and political structures of a Confucian society and how such society is built upon and justified by Confucian ethics. This essay also discusses the implications of Confucian ethics for the governance of contemporary technology and engineering including emerging technologies. The Appendix of this essay includes some teaching resources that instructors can employ to teach students about ethics, society, and technology from the Confucian perspective in and beyond the classroom.

Nevertheless, it is worth issuing some caveats here before we dive into the details of Confucian ethics. For instance, experts in Chinese philosophy may challenge that it seems unrealistic to include all historical and contemporary approaches to Confucian ethics in one essay not to mention the relevance of these approaches to society and technology. In recent decades, philosophers have employed various approaches to engaging Confucian ethics ranging from overtly historical or textual approaches to comparative approaches that put ideas from the classical period into conversation with contemporary Western ethical, social, and scientific theories (Mattice, 2019). Scholars have tried to understand Confucian ethics as a species of deontology, virtue ethics, or care ethics (Mattice, 2019). Until very recently, scholars have attempted to theorize Confucian ethics as a kind of role-based moral theory (Ames, 2011; Rosemont & Ames, 2016). Given such an extremely diverse context of the scholarship in Confucian ethics, it is impossible to include all competing approaches to Confucian ethics in this single essay. Therefore, this essay limits its scope of discussion to the role-based approach to Confucian ethics which is one of the most recent and creative efforts to reinterpret and rediscover the relevance of Confucian ethics to the contemporary society.

Confucian Ethics: A Comparative Perspective

This essay takes a comparative approach to Confucian ethics that compares fundamental doctrines from Confucian ethics with those from other dominant traditions in Western ethics such as deontology and consequentialism. In doing such comparison, this essay mainly focuses on the role-based approach to Confucian ethics. There are at least several strengths for taking such comparative approach to understanding Confucian ethics. For instance, most undergraduate students who have taken introductory courses on ethics and philosophy are expected to be familiar with both deontology and consequentialism. Thus, the two Western theories naturally serve as “frames of reference” for understanding Confucian ethics.

To a large extent, both deontology and consequentialism can be perceived as “rule-based” ethics. For instance, deontology is concerned about whether one’s action is in accordance with some moral rules or “categorical imperatives” that can be universalized. Consequentialism especially utilitarianism emphasizes the unity principle or “rule,” that is, good actions are those that can bring the maximum amount of net utility (e.g., happiness, pleasure, welfare) to the greatest number of people. Both deontology and consequentialism are mainly interested in “defining what good is” and worry about “how one can come to know the good”. In contrast, Confucian ethics or Chinese philosophy in general is mostly concerned about the problem of “how to become good” (Ivanhoe, 2000).
Another interesting comparison between deontology and consequentialism and Confucian ethics is that the two Western ethical theories often assume an idea of *ethical impartiality* whereas Confucian ethics places a much stronger emphasis on *ethical partiality*. Deontological impartiality represented by Kantian ethics requires that “moral judgments be universalizable” and these moral judgments “be independent of any particular point of view” (or any particular person) (Jollimore, 2018). Consequentialist impartiality is “strictly impartial in a very direct manner and in a very rigorous sense” and a consequentialist agent is thus “not permitted prefer herself, nor any for her loved ones, in choosing a distribution of benefits and burdens” (Jollimore, 2018). In contrast, Confucian ethics advocates a kind of love with distinction. In other words, our moral concerns toward others decrease as our relationships with others further.

While both deontology and consequentialism place strong emphasis on the value of following rules (either Kantian categorical imperatives or consequentialist utility principle) for moral actions, Confucian ethics argues that the key to become a good person is to live and reflect on the social roles (e.g., parent, child, citizen, and engineer) one assumes in specific communal contexts. By nature, humans are social, interdependent, and related to each other after birth (Yu & Fan, 2007). According to Confucian ethics, the moral actions we take in different situations are influenced by the specific roles we take in these situations. We as humans all assume different roles which are determined by the relationships we have with others. These different relationships and social roles affect the ways we choose to interact with others. The tone you use to speak to your parent is different from the one you use to communicate with a stranger. The nature of a particular role relationship often evokes feelings and expectations characteristic of that relationship (Ames, 2016). Through living and reflecting on these social roles, one gets to cultivate virtues that define the ideal forms of these social roles. For instance, to live and reflect on the role as a medical doctor well, one gets to cultivate virtues (e.g., benevolence) that define an ideal medical doctor. Therefore, the ultimate goal for Confucians is that all individuals strive to develop their capacities for virtue and eventually aim at sagehood through their relationships with others (Angle, 2012). Confucian ethics advocates for a kind of relational ontology: if there is only one person, there are no persons. In other words, becoming benevolent is something we either do together, or not at all (Ames, 2011).

Confucian ethics distinguishes the different relationships we have with others and argues that these different relationships have normative connotations. Confucian ethics defends the value of partiality in ethics. Our moral obligations are strongest to those we have close relationship, and the intensity of our moral obligations diminishes as we go from these close relationships (Bell & Metz, 2011). However, critics may question whether such love or care with distinction would lead to ethical egoism or favoritism. In other words, does Confucian ethics teach us to care about ourselves and people we have close relationships with at the expense of those we have no relationship with such as strangers? It is true that Confucian care or love originates within close relationships such as familial relationships. Nevertheless, such care or love does not stop within the family but will be extended toward others in much broader communities including our neighbors, co-nationals, and even strangers. The following passage from *Mencius* well describes the idea of extension of moral feelings:
Treat with respect the elders in my family, and then extend that respect to include the elders in other families. Treat with tenderness the young in my own family, and then extend that tenderness to include the young in other families. (Mencius, IA: 7)

It is worth noting that such extension of moral feelings from within the family toward others is a natural and effortless process. Once one has put effort into the development of moral sentiments toward her family members, these moral feelings will be naturally extended to others outside of her family. Therefore, Confucians do think that one’s moral virtues developed in the familial context can predict her moral performance in much broader contexts such as workplace and the society. The following passage from Analects demonstrates the close connection between being a filial child and being a loyal subordinate in the government,

A young person who is filial and respectful of his elders rarely becomes the kind of person who is inclined to defy his superiors, and there has never been a case of one who is disinclined to defy his superiors stirring up rebellion. (Analects, 1:2)

For Confucians, our lifelong project is to reflect on our moral experience interacting with others in the society and cultivate virtues through such self-reflection process. In other words, the ultimate goal for human development is to learn to become a junzi (superior person, 君子) through self-reflection. Self-cultivation is about “learning and practice of relating to and interacting with others appropriately” (Wong, 2012, p. 76). Therefore, Confucian ethics perceives moral development as a kind of practice-oriented activity. Karyn Lai (2007) conceptualizes a practical tool for Confucian self-cultivation that consists of three interrelated processes: observation, reflection, and practice. As I argued elsewhere, according to Lai’s theory, we need to observe how moral exemplars behave in different situations. We need to observe how experienced moral leaders practice li (social and moral norms, 礼) in different circumstances. Nevertheless, observation does not mean “just looking” or imitation. We are advised to critically evaluate and reflect on these behaviors in different situations and understand the reasons to act. In this sense, for Confucius, observing moral failures or incompetent leaders is as useful as observing moral successes or exemplars. A person should work to avoid becoming like the failures. Reflection is supposed to develop moral sensitivity to others and situations and it helps the moral learner tease out the morally significant factors in particular situations. Practice is also critical when moral learners apply what they have observed and learned in new situations. Through practice, moral learners are able to integrate the moral sensitivity developed from previous experiences and test to what extent their understandings of the morally significant factors work in new situations. In general, the reiteration of the three processes cultivates the inner virtues of a person. [REMOVED FOR PEER REVIEW]

Such reiteration of the three processes allow people to grow virtues through four levels of Confucian moral development [REMOVED FOR PEER REVIEW]:

- Level 1 The Beginner who is fully in compliance with Confucian norms li and acting within circumscribed contexts.
• Level 2 *Developing Learner* who is building her inner disposition and moral sensitivity and nurturing a virtuous self and expressing her moral character in her interactions with others.

• Level 3 *Junzi* who draws upon her own resources in moral deliberations and sometimes improvises on existing norms. For a *junzi*, moral norms are flexible and are subject to further improvement.

• Level 4 *Sage* to whom moral principles are no longer constraints. What she desires is just what the principles require. The ways in which she acts set up principles for others.

Among the four different levels of Confucian moral development, extremely rare people can achieve the sage level. Therefore, moral development is truly a lifelong, “never-ending” project for most people. We as humans are always striving for becoming better people. For people who are the beginner and the developing learner, what they need to do is to observe what other people especially moral exemplars do in specific moral situations. On the one hand, moral learners focus on how moral exemplars act and try to imitate them. On the other hand, moral exemplars need to acknowledge their moral influence on others and work diligently to be influential (Cottine, 2016). In this way, through being followed by less experienced moral learners, moral exemplars are motivated to avoid making mistakes and further refine their moral selves.

### The Confucian Society

As indicated in the last section, Confucian ethics supports a hierarchical, meritocratic approach to moral development. People in the society belong to four different groups according to the level of their moral development. Therefore, it should not be surprising to see that Confucians envision that an ideal society should be governed by those who are *intellectually* and *morally* superior to the average. It is worth noting that Confucians often give more weight to moral virtues than to intellectual and technical excellences when selecting, evaluating, and promoting political leaders (Liu, 2015). One reason for the prioritization of moral virtues in politics is to ensure that the political power will not be misused by morally immature leaders, when democratic checks and balances are absent in the political system. To ensure that competent politicians are selected and promoted, their political performance is often evaluated based on two meritocratic criteria: (1) whether they have demonstrated intellectual and moral excellence in current and past positions; and (2) whether their political performance is approved by both her supervisor and subordinates (Bell, 2015).

However, critics may argue that it is quite possible that selected Confucian politicians forget the promises they give to their people, are corrupted by the power, and thus misuse the power. How would Confucians respond to such critique of Confucian meritocracy? Wouldn’t it be too risky if the politicians employ their own subjective moral feelings (rather than objective, public moral standards) to inform political judgment and policy decision-making? Stephen C. Angle (2012) suggests that Mou Zongsan’s idea of “self-restriction” can be helpful for thinking through these questions. According to Angle,

Our subjectively felt, internalized morality implicitly points toward an ideal of full, sagely virtue. Full virtue must be realized in the public, political world. Without objective structures (like laws), the public goals of full virtues are inaccessible. Since these
objective structures restrict the ways in which our subjective moral feelings can be manifested, Mou concludes that the achievement of virtue requires self-restriction. Objective, public standards are thus related to inner virtue, but they are also distinct from one another. (Angle, 2012, p. 29)

It is obvious that Mou Zongsan’s idea of self-restriction is quite metaphysical. The general point here is: if Confucian ethics wants to achieve their political ideals, objective political structures such as the constitution, laws, and rights are required by Confucian ethics (Angle, 2012). These political structures emerge out of our later become independent of moral values.

Another more specific approach to the examination of how politicians exercise their power is to ask whether their political legitimacy is ethically justified. As a fundamental concept in political philosophy, political legitimacy is concerned about questions such as where political authority comes from and how it is justified. Western political thinkers such as John Locke argue for a consent theory of political authority: a political authority is legitimate only if it has acquired the consent of the ruled (Christiano, 2013). In comparison, Confucian ethics adopts a more pragmatic approach to political legitimacy: political authority is justified instrumentally by to what extent politicians contribute to the betterment of people’s lives. The rulers do not possess any natural political right to rule. The people, or the ruled, have worth independent of the ruler-rulled relationship, while the ruler’s worth is only derived from the worth of the ruled (Chan, 2014).

A harmonious society, from the Confucian perspective, is that everyone appropriately assumes their own social roles and associated role-based obligations. Social cohesion and flourishing require well-ordered roles (Cottine, 2020). Fulfillment of one’s social roles is guided by the Confucian idea of li which refers to “social convention, etiquette, and other patterns of courteous behaviors and includes norms for formal occasions” (Wong, 2019). The meritocratic nature of the Confucian society leads to the issue that social relationships are often hierarchical: people have different degrees of virtuousness and virtuous capacity and social governance should be led by virtuous and capable people (Wong, 2013). A morally appropriate relationship between the ruler and the ruled is that the ruler rules while the ruled respects and obeys (Chan, 2014). In addition to the relationship between ruler and minister, there are four other basic relationships that are critical for building a harmonious Confucian society and they are the relationships between parent and child, between husband and wife, between siblings, and between friends. Among the five relationships, at least four of them are hierarchical relationships, although in some cases friendship could also be hierarchical (Bell & Wang, 2020).

The five relationships belong to three social spheres: (1) family sphere: the parent-child relationship, the husband-wife relationship, and the relationship between siblings; (2) intermediary sphere: friendship; and (3) the social/political sphere: the ruler and minister relationship. Family relations are foundational for individual moral development and state governance (Cottine, 2020). For instance, being a filial child is preconditional for being a loyal minister.

However, Western political thinkers worry that such hierarchical, unbalanced distribution of political power in a Confucian society may potentially jeopardize some social and political ideals
such as human rights, equality, and justice. In response, Henry Rosemont invites Western political thinkers who advocate for universal human rights to consider the following scenario,

If … a majority of the world’s peoples live in cultures which do not have a concept of rights, or have concepts incompatible with that concept, then how could, or should, the members of those cultures imagine what it would be like to have rights, or that it would be right and good and proper for them to so imagine? (Rosemont, 2016, p. 35)

Historically, Confucian ethics was not developed in a social and cultural environment dominated by Western liberal, universalistic approaches to human rights. Therefore, it will be challenging for Confucians to imagine or adopt the idea that humans are all born with absolutely equal, inalienable, individualistic political rights. For Confucians, it is unrealistic to overlook the existence of hierarchical relationships in our society. A more worthwhile question for us to consider is to distinguish justified or “just hierarchies” from other hierarchies that are not ethically justified (e.g., racial discriminations). In other words, what is central to moral discussions on social hierarchy is not the ethical quality of hierarchical structure per se but whether the rankings of people are morally justified or based on valued social dimensions (e.g., virtue, academic achievement, government rank, experience) (Bell & Wang, 2020).

Confucians would further argue that in any given society there are always different kinds of human rights and some rights are prioritized over others. Heather Widdows (2011) categorizes human rights into three different groups or “generations”: first generation rights are civil and political rights, second generation rights are economic, social, and cultural rights, and third generation rights are rights of (indigenous) peoples. In contrast to Western thinkers who consider civil and political rights as the most fundamental human rights, Confucians tend to prioritize economic, social, and cultural rights (e.g., social wellbeing) over civil and political rights (Wang, 2002). In particular, the right to subsistence is an essential part of Confucian constitutional rights (Kim, 2015).

So far, we probably can draw a tentative conclusion that Confucian ethics does not subscribe to political egalitarianism. However, it is worth noting that Confucian ethics does support a kind of moral egalitarianism. Confucians believe that humans are all born with equal potential to be morally good. The reason why humans in the society have arrived at different levels of moral development is that they put different efforts into moral learning and self-reflection. As pointed out by Donald Munro, “men are malleable, since none of them have innate defects; hence the direction of a man’s moral growth depends very much on education” (Munro, 1969, p. 15). A harmonious society is one where you can find all people feel joyful in the pursuit of their own moral projects that strive to be better persons, regardless of their social and economic classes. Junzi can literally be found in every profession. Instead of saying that everyone can achieve certain social and economic goals in a society if they work diligently, Confucian ethics believes that all people do have equal access to becoming junzi if they put a lot of efforts into their moral projects.

Confucian Ethics of Technology and Engineering
From the Confucian perspective, technology is never value neutral. Good technologies should always help promote the values respected and maintained in the communities such as harmony. Therefore, Confucian approach to the ethics of technology evaluates to what extent and in what ways technology contributes to a process of harmonization. Reliable technological development often leads to “a continuous negotiation and adjustment of relationships between human beings, society and technology” (Wong, 2012, p. 81).

More specifically, a major task for the Confucian ethics of technology is to investigate whether practices engendered by technology “are conducive or detrimental to our performance of the social roles” (Wong, 2012, p. 83). In this sense, the development of technologies such as AI can and should be encouraged by our political communities if these technologies help us realize our constitutive commitments or moral obligations prescribed by our social roles (e.g., child, parent). Similarly, technologies that undermine the realization of our constitutive commitments should be restricted (Bell & Wang, 2020). Daniel Bell and Wang Pei (2020) imagine two example scenarios that involve AI and robots and can be assessed by using Confucian ethics:

- If an AI-enabled technology can free us from socially necessary work so that we can be easier to spend time caring for our parents with love and compassion, then such technology should be supported.
- If a cute-looking robot relieves all of our caring obligations and our parents are convinced that the robot truly cares about their well-being, then the parents care more about the robots than their own children. Such robotic technology should be restricted, from the Confucian perspective.

The two scenarios demonstrate that the moral quality of technology is assessed on the basis of to what extent technology helps us practice our role-based obligations and cultivate virtues for better living these social roles. Such role-based morality in Confucian ethics has been integrated into recent efforts to design ethical guidelines for socially integrated robots. JeeLoo Liu argues that a robot inspired by Confucian ethics “must and foremost fulfill its assigned roles” and need to “render assistance to other human beings in their pursuit of moral improvement” (Liu, 2017). In this sense, to design and evaluate moral agency in a robot is to: (1) assess to what extent such robot well assumes its assigned social roles (e.g., a social companion robot working with elderly people); and (2) what capabilities and dispositions are required to define a good robot that fulfills its assigned roles. Also, as suggested earlier, Confucian moral development is a social and collaborative process between the moral learner and others. A truly socially integrated robot has the obligation to offer assistance to other humans in their moral development projects.

Despite that emerging technologies such as AI and robotics can improve the efficiency of work and free us from some role obligations, philosophers also feel concerned that these technologies may also lead to the issue of “technology-driven moral deskilling” (Wong, 2019; Vallor, 2016) that technologies negatively affect our moral cultivation. For instance, robot caregivers are morally questionable as they reduce the precious opportunities for nurses to exercise and cultivate the virtues defined by their role as professional nurses. One implication for the design of AI and robotics is whether engineers can be creative enough to design technologies that allow or create opportunities for users to develop their moral skills and cultivate role-based virtues.
Confucian ethics that focuses on role-based morality and relationship also has profound implications for assessing biomedical technologies such as gene editing technology. For instance, conducting moral assessment of gene enhancement technology for children needs to answer at least two questions: (1) what is the appropriate role of children in the familial context? and (2) what are the role-based moral responsibilities of parents? In the Confucian tradition, children are perceived as gifts from ancestors (Fan, 2010). They are critical for promoting the family’s prosperity and integrity (Li & Zhang, 2019).

Confucian ethics emphasizes the sociocultural practicality of genes (Fan, 2010). Confucians may accept some types of gene enhancement while reject others. Again, a single most important criterion for assessing the moral quality of technology is to examine whether and how such technology helps to promote the values upheld by a Confucian community and how it helps community members realize and live their assigned social roles and associated moral obligations. Ruiping Fan (2010) invites us to consider the following thought experiment: if a genetic enhancement technology for changing skin and hair color is possible, a Confucian Chinese wants genetically to change his children’s skin color from yellow to white, or hair color from black to blond. Is it morally acceptable for this Confucian Chinese person to do so? Such a gene enhancement technology to change the color of skin or hair may be rejected by Confucian ethics. The reasoning behind such rejection is quite straightforward. In the Confucian tradition, a child is considered as a gift from ancestors. Such gift is not from a particular ancestor but from all the ancestors of the family (Fan, 2010). As a child, our moral obligation is to respect and love our ancestors including our lives given as their gifts and continue the family lineage. As parents, our moral responsibility requires us to respect all of the ancestors of the family and to not change the appearances of our children. As our ancestors were yellow skin and black hair, we do not want our children to look more like the image of other people’s.

However, some gene enhancement technologies might be approved by Confucian ethics as these technologies can enhance certain abilities of the children which demonstrate the respect for the gifts granted by the ancestors and the promotion of family fame (Fan, 2010). For instance, Confucian ethics may approve a gene enhancement technology that is able to improve children’s IQ (intelligence quotient). The Confucian ethics of “giftedness” further leads to some interesting questions for future research. For instance, let us imagine a scenario that a child born in a non-Chinese culture was adopted by a Chinese couple. In this scenario, there are a couple of questions worth further philosophical exploration:

- whether this child can and should still be considered as a gift given by the ancestors of the adoptive family;
- if so, how to understand and justify the connection between a child adopted from a non-Chinese culture and the ancestors of the adoptive family;
- to what extent this adopted child is culturally Confucian despite that this child biologically is not Chinese.

Confucian ethics also has implications for rethinking the professional formation of engineers. The meritocratic approach to selecting and promoting leaders can also be found in contemporary Chinese technical companies. My own dissertation research that examined the everyday cultures of Chinese engineers discovered that the idea of meritocracy affected the selection of technical
managers on the factory floor in Chinese companies (REMOVED FOR PEER REVIEW). Chinese engineers who became managers may not possess any initial interest in management. Nevertheless, there has been a widely acknowledged assumption in most Chinese companies that competent technical experts are expected to be placed in management positions. Conversely, if later a manager is found to be not technically competent, the political legitimacy of this manager will be challenged by the subordinates. In a professional setting, challenging a manager’s technical competency is to question this manager’s political legitimacy of being a leader. One of the interviewees explained how the selection of engineers to leadership roles was practiced in his company:

> Our management often start from the very bottom technicians and learn from every project and discipline. If you start from the lowest level and then move up step by step, you can encounter different people and projects and expand your knowledge scope. As the higher position you move up to, the more you will be responsible for. You need to know a little bit about everything. Otherwise, how can you arrange production and organization?... We have an assumption, a person who is doing well in one position will be likely to do well and adapt easily in a different position. (REMOVED FOR PEER REVIEW)

On the factory floor, in fact, a Chinese engineer who has demonstrated technical excellence is often expected by the company to exert moral power on other members, especially when the leader is assigned to formulate or lead a new team. As analyzed earlier in this essay, qualified leaders are often assumed to be intellectually and morally superior to others. As described by another interviewee who was a lead engineer at a private computer engineering company:

> Suppose you are excellent in technological development… However, the company might expect you to assume more responsibility. You are expected to extend your (moral) power or influence. The way you extend your influence is to lead a new team. You transfer your influence to others. Or, by leading a team, through your project, by using your own deep and broad understanding of technology, you teach your team members’ competency. (REMOVED FOR PEER REVIEW)

Again, similar to how political leaders are chosen, the process in which technical managers are selected in Chinese technical companies often places more emphasis on moral competence than technical or intellectual competence.

**Conclusion**

This essay provides a very brief overview of Confucian ethics that focuses on the role-based morality. It compares Confucian ethics with two dominant schools of thought in Western ethics deontology and consequentialism. This essay then discusses how Confucian ethics provides a unique way to think about social and political issues such as how the political leaders are selected and evaluated, the ethical justification of political legitimacy, the prioritization of economic, social, and cultural rights over other rights, and moral egalitarianism. Finally, this essay explores ways in which Confucian ethics serves as a useful intellectual resource for
examining the issues arising from the ethical assessment of (emerging) technologies and the professional formation of engineers.

Acknowledgement

The author would like to thank the [REMOVED FOR PEER REVIEW] that provided funding for the preparation of this essay and the teaching resources included in the Appendix. Special thanks to my students who have inspired me to explore more relevant ways to teach Confucian ethics.
Appendix: Teaching Resources

This section includes exercises that instructors can use to teach Confucian ethics, society, and technology in undergraduate courses in the fields such as the ethics of technology and engineering, comparative philosophy and religion, global studies, and world religions. They can also be used in engineering courses with a focus on contemporary affairs, cross-cultural communication, and/or globalization.

Exercise 1 Role Ethics and Social Justice

Reflect on the following scenario adapted from a passage from the *Analects* (13:18) and then ask yourself three questions: (1) what would you do in this scenario and why? (2) what is your ethical obligation prescribed by your role as a son or a daughter? (3) how is your role-based obligation reconciled with the idea of social justice?

*When you find that your father took a sheep on the sly, what would you do? (1) report him to the authority; and (2) cover for his father.*

More in-depth discussions on this classic scenario can be found in:


Exercise 2 Confucian Reflective Observation on the Street

You will have 40 minutes walking on the street and observing others. You are welcome to walk in groups or by yourself. BE SAFE! While you are observing what other people (observe at least THREE persons) are doing on the street, taking notes, and asking yourself the following questions:

Who are they? What are their roles?
How do their roles specify or prescribe their responsibilities?

Exercise 3 Who Would be More Confucian or Chinese?

Compare the following two scenarios and discuss who would be more Confucian (or Chinese) from the Confucian perspective.

Scenario #1: Andrew Jackson, who was born in China but later adopted by a couple of Americans, barely speaks any mandarin.

Scenario #2: 齊安德 (birth name Andrew Jackson), was born in the United States into a white family but was later adopted by a Chinese couple. He was growing in a Chinese family and speaks very fluent Chinese and wears Chinese clothing. He cannot speak any English.
**Exercise 4 The Moral Assessment of Technology**

From the Confucian ethical perspective, what are the “good” or “bad” technologies in our society? Please explain why.

A. cell phone  
B. nuclear weapons  
C. laptop  
D. aircraft  
E. organ transplant technologies  
F. a mathematical equation without immediate practical use  
G. a gene editing technology that improves children’s moral reasoning skills

**Exercise 5 Designing Confucian Robots**

Imagine you are designing the following social robots inspired by Confucian ethics, what features do you want to program into the robots? Or, what features you may not want to program? Explain why.

1. A learning companion robot for university students enrolled in a Chemistry class  
2. An elder care robot  
3. A therapy robot teaching social skills to children with autism  
4. A robot that takes care of your daily schedule and helps you manage time  
5. A robot nanny that takes care of your children while you are busy at work  
6. A nutritionist robot who gives you advice on your dietary habit
References


