

A Critical Evaluation of Consequentialism through the Lens of Electric Vehicle Adoption

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Abstract

Consequentialism is a prominent normative ethical theory that evaluates the moral rightness of actions solely by their outcomes. While intuitively appealing in its focus on promoting good consequences, consequentialism faces several foundational challenges. This paper argues that the absence of a universally accepted standard for measuring and comparing outcomes undermines the plausibility of consequentialism as a reliable moral framework. Drawing on the real-world example of electric vehicle adoption, the paper illustrates how conflicting interests, temporal uncertainty, and subjective standards of pleasure complicate moral calculations. The analysis demonstrates that even revised forms of consequentialism, such as rule-consequentialism and agent-relative consequentialism, fail to resolve the core issue: without a clear metric for evaluating consequences, consequentialism can neither achieve the impartiality it prescribes nor provide consistent guidance for moral agents.

Keywords

Consequentialism, Jeremy Bentham, John Stuart Mill, Electric Vehicle Adoption

1. Introduction

The old adage “the end justifies the means” succinctly gives the gist of consequentialism, a normative ethical theory that posits that the evaluation of the moral rightness of an action is solely based upon its consequences. That is, a morally good action brings good or desirable outcomes, whereas an immoral action brings bad or undesirable outcomes (Driver, 2010). The English philosopher Jeremy Bentham (1748-1832) appealed to “hedonism”, an ethical theory claiming that “only pleasure has worth or value and only pain or displeasure has disvalue or the opposite

of worth” (Moore, 2019: p. 1), and formulated “utilitarianism”, the most well-known form of consequentialism (Driver, 2010). According to Bentham, pleasure is the only intrinsic good, and the right action maximizes pleasure, which is also known as the best overall consequence (Driver, 2010). While consequentialism offers a seemingly straightforward approach for moral decision-making, there are a number of objections against it. For instance, the consequences of actions are uncertain, and to evaluate the morality of those actions on a consequential basis is extremely problematic. It is also apparent that some actions are wrong, no matter how much good they produce. Besides, consequentialism has always been criticized as being too demanding, for it is an agent-neutral theory that requires moral agents to be highly altruistic and impartial (Driver, 2010).

In this paper, I attempt to argue that consequentialism is not a compelling claim as it has never succeeded in proposing a common standard for measuring consequences. Without a universally recognized reference scale for quantifying the results of our actions, agent neutrality will be difficult to achieve, and “maximizing overall pleasure” will become a vague concept because everyone has his or her own subjective standards for evaluating outcomes and defining pleasure. The organisation of this paper is as follows. First, I will provide an overview of the consequentialist theory and its major objections, particularly the lack of a universal standard for measuring consequences. Second, I will use the example of electric vehicle adoption to illustrate how the limitations of consequentialism play out in real life, and critically assess its ability to compare consequences across different time scales and interest groups with respect to people’s different standards for pleasure. Although electric vehicles have been proven to be much more environmentally friendly than traditional petroleum vehicles because they basically do not emit any greenhouse gases during operation, there are studies showing that large numbers of discarded batteries from these electric vehicles can cause devastating environmental and health problems in the future (Wan & Wang, 2022). Therefore, in the short term, electric vehicles can improve overall pleasure compared to conventional vehicles, but they may diminish overall pleasure in the long run. Then, in deciding whether to purchase an electric vehicle based upon consequentialist concerns, should we only consider the short-term, more visible positive outcomes, or the long-term potential negative outcomes of electric vehicle adoption? In short, this example will exhibit the complexities of applying consequentialism in practice, and trying to predict outcomes and find the right actions. Finally, a conclusion is presented.

2. Consequentialism: Outcome-Based Ethics

Consequentialism, deontology, and virtue ethics are the three distinct major philosophical theories in normative ethics that aim at establishing norms for right and wrong conduct (Shafer-Landau, 2023). Whilst deontology stresses the roles of duty and reason as well as adherence to moral rules, virtue ethics lays special emphasis upon the cultivation of virtuous character traits, such as honesty, trustwor-

thiness, generosity, and other virtues, of the moral agent. On the other hand, consequentialism posits that the evaluation of the moral rightness of an action is solely based upon its consequences, and claims that of all available options, the right action leads to the best overall outcome, namely, maximizing the good (McNaughton & Rawling, 1998). That is, a morally good action brings good or desirable outcomes, whereas an immoral action brings bad or undesirable outcomes (Driver, 2010). For instance, in the case of making donations to a charity, a deontologist would emphasize whether there is a moral rule demanding him or her to donate, and a virtue ethicist would consider what decision a virtuous person would make because he or she thinks that possessing virtuous character traits would lead to a good life and increase human happiness. Unlike deontologists and virtue ethicists, consequentialists would be concerned with whether the donation would produce better consequences.

Appealing to the hedonistic theory of value, utilitarians like Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1872) view pleasure as the only good and pain as the only bad. Thus, an action is morally right if it brings the greatest amount of pleasure for the greatest number of people (Driver, 2010). Regarding the measurement of pleasure, utilitarians have proposed some guidelines. Bentham held an egalitarian view that everyone's pleasure has equal intrinsic value, and that pleasure can be quantified by intensity, duration, certainty or uncertainty, propinquity or remoteness, fecundity, purity, and extent (Driver, 2010). He suggested that in making decisions we should first consider the person most affected by the action, and then evaluate that person's experience of pleasure or pain with respect to the six parameters (Driver, 2010). However, such a view was criticized as a kind of "swine morality". Bentham's student Mill thus modified the theory by taking quality into account when comparing pleasures. He acknowledged differences in kinds, e.g. humans versus animals, and that there are higher and lower order pleasures (Driver, 2010). Mill viewed pleasures that engage with intellect and moral sentiments as having higher intrinsic values than those bringing mere bodily sensations.

While consequentialism sounds like a plausible theory in terms of maximizing overall pleasure, it has long been criticized as being too demanding. Drawing on Bentham's egalitarian view, consequentialism is an agent-neutral theory requiring that the moral reasons for an action should apply to all agents, regardless of their relationship to the elements involved in the action (Driver, 2010). In other words, saving a drowning unfamiliar baby is just as important as saving my own child. What really matters are the consequences of actions. In fact, if saving the drowning baby brings greater overall pleasure than saving my own child, I should save the baby. Consequentialism is thus a paradigmatically unselfish and impartial theory that forces moral agents to sacrifice themselves for better outcomes. However, humans are sentient creatures with special attachment to the people we love. It is too demanding, and nearly impossible, for us to be completely impartial. Indeed, this is in stark contrast to deontology and virtue ethics; whilst deontology often

includes thresholds or permissions that limit moral demands, virtue ethics focuses on what a good person would do, not what produces the best results. Since deontology prioritizes rights and duties over outcomes, it avoids the trap of requiring agents to constantly calculate and pursue the best consequences. Virtue ethics is inherently agent-centred and allows for moral development over time, making it more psychologically realistic and less demanding. Perhaps proponents of consequentialism may argue that moral agents should also take into account their own pleasure when facing such dilemmas.

Moreover, as an outcome-based ethical theory, consequentialism ignores the intention and intrinsic nature of actions, as well as other morally relevant factors such as promise. The only criterion for judging the rightness or wrongness of an action is its consequences, implying that killing can be morally good if it produces the best overall outcome (Driver, 2010). For example, under the assumption that no treatments are currently available and drug development is far slower than infection rates, by sacrificing an infected patient society can prevent a serious epidemic that would bring suffering and death to large swaths of the population. Therefore, consequentialism is indeed very demanding for human beings as we sometimes need to overturn our commonsense morality of doing no harm to others and keeping trust while seeking the best outcome (Frederick, 2009).

Over the years, consequentialists have proposed various revised versions of consequentialism, which aim at filling the holes in the theory and addressing the demandingness problem. However, they have failed to address the fundamental problem of consequentialism, namely the absence of a universal standard that quantifies pleasure and determines the best overall outcomes. For instance, many consequentialists argue that we only need reasonable estimates of expected outcomes rather than perfect measurement to sidestep the objection. Some suggest that we may resort to our moral intuitions. Since intuitions often align with maximizing overall good, they suffice in routine situations. However, intuitions vary widely across cultures and contexts, so they are unreliable and lack accountability. Others like Hooker (2000) have developed rule-consequentialism. This modified version of consequentialism holds that an action is morally permissible only if it conforms to an ideal code of rules whose universal predominance—defined as the acceptance by the overwhelming majority of society—is expected to produce the best overall outcomes. Unfortunately, rule-consequentialism is still plagued by the same underlying problem: the absence of a universal standard for identifying the ideal set of rules that lead to the best consequences. Moreover, the ‘acceptance rate problem’, i.e., the challenge of determining the threshold at which a rule is considered accepted by the majority, has long been debated among rule-consequentialists. Various formulations of rule-consequentialism such as the fixed rate, variable rate and optimal rate theories have been proposed to define the ideal moral code, yet no consensus on a universally justifiable standard has been reached (Tobia, 2013). Without a common standard that tells us the extent to which we need to consider when taking actions, not only consequences are difficult to predict and

may change over time, but the complex relationships between parties who are better off or worse off because of certain actions also increase the difficulty of enforcing consequentialism. Thus, no matter how impartial people try to be, they need to resort to their own subjective criteria for determining pleasure and identifying those most affected by their actions. Consequently, due to the absence of a clear and objective universal standard that quantifies pleasure and determines the best overall outcomes, consequentialism cannot be a compelling theory that guides people's actions.

3. A Critical Review of Consequentialism: Electric Vehicle Adoption

As a sustainable technology, electric vehicles have been vigorously promoted by environmental experts and actively adopted by countries like China and the United States. Electric vehicles, which run on electricity rather than diesel or gasoline, are said to be a much more environmentally friendly option than traditional petroleum vehicles because they produce significantly less greenhouse gas emission during operation and improve roadside air quality. Therefore, in order to achieve emission targets, countries have encouraged the switch from conventional vehicles to electric vehicles through active policy interventions such as introducing purchase subsidies and installing free public charging facilities. At first glance, electric vehicle adoption appears to be a morally right action according to consequentialism. Nevertheless, there are many more complex factors involved in the action, and the decision-making procedure is not as simple as what Bentham suggested.

3.1. Unpredictable Outcomes in the Long Term

Consequentialism posits that “the end justifies the means”. However, ends are always unpredictable, especially in the long term. We cannot even predict what tomorrow will bring, so how can we measure and ensure that an action really maximizes overall pleasure across time? Indeed, an action can produce very different outcomes at different time scales.

Despite the substantive research that has been carried out to prove the positive impact of electric vehicles on the environment, we do not know clearly what their actual impact will be a hundred or a thousand years from now. There are some studies showing that a great number of discarded electric vehicle batteries can cause devastating environmental and health problems in the future (Wan & Wang, 2022). Therefore, in the short term electric vehicles can improve overall pleasure compared to conventional vehicles, but they may diminish overall pleasure in the long run. According to consequentialism, we need to seek the action that brings about the best good. Then, when we must decide whether to purchase an electric vehicle based upon consequentialist concerns, should we only consider the short-term, more visible positive outcomes, or the long-term potential negative outcomes of electric vehicle adoption? As the action produces both goods and bads

on different time scales, where should we draw the line when measuring the consequences? Since outcomes are unpredictable and change over time, it is a formidable task for moral agents to determine the best actions without universal standards. Specifically, for the sake of environmental protection, should we promote electric vehicle adoption to reduce greenhouse gas emissions, or should we stick to conventional vehicles in order to prevent the piling up of hazardous discarded electric vehicle batteries? Accordingly, consequentialism appears to be rather demanding because it places no limits on the scope of consideration.

3.2. Conflicts among Interest Groups

Even within the same time scale, consequences are difficult to evaluate due to conflicts between various interest groups. The consequences of a controversial question are often complex and hard to judge. It is not the simple mathematical comparison between the sums of the values of pleasures and pains that Bentham suggested (Driver, 2010). In fact, action does not necessarily have a good or bad tendency. Since it can bring pleasure in certain aspects and displeasure in others, it is very challenging for us to calculate and compare outcomes in terms of the six parameters. Simply pondering a question from various perspectives, we will get completely different or even opposite answers.

There is no doubt that the adoption of electric vehicles can bring many benefits to society. It not only improves environmental quality and public health but also creates job opportunities through the development of the electric vehicle industry. According to consequentialism, the adoption of electric vehicles is a morally right action as it seems to increase society's overall pleasure. However, if we look at this issue from the perspective of conventional vehicle suppliers, we will see a very different picture. When people start using electric vehicles, they will naturally abandon conventional vehicles. As a result, sales of conventional vehicles will decline, supply chains will be disrupted, and unemployment will occur, thereby bringing a huge burden to society. Moreover, it is difficult for traditional car manufacturers to switch to producing electric vehicles since huge oligopolists like Tesla already exist in the market. Thus, social unrest is likely to rise as people lose their jobs, and the traditional automotive industry falls into a crisis. In this sense, electric vehicle adoption can actually be a morally wrong action that imposes displeasure on society.

Realising that electric vehicle adoption can bring both benefits and drawbacks, according to Bentham, we should sum up the values of pleasure and displeasure respectively and compare them. But how can we do so? To begin with, we assume that all stakeholders are proponents of consequentialism for simplicity. For conventional vehicle suppliers, the intensity of displeasure is greatest as they are the ones directly facing the resulting financial crises, whereas for environmentalists, pleasure can be enhanced as electric vehicle adoption brings significant benefits to the environment. In this case, without a common standard free from subjective interventions, how can we compare and quantify the values of pleasures and dis-

pleasures? Besides, as both pleasure and displeasure affect large populations, it is impossible for us to count and figure out whether electric vehicle adoption can indeed maximize overall pleasure. It is also hard for us to determine who is most affected by the decision. Hence, in the absence of a universally recognized reference scale for quantifying consequences, it is infeasible to compare actions based upon consequentialist principles and identify the action that brings about the best overall outcomes.

3.3. Different Standards of Pleasure

Just as smoking is a pleasure to some people because it brings a sense of relaxation, and a pain to others because it is harmful to health, everyone has their own standard of pleasure. In fact, our moral judgments of good and bad really depend on subjective factors like religion, customs, and social norms. Moral agents who care about the environment and public health believe that electric vehicle adoption maximizes overall pleasure, and that other agents who also enjoy the benefits of electric vehicles would make the same claim. On the contrary, moral agents who are concerned about the cost believe that conventional vehicles bring greater pleasure, and that other agents agree with them. In both cases, moral agents have made their statements according to consequentialism, but they have exhibited very different concerns and arguments. Therefore, even though a person can justify his or her actions based upon consequentialism and believes that others in his or her situation would have acted the same, it does not mean that his or her moral reasons can really appeal to everyone and promote the best overall pleasure. Without a universal standard for determining pleasure, agent neutrality is thus impossible to achieve, as moral agents are unable to ensure that their moral reasons apply to all other agents. Furthermore, even when moral agents act impartially, without favoring those with whom they have special relationships, they will inevitably have to make moral decisions based upon their own subjective views due to the lack of a common standard that appeals to all agents.

Mill has attempted to propose a remedy, called rule consequentialism, which holds that moral agents should follow a set of widely accepted moral rules, e.g., telling the truth, keeping promises, etc., whose general acceptance would produce the best consequences. Rule-consequentialism aims at preserving the appealing features of consequentialism while incorporating the predictability and stability of rule-based morality. One of its major strengths is that it simplifies moral decision-making by referring to a consistent set of rules rather than calculating consequences for each case, i.e., no more moral calculus. Unfortunately, agent neutrality still fails, and unfairness arises as those rules are again based upon subjective standards of the majority (Hooker, 1995). Given the diversity of cultural backgrounds and value systems across the world, it is highly unlikely that any single set of moral rules could gain acceptance from “the overwhelming majority of everyone everywhere”, as proposed by Hooker (2000). A moral rule that is widely accepted within one society may not be seen as ideal by the majority in another

society. For instance, Western societies often emphasize individualism and thus endorse rules that protect individual rights and autonomy, whereas many Eastern societies prioritize collectivism and favour rules promoting collective well-being and social harmony—both underpinned by the belief that their respective moral frameworks produce the best overall outcome for society. As a result, the formulation and evaluation of an ideal code of rules within rule-consequentialism is again inevitably influenced by the subjective standards of different majorities based on their distinct backgrounds and beliefs. Opponents criticize that it can lead to blindly adhering to rules even when breaking them would clearly lead to better outcomes; for instance, despite being disadvantaged or exploited, minorities must follow those moral rules set by the majority. They also challenge the idea that since moral rules are outcome-based rules, we can evaluate acts directly. Besides, to accommodate people's subjectivity, consequentialists have proposed agent-relative consequentialism, which combines strict agent-neutral consequentialist deontic principles with agents' subjective views and allows moral agents to rank actions based upon their own criteria (Hammerton, 2020). Nevertheless, this is still problematic as we do not have a universal standard that tells us to what extent we can accommodate our personal preferences.

4. Conclusion

As a moral theory based entirely upon outcomes, consequentialism provides a relatively easy way for people to evaluate their actions by eliminating all other complex morally relevant factors. The lack of a universal standard for quantifying and determining the best overall outcome, however, makes consequentialism a problematic theory. With the help of the example of electric vehicle adoption, we have identified some limitations that arise under consequentialism. Consequences are unpredictable, and conflicting outcomes always occur. Without a standard that determines the scope and scale of considerations, such as the extent to which indirect, long-term potential consequences need to be considered, as well as a reference for comparing conflicting consequences, consequentialism is problematic, confusing, and very demanding. Likewise, in the absence of a universally agreed standard of pleasure, moral agents inevitably must make decisions based upon their own subjective criteria of pleasure, thereby violating the agent neutrality requirement of consequentialism. Even though several revised versions of consequentialism, e.g., rule and agent-relative consequentialism, were proposed to address different problems that have been plaguing the theory, they failed to tackle the fundamental problem as well as to propose a clear and objective universal standard to guide moral agents' decisions. All in all, it can be concluded that consequentialism is not a compelling claim until a universal standard is rigorously defined.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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