

Can AI learn the ethics?

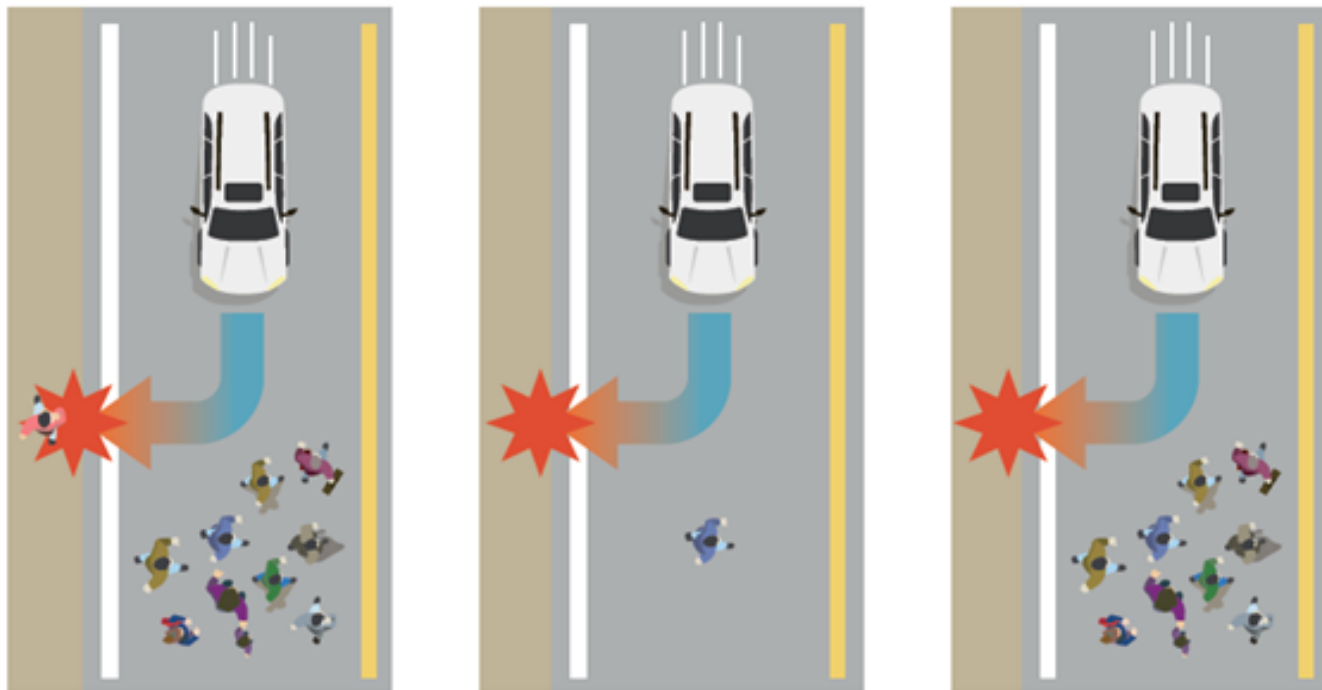
12.16.2016

Yunmyung KIM

Senior Researcher, Software Policy & Research Institute
infolaw@spri.kr

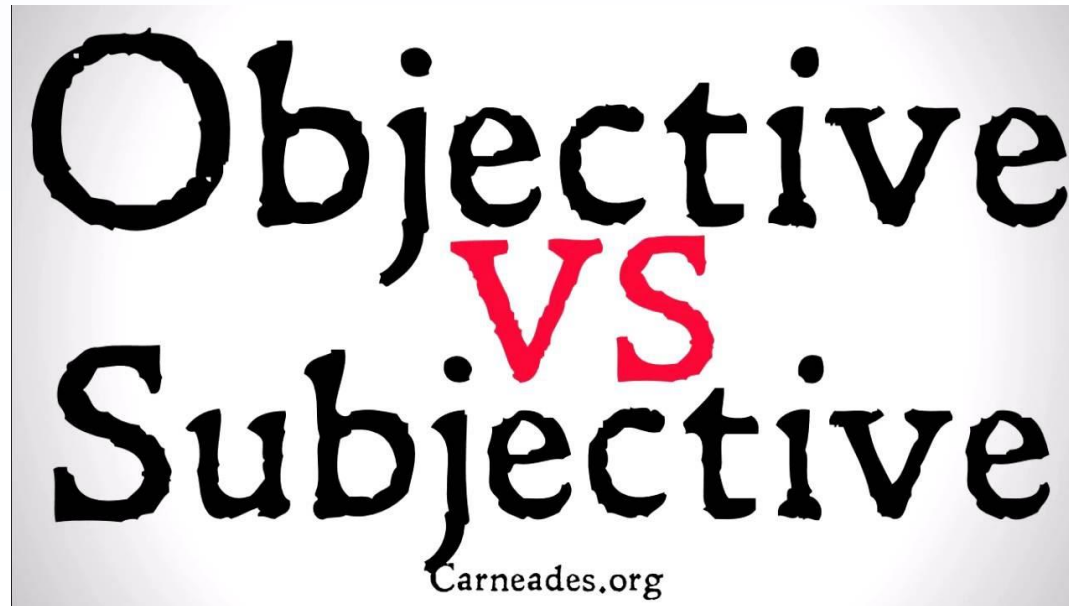
Trolley dilemma

Determining ethically is not an easy task. There may be no answer. Can humans demand or enforce a priori ethics to AI?



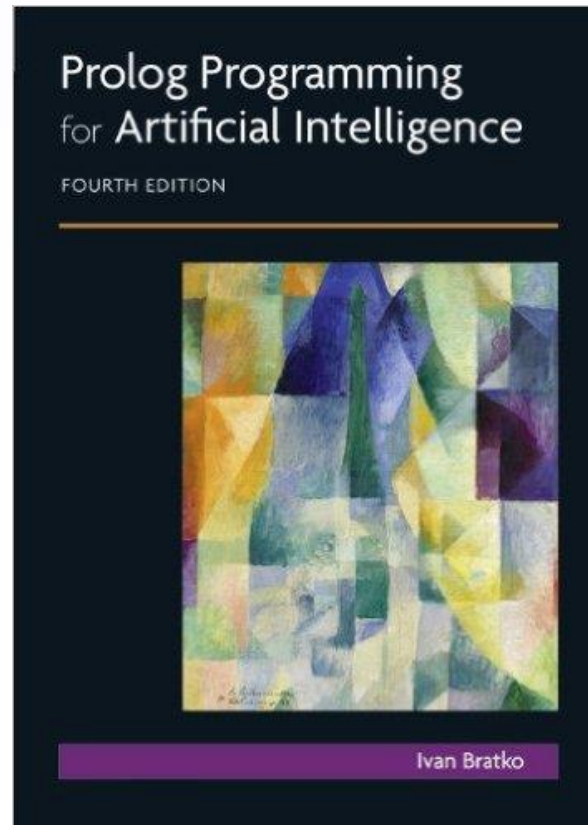
Is ethics objective?

Ethics is the embodied value of humanity through human experience and learning. However, it can also be perceived differently by people. Many people are likely to make different choices about a situation. In this sense, ethics is hardly objective.



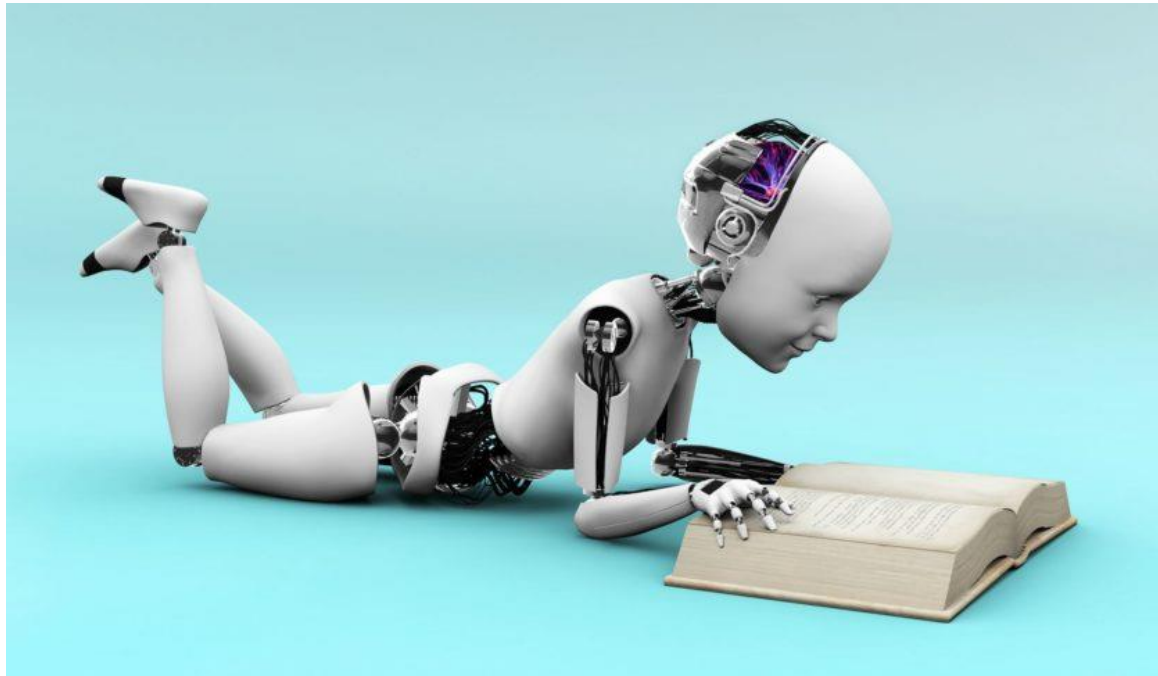
Can we program ethics for AI?

Can you force such a difficult ethic on the robot? Of course, we can admit that robots should be ethical. The impact on people is not so small that ethical elements should be reflected in their choice or judgment. However, the method is a problem.



Is it possible to learn ethics for AI?

it is difficult for the robot to judge on its own unless it teaches one by one. Even though behavior patterns are possible through machine learning, how do you understand the context? Machine learning strongly reflects the intent of the designer.



If possible?

Rather, it is likely that a person wearing a robotic mask will be a much easier solution.



Chatbot - Tay

Artificial intelligence is becoming socialized through machine learning. A chat bot is a typical example. Though it is a negative example, the learning experience of artificial intelligence can be reflected in the intentions of Tay, a Microsoft chat bot.



Is the guideline of robot ethics appropriate?

What can be considered in the case of Tay is to present a future standard to the robot. You can not impose ethics or morality on a person. I do not know if the guidelines are reasonable, but I would like to suggest some options.

Method 1. Analysis of results - A method of establishing moral standards by analyzing cases or cases accumulated by mankind

Method 2. Selection of Value - Analysis and systematization of various suggested values (legal obligations, etc.)

Method 3. Strengthening the responsibilities of the intermediary - Imposing responsibility to the stakeholders related to artificial intelligence

Law is not logic, but experience

The law plays a role in breaking the gap for various situations. The risk of artificial intelligence is predicted, and it is difficult to apply to cases where there is no reason for it.

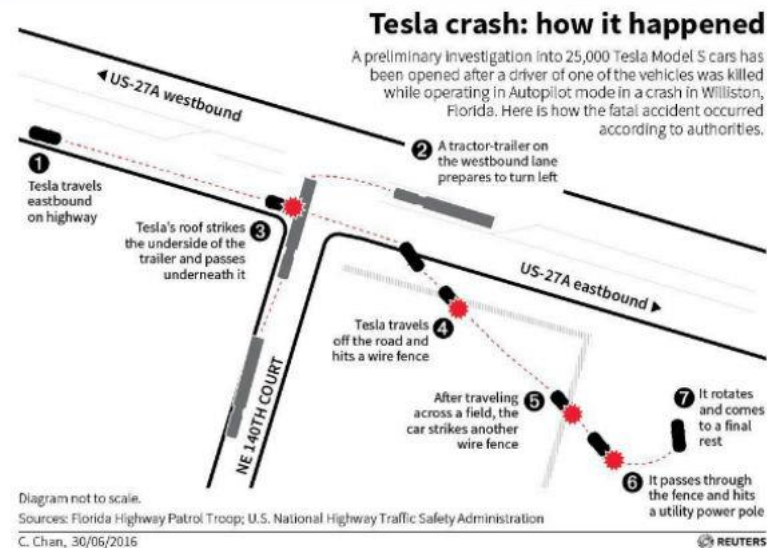
After all, it is not small that legislation is implemented after experiencing a historical problem. This is criticized for the conservative nature of the law, but it is also a choice for legal stability.

Technological ethics may also be considerably slow or conservative in this respect.

Tesla and Product Liability

A death that occurred while driving a Tesla vehicle is a driver's fault. Tesla has informed the operator of the risk liability through the Terms of Use. However, it is hard to conclude that legal immunity is ethically valid, if at all possible.

At least Tesla has to take responsibility for the marketing of incomplete products. Product liability has led to the ethical level of responsibility for manufacturers to create safe products.



Should developers and users be ethical?

Human involvement in the process of artificial intelligence development and use can be essential. Therefore, the ethics of artificial intelligence can not help but start from the search for human ethics. The ethics of artificial intelligence is ultimately human ethics.



**PROFESSIONAL SOFTWARE DEVELOPMENT,
PRACTICES AND ETHICS**

```
map run completed -- 1 IP address (1 host up)
scanned
X sshmike 10.2.2.2 -rootpw="ZION0101"
Connecting to 10.2.2.2:ssh ... successful.
Attempting to exploit SSMi CVE32 ... successful.
Resetting root password to "ZION0101".
System open: Access Level (9)
X ssh 10.2.2.2 -l root
root@10.2.2.2's password:

RTF-CONTROL> disable grid nodes 21 - 48
Warning: Disabling nodes 21-48 will disconnect
sector 11 (27 nodes)

ARE YOU SURE ? (y/n)

Grid Node 21 offline...
Grid Node 22 offline...
Grid Node 23 offline...
Grid Node 24 offline...
Grid Node 25 offline...
Grid Node 26 offline...
Grid Node 27 offline...
Grid Node 28 offline...
Grid Node 29 offline...
Grid Node 30 offline...
Grid Node 31 offline...
Grid Node 32 offline...
Grid Node 33 offline...
Grid Node 34 offline...
Grid Node 35 offline...
Grid Node 36 offline...
Grid Node 37 offline...
Grid Node 38 offline...
```

LEMİ ORHAN ERGİN
SENIOR SOFTWARE ENGINEER @ GITTIGIDIYOR / EBAY

Is this ethical?

Let's think about one more thing. About footage of "BigDog" of Boston Dynamics, people responded "How can he kick a robot?" This can be understood from the ethical viewpoint of the user.

Boston Dynamics



In short, it is a person in the end

A discussion of artificial intelligence requires serious reflection on people. It is difficult to understand artificial intelligence or robots without understanding people. Ethics is the basis of human society. However, proper learning is necessary.

In the case of Tay, we can see that the ethics of the user is also important in the ethics of artificial intelligence. The fact that artificial intelligence can learn unethical content tells you that you can also learn ethical things. Suggesting that the ethical use of machinery may be important prior to machine ethics. Of course, artificial intelligence ethics is a difficult subject to find right now.

The various discussions, including artificial intelligence ethics, are not a matter of one country. Since artificial intelligence, like SW, will be the subject of crossing borders, the need to discuss or adopt this in the form of international treaties.

감사합니다.



Thank you.