

Activities associated with *Can animals and machines be persons?* — JP 1

Part 1: What are persons?

Description

In this activity, students deepen their understanding by being challenged with the question, “Can animals and machines be persons?”

1. Students create *criteria* that define being a person. The context should include consideration of the *rights* associated with being a person. This may be accomplished by an individual ⇒ pair-share ⇒ quad-share progression.
2. After group discussion and cross-group or whole-class sharing, students regroup and explore the implications of their assertions.
3. Students are exposed to the first part of *Can Animals and Machines Be Persons? A Dialog* by Justin Leiber, including “The Setting” and “The First Morning.”
Alternatives: Students may have been asked to have previously read that material or may read/perform/group-read during the class session.
4. Students then individually write a reflection that analyzes the implications of their assertions and beliefs, and address implications for whether machines (or animals) can be considered persons. (The reflection should include appropriate citations.)

Planning Notes

- Prepare additional short readings and exploratory questions based on the question, “Can animals or machines be persons?”
- Design how individual contribution and information sharing will be facilitated.
- Prepare set of prompts and the rubric for this assignment and share with students before they begin writing their reflective piece.
- Prepare key issues to raise if they do not naturally arise during discussion; such as, replacement of human parts (partial replacements, corrective, perfective, enhancement) as path to full bionics, living versus dead (+ definition of *alive*), the *end-of-history* illusion, physical characteristics, intelligence, the singularity, ...

Activity

1. In small groups (which may have been achieved via individual ⇒ pair-share ⇒ quad-share), **students brainstorm what it means to be a person.** Component questions include, “What constitutes a person?”, “What characteristics are necessary to be considered a person?”, and “What rights does a person have?” **Each student documents seven to ten criteria for being considered a person.** The group should come to a *consensus*.

Reinforce the idea that the terms “person” and “human” should not be used synonymously and that the term “human” is a biological concept, whereas the term “person” is a philosophical one. Ensure consideration of the recency of the perspective of *all* humans being considered persons. Use examples of sub-person status of groups such as women, slaves, untouchables (Dalit in India, Burakumin in Japan), and the like.



Activities associated with *Can animals and machines be persons?* — JP 2

The resulting criteria — set of characteristics necessary to be considered a person — must be *effective*, that is, they must be able to be applied to a candidate entity with objective measurable outcomes. Ensure that students consider the context of what rights are afforded to those who are considered persons. An extension is to require listing such rights explicitly.

2. Each group presents their findings to the whole class, either via jigsaw or direct presentation. The whole class then attempts to come to a consensus and produces a final list of the criteria for personhood.
3. If necessary, re-raise the idea that we often assume humans are the only candidates for personhood. Pose the question, “Is it theoretically possible to have ‘persons’ who are non-human?” A full class discussion should ensue.
4. Students either form new groups or return to their original groups and consider additional information in their analyses (such as from the group discussion or in the articles “Is A Dolphin A Person?” or “Can Machines Think?”)
5. Students take the information they have about a machine or animal and test it against the criteria that the whole class created for personhood. The group determines if the machine or animal is a candidate for personhood. Conclusions should be shared with the whole class.
6. Students individually write a reflection essay on the question, “*Can machines (and animals) be persons?*” They should specifically refer to the criteria of personhood in their response. In their response, they should also refer to the implications of their findings (*e.g., If animals/machines are persons, does this mean that they have certain rights? Is it wrong to keep them in captivity? To turn them off?*). The reflection paper is submitted online.

Assessment & Evaluation of Student Achievement

During the group presentations of the criteria for personhood, formatively assess the students’ understanding of the topic. If there are groups that do not seem to understand the main concepts behind the activity, further explanation may be necessary.

Activities associated with *Can animals and machines be persons?* — JP 3

Activity 2: Can animals and machines be persons?

Description

In this activity, students deepen their understanding by being challenged with the question, “Can animals and machines be persons?”, in the context of Leiber’s *Can Animals and Machines Be Persons? A Dialog*.

1. Students are exposed to the complete text of *Can Animals and Machines Be Persons? A Dialog* by Justin Leiber.
Alternatives: Students may have been asked to have previously read that material or may read/perform/group-read during the class session.
2. Students explore the computer science content including technical, social, economic, philosophical, and ethical aspects through engagement in individual contemplation, pair exploration, and small-group sharing and discussion.
3. Students, either individually or in pairs or trios, express an aspect of their understanding of the concepts explored in a form that is accessible to their peers. This may employ a dialog, expository writing, visuals (slides), or any other media as appropriate.
4. Students, either individually or in pairs or trios, address specific questions from the set provided by the course instructor/facilitator.
5. Students then individually write a brief piece that reflects upon the experience, highlighting insights gained and observations of unanticipated occurrences.

Activity

1. Students explore the technical, historical, social, economic, philosophical, and ethical aspects of computer science that arise in the dialog by Leiber. Sample content includes the following.
 - Socio-ethical issues of computing in historical contexts
 - *Artificial intelligence* (AI)
 - Socio-ethical issues associated with AI
 - Alan Turing as key figure in development of computing
 - *Universal Turing Machine*
 - *Imitation Game* and *Turing Test*
 - *Cast of millions* argument & *multi-cellular organism* counterargument
 - *Chinese box* argument & counterarguments
 - Slippery-slope arguments
 - Use of dialog articulate issues
 - *End of history* illusion
 - Application of the end of history illusion to contemporary views of computing & society

Activities associated with *Can animals and machines be persons?* — JP 4

2. Students are asked to respond to the following prompt.

Answer two of the following questions:

- 1) What is Counselor Godwin's main argument for claiming that AL and Washoe-Delta are persons? What difference does she articulate between the case for AL and the case for Washoe-Delta? What is the "slippery slope argument" criticism of her position proffered by Counselor Goodman? What is Godwin's reply to his criticism?
 - 2) What is the "Turing Test"? How does *functionalism* underlie and justify the Turing Test? How does Alan Turing reply to the *originality* and the *solipsist* objections to the test? What is your own position regarding the Turing Test?
 - 3) Describe both Searle's and Block's criticisms of the Turing Test. What common assumptions do they both make about what constitutes "passing the Turing Test"? Detail a reply that might be made to each of their counter-example arguments.
 - 4) What is a Turing Machine? That is, what are its parts; what does it do; why might it be called "the normal form for describing a functional mental state"? Describe a "Universal Turing Machine."
 - 5) Imagine yourself as a commissioner. How would you answer Versen's last question? Why?
 - 6) What philosophical position does each of the following characters represent: Indira Ramajan, Juan Mendez, Peter Goodman, and Mary Godwin? Articulate each position clearly.
 - 7) Descartes' "test" for mind/personhood is that it "replies appropriately to whatever might be said in its presence." Why does he think that "automata" or "machines" cannot pass this test while normal (minded) humans can? Why, to the contrary, does Alan Turing think that some sort of computing machinery might pass Turing's similar version of the test?
3. Students then write a brief piece that reflects upon the experience, highlighting insights gained and observations of unanticipated occurrences.

Activities associated with *Can animals and machines be persons?* — JP 5

Activity 3: Presentation of social/ethical issue as a dialogue

Description

In this activity, students continue exploring their understanding of social and ethical issues associated with the impact of computing by articulating a particular issue in the form of a two-person dialogue.

Activity

Students are given the following instructions.

1. Consider the pervasiveness of computing in contemporary society and the implications for individuals (such as, exploitation, privacy, bullying, and so on).
2. Select one related social or ethical issue and write the script for a brief two-person dialogue that presents a perspective on that issue.
3. Sign up to use the text-to-movie tool at <http://www.xtranormal.com> (Note that you may wish to use a disposable e-mail address as covered in a previous activity/assignment.)
4. Create and save a movie from your script using the text-to-movie tool at <http://www.xtranormal.com>
5. What to submit for this assignment:
 - a. Provide the URL link to your published movie. [30%]
 - b. Include the text of your script as originally written. (It's fine if you ended up editing it while creating the movie.) [15%]
 - c. Write a brief reflection that includes your observations and any insights gained during both (i) the activity of considering the issues and writing the script, and (ii) the activity of creating the movie. [55%]
6. Prepare to present your movie to the course participants.
 - a. Your movie will be shown to participants without introduction.
 - b. You should be prepared to answer the following questions:
 - i. What is the primary message your dialogue is intended to communicate?
 - ii. How did you decide on that message as the one to address?
 - iii. What did you encounter that was unexpected while working on this activity?
 - iv. What did you learn as a result of engaging in this activity?
 - c. You should expect additional questions from the audience as well.

Activities associated with *Can animals and machines be persons?* — JP 6

Resources

Leiber, Justin. *Can Animals and Machines Be People?* Indianapolis: Hackett Publishing, 1985.

Wright, Robert. "Can Machines Think?" in *TIME*, April 1, 1996, pp. 50-58.

White, Thomas. "Is A Dolphin A "Person?" in *Discovering Philosophy: Brief Edition*. New Jersey: Prentice-Hall, 1996.

Wolff, R. "Do Computers Think?" in *About Philosophy*. New Jersey: Prentice-Hall, 1995.

Leiber, Justin. *A Philosophical Glossary*. <http://mailer.fsu.edu/~jleiber!/glossar.htm>

Leiber, Justin. *Course materials for Philosophy 2010*. <http://mailer.fsu.edu/~jleiber/>

Bicentennial Man soliliquy — Video clip

Xtranormal. <http://www.xtranormal.com>