

## Neuroethics: Should We or Shouldn't We?

**Blakely Drake**

Lake Forest College  
Lake Forest, Illinois 60045

In Michael Gazzaniga's book, *The Ethical Brain*, many different topics are brought up that discuss the use of neuroethics to make decisions on day-to-day social issues related to disease, mortality, lifestyle, and the philosophy of living. I don't agree with Gazzaniga-- at least, not completely. In my opinion, there are some situations where neuroethics should be used, such as deciding when euthanasia is acceptable, and other situations where it shouldn't be used, such as in cases of abortion and determining guilt.

There is no doubt that using neuroethics can be beneficial in certain situations. For example, some people are afraid of developing a neurodegenerative disease and would rather die sooner than suffer through it. Other people are not comfortable with this wish. Part of it is "it feels impossible to identify a point at which a deteriorating or deranged brain becomes undeserving of normal moral status" (Gazzaniga, 32) and the other part is that a person is still a person. Although not everyone believes this, "some physicians feel that it is appropriate for them to end the suffering of a patient who is capable of making a rational decision and asks to die" ("Assisted Suicide", 2015). Using neuroscience, physicians can evaluate the mental and physical status of a person's brain and decide whether they have reached the predetermined point, specified in advance directives, at which the patient no longer believes he/she has a good quality of life. We know "the mental state of demented patients [makes them] ...disconnected from the world" (Gazzaniga, 27).

If examination of the brain reveals a person has reached a certain point, then just like Gazzaniga, "I believe society has no option but to allow a dignified method for ending life for those with terminal or totally debilitating diseases who choose this" (Gazzaniga, 33).

Although there are situations where neuroethics can play a role, there are many other situations where it can't. The first of those situations involves issues related to abortion. In the case of a developing fetus, Gazzaniga suggested that one "could determine the moral status of an embryo or fetus based on...whether the embryo has a brain that functions at a level that supports mental activity" (4). The problem is that people and legislators have developed different age markers for abortion approval, leading to variability in claims that it is unethical. One marker claims the zygote is an individual at 14 days, while another marker claim a zygote's individuality begins at 23 weeks (Gazzaniga, 15-16). This difference is not one that has reached an agreement, and that, along with my own personal beliefs, is why I believe abortion shouldn't be ethical at all. Neuroscience is not enough to justify the ethics of abortion since society can't come to an agreement on the developmental line for ethical abortions. Also, I believe in the continuity argument "a fertilized egg will go on to become a person and therefore deserves the rights of an individual, because it is unquestionably where a particular individual's life begins" (Gazzaniga, 9). Not only does this agree with my personal beliefs but it also removes the sticky situation of choosing a cutoff date in development.

On top of the previous problem, "the process [of abortion] itself is eugenic in nature...the decision to terminate a pregnancy of a child deemed 'defective' is 'morally problematic'" (Giric, 2016). No one should be allowed to analyze genes and terminate a pregnancy based on what they find or how developed the zygote's system is. Although Gazzaniga doesn't believe a newlyformed zygote has the same rights as a full grown person, he agrees that defining a specific point where abortion is no longer acceptable is difficult (Gazzaniga, 8).. Thus, because neuroscience causes a whole set of grey areas to arise when defining life, it should not be used in cases of abortion.

Finally, neuroethics is also involved in declaring a person guilty. Occasionally in court lie detectors are used to get information and verify suspicions related to a crime. These detectors record mental and physical data related to a suspect's reactions when he/she is asked to answer different questions. The goal of these tests is to prove whether or not someone is lying or telling the truth. The problem with using a lie detector is it's not 100% accurate. Interestingly, "positive DNA matching virtually

assures that a particular person was or was not involved in a crime, reading states of mind is a different matter" (Gazzaniga, 108). For instance, many factors, such as a racing heartbeat, sweaty hands, or altered breathing, can affect the results of a polygraph test when under pressure (Bork & Giberti, 2017) and while "brain imaging provides fascinating data, it doesn't provide incontrovertible evidence" (Gazzaniga, 107). I agree with Gazzaniga; it is not ethical to use neuroethics as a way of finding a person guilty. It would be awful if a person was falsely proved guilty based on a lie detector test and had to pay for a mistake he/she didn't make.

As previously mentioned, neuroethics can be both helpful and harmful when guiding society in choosing the morality of a situation. In my opinion, if you can't come up with a reliable and consistent way to use neuroscience as the basis of an ethical argument, it shouldn't be used. When it comes to euthanasia, the basis of how neuroscience will be used is clearly defined in an advance directive, indicating it is a reliable method of arriving at a consensus. When it comes to ethically defending abortion or proving a person guilty based on lie detectors, the use of neuroscience isn't as reliable. For abortion, people can't come to a general consensus on which stage of brain development is the cut off for abortion rights and when it comes to proving someone guilty using lie detectors, "the questions the law asks are not always the same as those questions that neuroscience answers" (Gazzaniga, 105). If the basis of neuroethics isn't consistent, it has no place in deciding what is ethical and what is not.

*Note: Eukaryon is published by students at Lake Forest College, who are solely responsible for its content. The views expressed in Eukaryon do not necessarily reflect those of the College.*