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PIERCING THE VEIL: THE LIMITS OF BRAIN DEATH AS A LEGAL FICTION

Seema K. Shah*

Brain death is different from the traditional, biological conception of death. Although there is no possibility of a meaningful recovery, considerable scientific evidence shows that neurological and other functions persist in patients accurately diagnosed as brain dead. Elsewhere with others, I have argued that brain death should be understood as an unacknowledged status legal fiction. A legal fiction arises when the law treats something as true, though it is known to be false or not known to be true, for a particular legal purpose (like the fiction that corporations are persons). Moving towards greater transparency, it is legally and ethically justifiable to use this fiction to determine when to permit treatment withdrawal and organ transplantation.

However, persistent controversy and recent conflicts between hospitals and families over the treatment of brain-dead patients demonstrate the need for clearer limits on the legal fiction of brain death. This Article argues that more people should recognize that brain death is a legal fiction and further contends that existing scholarship has inadequately addressed the appropriate use of the legal fiction of brain death in legal conflicts.

For instance, as in Jahi McMath’s case (in which a mother wanted to keep her daughter on a ventilator after she was determined brain dead), families may distrust physicians and hospitals who fail to acknowledge that brain death is a legal fiction. Legislators in most states have ignored the need to permit statutory exceptions for individuals with strong sanctity of life views. When hospitals treat brain-dead pregnant women, as in Marlise Muñoz’s case, courts have failed to weigh the fundamental constitutional rights of pregnant women against the state’s interests.

Finally, judges and legislators should sometimes “pierce the veil” of brain death and should not use the legal fiction in cases involving: (1) religious and moral objections, (2) insurance reimbursement for extended care of brain-dead patients, (3) maintenance of pregnant, brain-dead women, and (4) biomedical research. The

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INTRODUCTION

Considerable public attention has centered on two cases, in which hospitals and family members have disagreed over the treatment of brain-dead patients.¹ These cases demonstrate that the controversy over brain death cannot remain confined to scholarly literature² and that clearer guidance is needed regarding when brain death should or should not be used to resolve legal controversies.

Brain death is defined as the “irreversible cessation of all functions of the entire brain.”³ Notwithstanding the tremendous value of the legal standard of brain death in some contexts, “brain death” is simply not the equivalent of a traditional, biological conception of death where the heart stops beating and the body grows cold to the touch and begins deteriorating.⁴ Although brain-dead patients are in an irreversible coma and have no chance of regaining consciousness or the ability to breathe spontaneously, they are not biologically dead. Their hearts still beat with the aid of mechanical ventilation; their bodies can heal wounds, mount stress responses, grow feverish in response to infection, move spontaneously, and maintain a warm body temperature; and, for many brain-dead patients, the brain continues to secrete vasopressin, a hormone that regulates the balance of salt and fluids in the body.⁵

Jahi McMath’s case received national attention. Three physicians examined Jahi, a thirteen-year-old girl, a few days after she had surgery to remove her tonsils, adenoids, and uvula; these physicians

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⁴. Throughout this Article, the term “biological death” refers to the irreversible cessation of the functioning of an organism as a whole. See FRANKLIN G. MILLER & ROBERT D. TRUOG, DEATH, DYING, AND ORGAN TRANSPLANTATION: RECONSTRUCTING MEDICAL ETHICS AT THE END OF LIFE 69 (2012).

agreed that she was brain dead. The family believed that Jahi was alive and could still recover, and asked the hospital to keep her on the ventilator. The family’s lawyer expressed that the family did not believe that Jahi had died or that the hospital should treat her as a dead person because, with the support of mechanical ventilation, her heart was still beating and her body remained warm to the touch. The family sought to compel the hospital to perform a tracheostomy on Jahi and insert a feeding tube to make it easier to transfer her to a local facility; the hospital refused. The court initially issued a temporary restraining order against the hospital. The court then required an independent physician to examine Jahi to determine whether she was brain dead, ultimately accepted the physician’s determination of brain death, and considered Jahi legally dead. The family eventually transferred her to a long term care facility.

In the second case, Marlise Muñoz, who was fourteen weeks pregnant, suffered from what appeared to be a pulmonary embolism, and doctors determined she was brain dead in November 2013. Although her family wished to remove her from life support and felt this was consistent with her wishes, the hospital refused. It cited a Texas law that states that “life-sustaining treatment” cannot be withdrawn or withheld from a pregnant woman, regardless of how

7. Id.
8. Id.
far along the pregnancy has advanced.\textsuperscript{14} The family sued the hospital, arguing that the statute requiring hospitals to keep pregnant patients on life support should not apply to Ms. Muñoz because Texas law considers a person biologically dead when they are brain dead.\textsuperscript{15} Although the court ultimately accepted this argument and granted the family’s request,\textsuperscript{16} a strict application of the legal fiction of brain death could have led to a different outcome under even slightly varied circumstances.

Because brain death is actually a legal fiction, courts should not, by default, extend the legal standard of brain death to the types of cases discussed above. A legal fiction exists when the law treats something known to be false (or not known to be true) as if it were true for a particular legal purpose.\textsuperscript{17} Fictions are devices that simplify the extension of the law. For example, although corporations are not persons, the law treats them as such to apply statutes and case law to their circumstances. Moreover, courts are aware that sometimes exceptions to this legal fiction are warranted and have “pierced the corporate veil” when the strict application of the legal fiction would produce an unjust outcome.\textsuperscript{18} Unlike the fiction of corporate personhood, however, the legal fiction of brain death is not widely acknowledged, which makes it hard to recognize when the courts use the legal fiction inappropriately. As a result, scholars, courts, and legislators have not addressed the need to limit the legal fiction of brain death. Important and valid uses of the legal fiction of brain death exist, for example determining when to withdraw life-sustaining therapy and allow organ donation. In contrast, using the traditional, cardiopulmonary standard for death, instead of the legal fiction of brain death, is important in some circumstances.

In light of scientific evidence, the existing rationales for considering brain death as a type of biological death fail.\textsuperscript{19} Although commentators argue that it is indisputable that brain death is equivalent to biological death,\textsuperscript{20} asserting this as a fact and ignoring

\begin{thebibliography}{99}
\bibitem{id} Id.
\bibitem{fuller} See LON FULLER, \textit{LEGAL FICTIONS} 9 (1967).
\bibitem{shewmon} See D. Alan Shewmon, \textit{supra} note 5.
\bibitem{gostin} See, e.g., Lawrence O. Gostin, \textit{Legal and Ethical Responsibilities Following Brain Death: the McMath and Muñoz Cases}, 311 J. AM. MED. ASS’N 903, 903 (2014). Gostin argues that “[t]he
the existing controversy over brain death is problematic. For instance, some argue that because brain death is the same as death, physicians should never treat a brain-dead patient. Yet physicians regularly treat brain-dead patients to keep their organs viable for organ donation.

Perhaps because our medical and legal discourse employs the term “death” when it refers to “brain death” and “biological death,” the important distinctions between these two states are overlooked. When theorists believe the law treats brain-dead and biologically-dead individuals identically, relevant considerations are omitted from medical and legal discourse. The hospital’s reluctance to accommodate the McMath family illustrates this point. It was not clear whether California’s statute, requiring some brief period of accommodation to allow family to gather at the bedside of a brain dead patient, generated any legal obligation on the hospital to respect the family’s views and to facilitate the transfer of Jahi McMath to another facility.

The under-acknowledged distinction between biological death and brain death causes confused reasoning and potentially problematic outcomes. In certain legal contexts, a traditional conception of cardiopulmonary death, rather than brain death, aligns better with the law’s underlying goals and policy. For instance, although the correct outcome was reached in Muñoz, as argued infra, given the complexity of the issues involved and the potentially conflicting rights and interests of the mother and fetus, hospitals and physicians should not use the brain death standard mechanically to justify terminating treatment. Instead, they should weigh a woman’s constitutional rights to privacy and to consent to treatment against the state’s interest in preserving her life and the life of her fetus. Furthermore, judges and legislators engaged in this balancing should take into account the diminished interests of brain-dead individuals and recognize that states have reduced interests in preserving the lives of brain-dead individuals.

Simply stated, brain death is a useful construct in some cases. In other cases, a traditional, cardiopulmonary standard for death is

McMath and Muñoz cases are quite distinct in that both of these individuals have been declared legally dead. Once a patient has died, any conversation about the appropriate form of medical treatment is no longer relevant. This would mean, for example, that while Jahi’s mother could ask for ventilation for a short duration to enable her to come to terms with her daughter’s death, the very idea of ‘treatment,’ especially if it is of an indefinite duration, would be well beyond the bounds of prevailing ethical or legal thought.” Id.

21. See, e.g., id.
more appropriate. Therefore, resolving the question of when it is appropriate to use brain death as a legal fiction will increase transparency and awareness of the fiction’s limits. The McMath and Muñoz cases demonstrate the need for a clearer understanding of when to use the legal fiction of brain death.

To develop this argument, Part I describes the historical development of brain death, the current legal standards for determining death, and the widely-accepted evidence about brain death that caused controversy. Part II explores the theoretical basis and justifications for legal fictions and establishes a theoretical approach to status legal fictions. This theoretical analysis demonstrates why using a legal fiction is the best solution to the controversy over brain death. Part III argues for greater transparency surrounding the legal fiction of brain death among judges, legislators, hospitals, and members of the public. That Part addresses the appropriate use of the legal fiction of brain death by using the cases of Jahi McMath and Marlise Muñoz. In particular, hospitals and courts should not use the legal fiction of brain death in cases involving: (1) religious and moral objections, (2) insurance reimbursement for extended care of brain-dead patients, (3) maintenance of pregnant, brain-dead women, and (4) biomedical research. Part IV discusses the implication of the analysis for legal actors deciding whether to create or use legal fictions. For these actors, in some cases, it is better not to employ legal fictions in the first place. When legal fictions are adopted and used, the doctrine should only be applied within appropriate limits. Finally, this Part proposes areas for future scholarship to explore the use of legal fictions in technological legislation and critically evaluates the general use of legal fictions.

I. Background

A. The Historical Development of Brain Death

Death has long been associated with a body that is cold to the touch and without breath, heartbeat, or pulse. Of course, in the distant past, death was difficult to accurately determine. Concern about premature burials once prompted periods of high public anxiety about the determination of death.24 Nevertheless, for much

24. JAN BONDENDORF, BURIED ALIVE: THE TERRIFYING HISTORY OF OUR MOST PRIMAL FEAR 31–32 (2002) (documenting periods with high levels of anxiety among the public about the prospect of being buried alive, such as after cholera epidemics when the dead were buried hastily in order to avoid the spread of disease). Some contended that bodily decay was the only sure sign of death at the time.
of history, laypeople and the medical profession have believed that death occurs when breathing ceases and the heart stops beating permanently.\textsuperscript{25} The legal view of death followed the medical one. The fourth edition of Black’s Law Dictionary, published in 1968, defined natural death as “[t]he cessation of life; the ceasing to exist; defined by physicians as a total stoppage of the circulation of the blood, and a cessation of the animal and vital functions consequent thereon, such as respiration, pulsation, etc.”\textsuperscript{26}

With the development of ventilators and other life-sustaining technologies in the 1950s and 1960s, the implications of the traditional, cardiopulmonary view of death troubled physicians. Ventilators could maintain patients for years at a time, even though some of these patients seemed to have permanently lost consciousness, the ability to breathe spontaneously, and the ability to interact meaningfully with others.\textsuperscript{27} French scientists first identified this state as “coma dépassé”\textsuperscript{28} (roughly translating to “beyond coma”).\textsuperscript{29} Physicians and scientists came to believe that this state of profound neurological loss belonged in a category of its own. Legal, moral, or social reasons linked this category to a legal determination of death.\textsuperscript{30}

In 1968, Henry Beecher and others from Harvard formed the self-described Ad Hoc Committee of the Harvard Medical School. The Committee published an article intended to change how death was determined, both legally and medically.\textsuperscript{31} The article noted that new approaches to life-sustaining technology were placing considerable burdens on families and hospitals, and that people kept on ventilators could serve as a source of valuable, high-quality organs.\textsuperscript{32}

\textsuperscript{25} President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, Defining Death: Medical, Legal, and Ethical Issues in the Determination of Death 5 (1981) [hereinafter President’s Commission].
\textsuperscript{27} Miller & Truog supra note 4, at 53–54 (2012).
\textsuperscript{29} The President’s Council on Bioethics, Controversies in the Determination of Death 3 (2008).
\textsuperscript{30} Calixto Machado et al., The Concept of Brain Death Did Not Evolve to Benefit Organ Transplants, 33 J. Med. Ethics 197, 197–98 (2007). Note that although Machado and colleagues accurately describe the evolution of the concept of brain death, scientists and physicians did not necessarily view total brain failure as a new way of determining death at least until the publication of the Ad Hoc Committee report, if not later. See id. at 198.
\textsuperscript{32} Id.
Next, they proposed a new way to determine death, based on the permanent cessation of neurological functioning. The Ad Hoc Committee also noted that if physicians could agree on a new way to determine death, they had the potential to effect profound legal change since physicians were typically asked to determine death in legal disputes. However, the Committee did not justify their belief that the cessation of neurological activity, or “brain death,” should be considered death.

An article published shortly after this report commented on the need for a public dialogue about the new criteria for death and cited data, suggesting that the public was very confused about the notion of brain death. Although debate persisted, the issue was ultimately resolved in the early 1980s. The President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (hereinafter, “President’s Commission”) was convened and tasked with explaining why patients who fit the Ad Hoc Committee’s proposed neurological criteria should be considered biologically dead. The President’s Commission explained that the development of technologies to sustain life “masked” that death had already occurred and argued that death happened with the loss of integrative functioning of the organism as a whole. They also proposed model language for a law that states could adopt to change the traditional way of determining death to include neurological criteria, or, in more colloquial terms, brain death.

B. The Legal Standard for Determining Death

The model language proposed by the Presidential Commission was adopted in the Uniform Determination of Death Act (UDDA). Forty-four states and the District of Columbia have adopted the UDDA. The Uniform Law Commission described the UDDA’s purpose as a “minimum one” that merely “recognizes cardiorespiratory and brain death in accordance with the criteria the

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33. *Id.*
34. *Id.* at 338–39.
37. *Id.* at 33.
38. *Id.* at 2.
medical profession universally accepts." 41 The Uniform Law Commission also explained that the act purposefully left the means of determining death unspecified to ensure that the act did not become out-of-date as medical technology advanced.42 Instead, the UDDA provides the following:

An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards.43

Notwithstanding the widespread acceptance of the UDDA,44 some variations persist. First, states have different “acceptable medical standards” for determining death.45 The American Academy of Neurology provides helpful general guidance for clinicians.46 The first task for a clinician to determine whether a patient is brain dead is to establish the coma’s cause and rule out other potentially reversible causes (such as hypothermia and drug use).47 Then, the clinician should perform a series of tests to detect whether any neurological reflexes are still present.48 These tests include shining a light in both eyes and detecting no change in pupil size; touching the cornea with a piece of tissue paper, a cotton swab, or squirts of water and seeing no eyelid movement; and confirming the inability to breathe independently with a process that includes taking the patient off the ventilator for several minutes.49 States’ requirements vary as to whether the physician making the determination must

42. Id.
43. UNIF. DETERMINATION OF DEATH ACT supra note 39, at 780.
44. PRESIDENT’S COUNCIL ON BIOETHICS, supra note 29, at 5–6 (2008).
45. See, e.g., VA. CODE. ANN. § 54.1-2972 (2013) (requiring that two specialists in “neurology, neurosurgery, electroencephalography, or critical care medicine” certify brain death); CAL. HEALTH & SAFETY CODE § 7181 (West 1982) (requiring “independent confirmation” by a physician); FLA. STAT. § 382.009(b) (2014) (requiring that two physicians make the determination and that “[o]ne physician shall be the treating physician, and the other physician shall be a board-eligible or board-certified neurologist, neurosurgeon, internist, pediatrician, surgeon, or anesthesiologist.”).
47. Id. at § 1.
48. Id.
49. Id.
have specialized in neurology, how many physicians have to conduct these tests, and whether registered nurses may participate in making the determination of death. Some states have requirements for the specialty of the physician performing the examination based on the patient’s age, and some state statutes are more detailed than others and delineate the clinical findings that indicate brain death has occurred.

State laws also vary with respect to whether they accommodate religious or moral objections to brain death. Two states, New York and New Jersey, allow for exceptions in cases where individuals have religious views that do not accept brain death as biological death. New Jersey’s statute first describes how death is determined in terms that are more consistent with a legal fiction: “[A]n individual whose circulatory and respiratory functions can be maintained solely by artificial means, and who has sustained irreversible cessation of all functions of the entire brain, including the brain stem, shall be declared dead.” The statute then indicates the appropriate use of cardiopulmonary criteria for people who have religious objections to brain death:

The death of an individual shall not be declared upon the basis of neurological criteria . . . when the licensed physician authorized to declare death, has reason to believe, on the basis of information in the individual’s available medical records, or information provided by a member of the individual’s family or any other person knowledgeable about the individual’s personal religious beliefs that such a declaration would violate the personal religious beliefs of the individual. In these cases, death shall be declared, and the time of death fixed, solely upon the basis of cardio-respiratory criteria.

New York has adopted the UDDA, but it requires hospitals to include “a procedure for the reasonable accommodation of the individual’s religious or moral objection to the determination as expressed by the individual, or by the next of kin or other person closest to the individual.” Since 2009, California has also required hospitals to provide a “reasonably brief period of accommodation”

50. Wijdicks, supra note 40.
52. N.J. Declaration of Death Act, N.J. Stat. Ann. 26:6A-3 (West 1991). This language is consistent with a legal fiction because the statute does not state that such an individual “is dead” and merely indicates that the individual “shall be declared dead.”
53. Id. at 6A-5.
that allows families or next of kin to gather at the bedside.55 Moreover, if a surrogate decision-maker or family member voices religious or cultural concerns about brain death, the hospital must “make reasonable efforts to accommodate those religious and cultural practices and concerns.”56 The hospital is only required to continue to provide cardiopulmonary support and may also consider other patients’ needs.57 Brain death and cardiopulmonary death are now the two legal standards for determining death in the United States and in many international jurisdictions.58

C. Criticisms of Using Neurological Criteria to Determine Death

Some scholars, and even the members of the Harvard Ad Hoc Committee themselves, were uneasy with the concept of brain death from the beginning.59 D. Alan Shewmon’s work, which emerged in the late 1990s, contained the most forceful challenge. Shewmon demonstrated that some patients, whom doctors had accurately determined to be dead under neurological criteria, could perform functions that seemed to require a body with integrative functioning60 and which the President’s Commission would have called alive.61 These functions included wound healing, spontaneously moving, maintaining a warm body temperature (though one was a few degrees below normal), mounting stress responses, and fighting infections.62 Many brain-dead patients still have at least one functioning part of the brain—the hypothalamus, which continues to secrete vasopressin through the posterior pituitary.63 Rare cases

55. CAL. HEALTH & SAFETY CODE § 1254.4 (West 2008).
56. Id. at (c)(2).
57. CAL. HEALTH & SAFETY CODE § 1254.4(d) (West 2008).
58. Wijdicks, supra note 40. Internationally, there is a divide between the “whole brain death” standard used in the U.S. and the “brainstem death” standard created in the U.K. and also used in countries such as Canada and India. C. Pallis, ABC of Brain Stem Death. The Position in the USA and Elsewhere, 286 BR. MED. J. 209, 209 (1983). The brainstem is the part of the brain that connects to the spinal cord and controls many important, involuntary bodily functions, such as breathing and swallowing. Some U.K. clinicians argue that this difference has little practical significance because injury affecting only the brainstem is rare, and the clinical examination used is “virtually identical around the world.” See, e.g., D. Gardiner et al., International Perspective on the Diagnosis of Death, 108 Suppl 1 Br. J. Anaesth. i14, i19, i25 (2012).
60. Shewmon, supra note 5, at 459–69.
61. PRESIDENT’S COMMISSION, supra note 25.
62. Id.
63. See Kazunori Arita et al., The Function of the Hypothalamo-Pituitary Axis in Brain Dead Patients, 123 ACTA NEUROCHIRURGICA 64, 66–71 (1995); see also Michael Nair-Collins et al.,
have occurred in which pregnant brain-dead patients successfully gestated fetuses and children even underwent puberty.

This evidence undermines the view that brain death is equivalent to biological death and the idea that integration of the body stops with the advent of brain death. First, many brain-dead patients do not lose all neurological function, as the UDDA and state laws explicitly require to determine brain death. Second, the rationales that justify construing brain death as biological death fail. The President’s Commission argued that death occurs when the body’s integrative functioning ceases; yet, as discussed above, integrative functioning does not necessarily stop upon brain death. For instance, it seems strange to say that brain-dead women who gestated fetuses for months at a time, which requires extensive biological activity across different organ systems, had lost integrative functioning.

The fact that brain death is not equivalent to biological death is important because it creates problems for legal standards that are premised upon, and incorporate, a brain death standard.

One could argue that integrative functioning does not matter because brain-dead patients rely on mechanical ventilation to perform these functions. Along those lines, the President’s Commission argued that life-sustaining technology merely serves to “mask” the presence of death. However, other instances exist in which technology is necessary to preserve organ function in people, and they are not considered anywhere close to death. Examples include individuals who rely on pacemakers to keep their hearts beating or patients who require dialysis. Without mechanical intervention, these patients would not be alive, yet they are not considered dead or even terminally ill.

Scholars, including the diverse group of scholars who formed the President’s Council on Bioethics under President George W. Bush, almost universally accept that some neurological and integrative

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65. D. Alan Shewmon, *Brain Death or Brain Dying?* 27 J. CHILD NEUROL. 4, 5 (2012). It is an open question whether all brain dead patients maintain some form of integrative functioning, or whether it is just some subset of brain dead patients who could, theoretically, be identified if there were more accurate criteria for determining which patients are truly brain dead. Shewmon describes his cases in a way that could be consistent with this explanation. Yet he and others have published many cases of patients who still have some integrative and/or neurological functioning and people who fit existing criteria for determining brain death. See, e.g., Powner & Bernstein * supra* note 64, at 1241; Nair-Collins et al., * supra* note 63.


67. See President’s Commission, * supra* notes 25, 36–38 and accompanying text.

68. President’s Commission, * supra* note 25, at 5–6.
functioning continues in some patients after an accurate diagnosis of brain death. In December 2008, the President’s Council acknowledged that this evidence required a reexamination of the neurological criteria for death and of the justification for why patients who fulfill those criteria are considered dead.

The President’s Council coined the phrase “total brain failure” to refer to the physiological state of those patients without calling them dead. The President’s Council noted that Shewmon and others’ research left them with two options: (1) to decide that society must abandon neurological criteria for determining death or (2) to develop a new rationale to explain why neurological criteria should determine death. A majority of the Council rejected the first option, noting that this would require halting the life-saving practice of organ transplantation and endeavored to develop a new rationale for determining death.

The Council argued that an organism is no longer alive when it ceases to perform the “fundamental vital work of a living organism—the work of self-preservation, achieved through the organism’s need-driven commerce with the surrounding world.” They explained that the following features characterize this work: (1) “[o]penness to the world,” (2) “[t]he ability to act upon the world” to fulfill one’s needs, and (3) a felt need that drives action to obtain what one needs. The Council stated that breathing and consciousness are the two primary ways of demonstrating that work.

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69. See President’s Council on Bioethics, supra note 29, at 40.
70. Id.
71. Id. at 12. The Council qualifies their definition of total brain failure by explaining that it does not preclude the existence of islands of brain tissue that may be damaged but not completely deteriorated. Additionally, some functionality is retained in the majority of patients diagnosed with “brain death”—they continue to secrete anti-diuretic hormone, a process that the brain mediates. Id. at 37–38. Thus, there remains some, perhaps very minimal, brain function in patients with total brain failure. Notably, the Council claims they are relying on an approximation of total brain failure, which is different than the target of this paper—treating whole brain death as biological death.
72. Notably, the Council explains elsewhere that if total brain failure cannot support a definition of death, it would not endorse abandoning the dead donor rule and allowing organ transplantation to proceed. Id. at 11–12. The members also explain that total brain failure does not necessarily mean complete failure—isolated parts of the brain may still function. They claim that the relevant question, however, is the following: “Is the organism as a whole still present?” Id. at 38.
73. Id. at 58; see also id. at 95–100 (personal statement of Alfonso Gómez-Lobo, Ph.D., arguing against abandoning existing criteria for death).
74. Id. at 60.
75. Id. at 61.
76. See id.
Some have praised the Council’s report for straightforwardly acknowledging evidence about brain death in scientific literature. Nevertheless the report did not meet the Council’s stated goals. First, the term “total brain failure” is inaccurate; patients who are accurately diagnosed as brain dead continue to have certain brain functions. Second, the Council failed to produce a defensible rationale for sufficiency of neurological criteria for determining death. Wound healing, fighting off infections, and stress responses to an incision to remove organs (without anesthesia) are all reactions to the environment and a way to express a need for self-preservation. Thus, the Council’s rationale should consider patients with total brain failure alive, not dead.

Moreover, as Shewmon notes, the Council’s definition is over-inclusive. Its rationale would consider fetuses relatively early in development dead because they do not breathe and do not have consciousness. Although there is controversy over whether a fetus is a person, no one disputes that fetuses are alive. The Council could, of course, consider fetuses early in development alive and state that it determines fetal death differently than and disconnected from how it determines death for born people and for animals. Determining death for fetuses according to different criteria than other humans, however, seems implausible. Finally, the Council’s reasoning does not hold up to scrutiny. Despite the Council’s failure, a more fruitful way of thinking about brain death exists—namely as a legal fiction.

II. A LEGAL FICTION VIEW OF BRAIN DEATH

Although two U.S. presidential bioethics boards have asserted that brain death is not a legal fiction, thinking of brain death as a

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79. See President’s Council on Bioethics, supra note 29, at 56.
80. Shewmon, supra note 77, 20–21.
81. Id. at 22.
83. Seema K. Shah & Franklin G. Miller, Can We Handle the Truth? Legal Fictions in the Determination of Death, 36 Am. J.L. & Med. 540, 550–51 (2010) (noting that the Council recognizes that a person who has permanently lost consciousness can be alive, and a person who cannot breathe without mechanical support can be alive, but then concludes, without explaining why, that a person who lacks both of these abilities is dead).
84. President’s Commission, supra note 25, at 31; President’s Council on Bioethics, supra note 29, at 49–50. In the body of the report, the Council explicitly rejects the notion
legal fiction clarifies much of the theoretical confusion surrounding brain death. Brain death is an unacknowledged status legal fiction.85 The legal fiction of brain death is ethically justifiable for the purpose of permitting patients to consent to organ transplantation, provided its continued use comes with increased public awareness about the fiction’s existence.86 In some, but not all, cases there are good reasons to justify using the legal fiction of brain death, but it is important to be explicit that it is a legal fiction.

A. Defining Legal Fictions

To understand the argument about brain death as a legal fiction, it is essential to understand the general concept of a legal fiction and the motivations behind the creation of legal fictions. This Subsection will first explain and then apply those basic concepts to the legal fiction of brain death.

A legal fiction is a somewhat counterintuitive device that relies on falsehoods to extend the law into new areas. Legal fictions arise when the law treats something that is false (or not known to be true) as if it were actually true. Sir Henry Maine noted that fictions first arose in Roman law, usually to expand the jurisdiction of a court and to ensure that the court had authority to try certain lawsuits.87 The first legal fictions involved statements that plaintiffs could make that defendants were not allowed to counter.88 For example, a plaintiff could allege he was a Roman citizen, even if he was a foreigner, in order to allow him to bring suit in a Roman court.89

Lon Fuller built on this work and more concretely defined a legal fiction in his canonical work on the subject. According to Fuller, a legal fiction is “either (1) a statement propounded with a complete or partial consciousness of its falsity, or (2) a false statement recognized as having utility.”90 Although Blackstone recognized the value that “death should be treated merely as a legal construct or as a matter of social agreement.”

Id. at 49. Meilaender argues that “[t]he Council rejects the view that the criteria for determining death should be shaped or determined by our need and desire for transplantable organs. We should not create ‘legal fictions’ or ‘social agreements’ whose aim is less an accurate determination of death than a ready supply of organs. Whatever else human beings may be, they are living bodies, and their death is a biological reality that we need to mark as accurately as we are able.” Id. at 103 (personal statement of Gilbert C. Meilaender).

85. Shah & Miller, supra note 83, at 559–64.
86. Id. at 569–71.
87. HENRY MAINE, ANCIENT LAW (1861).
88. Id.
89. Id.
90. FULLER, supra note 17 at 9.
of legal fictions, others have argued that fictions were vestigial elements of law that interfered with symmetry and orderliness.

A threshold question is whether there exists a difference between a “legal fiction” and a situation in which the legal definition of a term differs from the ordinary use of it. There are at least two important differences between the standard approach to legal definitions and the creation of a legal fiction.

First, legal fictions may involve treating something that does not obviously fit (and perhaps would not usually be treated as if it fit) into a particular category as if it belonged to that category. For instance, it is not obvious that one should treat a corporation the same as a person. Even though people make up corporations, corporations do not have many fundamental characteristics of persons—they do not breathe, eat, or sleep. They do share some features of personhood, such as the ability to commit crimes or to be subject to civil liability. Thus, in some ways, it might make sense for the law to treat corporations as persons and in other ways not. Hence courts use the legal fiction of corporate personhood, along with the ability to pierce the corporate veil, as needed to capture this tension.

Second, legal fictions are different than other legal constructs because the person who makes the statement and who hears it both recognize its falsity. For instance, to obtain jurisdiction, one English court declared that the Isle of Minorca was located within London. This extended the court’s jurisdiction beyond its approved boundaries and was intended to fit Minorca into a category in which it did not belong. By contrast, deciding that a Segway is a “vehicle” in interpreting a statute that prohibits vehicles in a public park does not stretch a category beyond reasonable limits and is not easily construed as false.

Jeremy Bentham characterized legal fictions as instances in which judges have improperly engaged in legislating, suggesting

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91. 3 WILLIAM BLACKSTONE, COMMENTARIES *43 (“These fictions of law, though at first they may startle the defendant, he will find upon farther consideration to be highly beneficial and useful; especially as this maxim is ever invariably observed, that no fiction shall extend to work an injury; it’s [sic] proper operation being to prevent a mischief, or remedy an inconvenience, that might result from the general rule of law.”).

92. MAINE, supra note 87.

93. Shah & Miller, supra note 83 at 561–62.

94. FULLER, supra note 17 at 18 (citing JOHN CHIPMAN GRAY, THE NATURE AND SOURCES OF THE LAW 34 (1st ed. 1909)).

95. JEREMY BENTHAM, A COMMENT ON THE COMMENTARIES AND A FRAGMENT OF GOVERNMENT 509–10 (J.H. Burns & H.L.A. Hart eds., 1977) (1838) (describing a legal fiction as a "willful falsehood, having for its object the stealing legislative power, by and for hands, which could not, or durst not, openly claim it, and, but for the delusion thus produced, could not exercise it.")
that he did not think that legislators could create fictions. In con-
trast, Fuller thought judges or legislators could create legal
fictions.96 Statutory legal fictions are more puzzling than judicial fic-
tions. Why would a legislator rely on a fiction when she or he could merely define the terms of the law to cover what she or he would like it to cover? Fuller explained that statutory legal fictions help simplify concepts or use familiar terms to extend the law.97 He also noted that fictions are not necessarily created with a clear sense of their falsity and may just “imply the opinion that the author of the statement in question was (or would have been had he seen its full implication) aware of its inadequacy or partial untruth, although . . . he could think of no better way of expressing the idea he had in mind.”98 This type of situation appears especially applicable to judges or legislators, who create legal rules in territory that is unfa-
miliar to them, such as science and medicine. If the author of a fiction does not fully realize its fictive nature, moreover, the fiction is more likely unacknowledged and opaque.99 Judges employ legal fictions for a number of different reasons.100 Bright-line legal fictions involve drawing a boundary that is under- and over-inclusive to develop an easily administrated rule.101 Anticipatory fictions treat something that will soon be true as if it were already true to avoid causing harm.102 Aspirational fictions involve putting forth a stan-
dard that is desirable in the abstract but nearly impossible to achieve in practice.103 A status legal fiction is an analogy in which one entity is treated as if it has the status of a different entity to

96. See Fuller, supra note 17, at 87–92.
97. Fuller, supra note 17, at 90 (“In accordance with the notion that the legislator ‘com-
mands’ or is ‘all-powerful,’ it is often assumed that if fictions are found in legislation they are to be construed as expository devices—mere conveniences of expression.”).
98. Fuller, supra note 17, at 8.
99. As Fuller explains: “The use of the word ‘fiction’ does not always imply that the statement’s author positively disbelieved it. It may rather imply the opinion that the author of the statement in question was (or would have been had he seen its full implication) aware of its inadequacy or partial untruth, although he may have believed it in the sense that he could think of no better way of expressing the idea he had in mind.” Fuller, supra note 17, at 8.
102. Shah & Miller, supra note 83, at 563.
103. Seema K. Shah, Does Research with Children Violate the Best Interests Standard? An Empiri-
justify applying an existing legal framework. Status fictions are, by nature, analogies because the second entity is not actually an example of the first entity. Rather, one entity is simply treated as if it were another because the two are similar in ways that make the analogy sensible in order to administer the law.

For example, corporations are often treated as if they were people under the status legal fiction of corporate personhood. Because this legal fiction makes an analogy between the needs and activities of people and those of corporations, and many existing laws were created to regulate "persons," it is more convenient for administering existing laws to grant corporations the legal status of "person." Our legal system is based upon prior authority, and analogical reasoning from existing legal authority is a valid and common way of extending law.

Another example of a status legal fiction is common law marriage, which some states recognize. Under the doctrine of common law marriage, two people who have never participated in a wedding ceremony or obtained a marriage license, but who live together and hold themselves out to be a married couple, are considered married under the law. Additionally, the doctrine of substituted judgment arose through the use of a legal fiction in Ex Parte Whitbread, decided in the English Court of Chancery in 1816. In this case, the Chancellor, Lord Eldon, was faced with administering a lunatic’s estate (in English common law, a lunatic was a person who was competent at one time but became incompetent). The man’s niece petitioned for an allowance from the estate, which was beyond the scope of what the Court had the authority to permit. Presumably moved by the niece’s plight, Lord Eldon decided that the court was constrained to benefit the lunatic and that the only way to do that was to do what he would have wanted—even in the absence of any evidence of his prior wishes—thereby authorizing the court to give an allowance to his niece.

104. Shah & Miller, supra note 83, at 561.
105. See State v. Std. Oil Co., 49 Ohio St. 137, 177 (1892) (“The general proposition that a corporation is to be regarded as a legal entity . . . is not disputed; but that the statement is a mere fiction, existing only in idea, is well understood . . . . It has been introduced for the convenience of the company in making contracts, in acquiring property for corporate purposes, in suing and being sued, and to preserve the limited liability of the stockholders, by distinguishing between the corporate debts and property of the company, and of the stockholders in their capacity as individuals.”).
108. Id. at 21.
109. Id. at 19.
110. Id. at 22.
One final example (perhaps one closer to the focus of this Article) is the legal fiction of "civil death." Black's Law Dictionary defines "civil death" as "the loss of rights—such as the rights to vote, make contracts, inherit, and sue." Civil death was a legal device that allowed property to pass on to the heirs of people who became monks or those who renounced their right to remain a member of society by committing a serious crime. The idea behind civil death was to treat someone who was clearly alive "as though he were naturally dead."

Regarding the limits of status fictions, remember all analogies have limitations. Consider the use of legal precedent: lawyers representing clients rarely have a case that directly replicates the facts of a case that is binding precedent. Instead, the lawyer must argue from analogy, deciding which features of a case are relevant. The critical work involved in adjudicating legal disputes in common law legal systems is to determine which cases have features that are good analogies to the case at hand and which do not. If a case is not favorable to the client’s interest, the lawyer may argue that the facts of the previous case are so different from the case at hand that the court should disregard it. No case will settle all future cases with the underlying subject matter, just as no analogy is ever perfect.

Thus, anyone using a legal fiction that relies on an analogy should note its limitations. The Supreme Court’s decision in Citizens United possibly led to considerable controversy because people disagreed about the correct limits of the legal fiction of corporate personhood. The majority opinion found that the law could not ban political speech merely because the speaker is a corporation, thereby clarifying that freedom of speech extends to corporations. Other Justices thought that the court should not extend the legal fiction so far; the treatment of a corporation as a person for civil liability purposes does not required treating it as such with regards to free speech law. If there were a clear way to determine

111. BLACK'S LAW DICTIONARY, 484 (10th ed. 2014).
112. Id.
113. Id. Note that there is also a common law fiction of "presumptive death," that is, declaring a person dead after he or she has been missing for seven years. Although this is possibly a type of bright-line fiction, where most people who have been missing for seven years are likely dead, it lends credence to the notion that death poses special definition problems for the law.
114. Floyd Abrams, Alan B. Morrison & Ronald K. L. Collins, Transcript: Debate on Citizens United v. Federal Election Commission, 76 ALB. L. REV. 757, 759 (2012–2013) ("Not since the flag desecration cases of the late 1980s and early 1990s and the proposed constitutional amendments following them, have we seen anything in the First Amendment area quite as divisive as the Court’s 2010 campaign finance ruling.").
116. Id. at 466 (Stevens, J., Ginsberg, J., Breyer, J., Sotomayor, J., dissenting).
the correct limits of a legal fiction, the issue would be easier to settle (or, more cynically, the fiction would be harder to manipulate).

### B. Why Brain Death is an Unacknowledged, Status Legal Fiction

The historical development of brain death reveals that it was not based on the discovery of a new form of biological death but rather was a pragmatic solution to several different problems. When Henry Beecher and the Harvard Ad Hoc Committee first proposed the concept of brain death, they did so to resolve two important practical problems for the field of medicine: the waste of resources spent on people who will not recover consciousness and the need to have organs for transplantation.\(^{117}\) Robert Veatch, a graduate student at Harvard at the time of the Ad Hoc Committee’s deliberations, worked closely with several Committee members.\(^{118}\) He argued that they did not believe that brain death was the equivalent of biological death.\(^{119}\) As Veatch explained:

> [T]he committee members implicitly held that, even though these people are not dead in the traditional biological sense, they have lost the moral status of members of the human moral community. They believed that people with dead brains should no longer be protected by norms prohibiting homicide.\(^{120}\)

In a 1968 article, Henry Beecher asked a question that seems to confirm Veatch’s view:

> In failing (so far) to accept irretrievable coma as a true indication of death, society condones the discard of the tissues and organs of the hopelessly unconscious patient when they could be used to restore the otherwise hopelessly ill but still salvageable individual. Can society afford such waste?\(^{121}\)

One scholar has noted that Beecher was concerned about the ethics of human experimentation\(^ {122}\) and that he thought that using

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117. Ad Hoc Committee, supra note 31, at 677.
119. Id.
120. Id.
122. Pernick, supra note 59, at 3, 10 (citing Henry K. Beecher, Ethical Problems Created by the Hopelessly Unconscious Patient, 278 New Eng. J. Med. 1425, 1430 (1968)).
brain-dead individuals as human research subjects might avoid these ethical concerns.123 This suggests that Beecher’s intention in setting up the Harvard Ad Hoc Committee was not to ensure that the law recognized a form of death it had previously neglected but rather to address important practical concerns.124

Alex Capron, the future head of the Bioethics Commission that issued the canonical report *Defining Death*, was an early commentator on the legal problems associated with brain death and organ transplantation.125 Capron addressed the concern that, without statutes recognizing brain death, transplant surgeons were possibly liable for homicide.126 As a solution, he proposed that the law should recognize that “a patient may be declared dead on the basis of a permanent and irreversible cessation of spontaneous activity in his brain.”127 The practical focus of Capron and other influential figures, who worked to change how physicians determined death, demonstrates that they were concerned about the usefulness of neurological criteria for death and not necessarily about whether these criteria tracked a newly discovered biological truth about the nature of death.

Early doubts about the adequacy of brain death as a concept also existed. In Beecher’s correspondence and writings, he expressed uncertainty over whether to think of “hopelessly unconscious” patients as dead.128 For instance, he argued that “[a]lthough some have attempted to make a case for the concept of a corpse as one who is unconscious and suffering from incurable brain damage, one can nevertheless orient the situation swiftly by a single wry question: ‘Would you bury such a man whose heart was beating?’”129 Yet Beecher also “shifted back and forth between endorsing and rejecting consciousness as the conceptual foundation of his diagnostic criteria,”130 betraying uncertainty about the basis for determining that brain death was a form of death.

In addition to Beecher’s doubts about brain death, prominent scholars presented early critiques of brain death.131 In 1982, Mark...
Siegler and Dan Wikler responded to cases involving pregnant, brain-dead women by stating, “It has been known for some time that brain-dead patients, suitably maintained, can breathe, circulate blood, digest food, filter wastes, maintain body temperature, generate new tissue, and fulfill other functions as well.” They also suggested that, though brain death might be an appropriate legal or moral construction, it was not a valid biological or medical one. Both considering brain death the same as biological death and the largely pragmatic reasons for developing the concept suggest that under Fuller’s definition, brain death was a legal fiction. It was “propounded with . . . partial consciousness of its falsity” and was justified from the beginning by its utility.

The historical development of brain death suggests that it is a status legal fiction, which relies upon an analogy between brain death and the traditional view of death. The analogy is as follows: like cardiopulmonary death, brain death does considerable damage to the brain and causes an irreversible loss of consciousness. Someone who is brain dead, like a corpse, has lost consciousness and the ability to interact in any meaningful way with others and the outside world.

However, this analogy is limited. Unlike people who are dead according to cardiopulmonary criteria, brain-dead patients’ bodies do not grow cold, retain the ability to heal wounds, and can, in some cases, gestate babies successfully. Thus, the best way to understand brain death is as a status legal fiction. It is therefore appropriate to treat brain death as death in some respects, while also recognizing its limits.

133. Id. at 1102.
134. Fuller, supra note 17, at 9.
135. President’s Council on Bioethics, supra note 29, at 40.
An alternative view is that brain death is not a fiction but a way of legally adopting a personhood view of death. The idea is that once consciousness and higher brain function are permanently lost, the person is gone and death has occurred. Bob Veatch’s recollection of his interactions with the Ad Hoc Committee suggests this view, and some scholars have argued for a personhood view of death.

One problem is that there is no clear indication that this is what motivated the adoption of brain death initially. In fact, both the President’s Council and President’s Commission expressly rejected a personhood standard of death. Additionally, people who are in a persistent vegetative state seem to have permanently lost consciousness but are clearly not brain dead. The legal and medical fields do not currently treat people with those disorders of consciousness as dead.

Additionally, no jurisdiction uses a personhood standard of death, and a shift to that standard would necessitate dramatic legal change. What counts as a person is already hotly contested. Given the controversy surrounding definitions of personhood, it is hard to imagine that a democratic process would adopt a personhood standard of death. Thus, a personhood standard of death is not the correct way to characterize the legal standard of brain death and is unlikely to provide much legal utility.

Different kinds of legal fictions exist. Several authors have acknowledged that brain death may be a legal fiction but have contended that it is a bright-line fiction or a fiction that draws a sharp line between two states when there is not a clear boundary between them. For instance, Alta Charo has argued that defining death requires bright-line fictions because of the difficulty involved in determining precisely when death occurs. Others argue that brain death is an “important social construction.” They further contend that, given that dying is a process, “the decision reached by the medical and particularly the neurology community to articulate

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137. See Veatch, supra note 118, at 267–68.
139. President’s Commission, supra note 25, at 40–41; President’s Council on Bioethics, supra note 29, at 50–52.
141. President’s Council on Bioethics, supra note 29.
142. Shah & Miller, supra note 83, at 560.
143. Alta R. Charo, Dusk, Dawn, and Defining Death: Legal Classifications and Biological Categories, in The Definition of Death: Contemporary Controversies 277, 277 (Stuart Youngner et al. eds., 1999).
and promulgate the concept of brain death as the right place to draw the line between life and death is extremely reasonable.”

However, a bright-line fiction does not accurately describe the legal fiction of brain death. In a standard bright-line fiction, the law uses a bright line to demarcate a boundary that does not really exist to make it easier for judges or other legal actors to administer and apply the fiction. The legal rule will be both over- and under-inclusive. For instance, in many jurisdictions eighteen is the age when individuals are considered adults who are capable of consent. This bright line neglects the fact that some children under the age of eighteen are already mature and that some adults over the age of eighteen never quite reach maturity. Bright lines make rules that are easy to apply but that may reach undesirable or incorrect results in certain cases.

Even if bright lines create boundaries where none really exist, they are valuable and necessary in many cases and are likely to be wrong mainly at the margins. Some amount of error may make it easier and less costly to administer rules. Courts should not adopt bright-line fictions if the bright lines do not, by and large, obtain the right results. For instance, imagine if there were scientific evidence that ninety-nine percent of all eighteen- and nineteen-year-olds lack the capacity to make decisions because a crucial developmental step does not occur until the age of twenty. In that case, courts should reconsider the rule. Similarly, a rule that only thirty-five-year-olds had full decision-making autonomy would get the result wrong too often to count as a reasonable bright line.

By contrast, a classic legal fiction is understood as false most of the time without undermining the reasons for initially adopting the fiction. A strict bright-line rule concerning neurological death is unproductive as two states have exceptions to accommodate religious views that do not accept brain death. Moreover, the evidence shows that many people who are accurately diagnosed as brain dead retain some brain function and various types of integrative functioning. This suggests that the fiction of brain death is simply false much of the time, not just at the margins.

Status legal fictions are usually transparent. For instance, corporations are not human beings, and no one would mistake civil death

145. Id. at 893.
146. Shah & Miller, supra note 83, at 561.
148. See, e.g., supra Part I.C.
for biological death. Yet, brain death is only partially transparent. It is also a confusing subject for the public when physicians and scholars routinely argue that brain death is the same as death. Thus, whole brain death is an especially dangerous type of legal fiction since it is opaque, unacknowledged, and therefore vulnerable to misuse.\textsuperscript{149} Given the dangers associated with using this legal fiction, an important question to ask is whether it does more harm than good. If this legal fiction is not ethically justifiable on balance, the law should eliminate it.

\section*{C. Is the Legal Fiction of Brain Death Justifiable?}

Even given the costs of developing unwieldy or partially dishonest extensions of the law, scholars have argued that legal fictions are permissible.\textsuperscript{150} The legal fiction of brain death exists to respond to practical problems generated by the introduction of new life-sustaining technologies.\textsuperscript{151} These technologies have likely saved many lives and have made it possible to maintain patients beyond the point of recovering consciousness or interacting meaningfully with the world.

Providing legal recognition of brain death as death had several benefits. First, hospitals and families became empowered to withdraw treatment from brain-dead patients.\textsuperscript{152} This permitted families to fully grieve and move on. It allowed families to honor the wishes of patients, who did not want to be maintained on life support indefinitely with no chance of returning to a relatively well-functioning life. Hospitals could also distribute scarce resources in intensive care units to patients who had a chance to restore significant function. Legal recognition of brain death, therefore, prevented the continued use of limited resources for people who would never have a meaningful recovery.

\textsuperscript{149} See Shah & Miller, supra note 83.

\textsuperscript{150} Blackstone contended that a fiction could be worthwhile as long as it does not “extend to work an injury; it’s [sic] proper operation being to prevent a mischief.” Blackstone, supra note 91.

\textsuperscript{151} See Ad Hoc Committee, supra note 31, at 677–79.

\textsuperscript{152} See M. Smith, \textit{Brain Death}, 108 Br. J. Anaesth \textbf{i6}, \textit{i6} (2012) (explaining that “the confirmation of brain death allows the withdrawal of therapies that can no longer conceivably benefit an individual who has died.”). Of course, once the Supreme Court recognized the right to refuse consent to life-sustaining therapy, the legal fiction of brain death was no longer strictly necessary for individuals or families to decide to withdraw care, but it is still necessary to allow hospitals to make the decision to withdraw brain-dead patients from life-sustaining therapy when a family objects. See Cruzan v. Dir., Mo. Dep’t of Health, 497 U.S. 261, 270 (1990).
Second, treating brain death as biological death contributed significantly to organ transplantation.153 Brain-dead donors are ideal sources of organs. Their organs continue to receive blood flow and oxygen from hearts that still beat, unlike the organs donated from cadavers. Thus, patients who meet neurological criteria for death are “the preferred source of organs” compared to individuals determined dead based on cardiopulmonary criteria. 154

Yet the “dead donor rule”—the still-existing ethical and legal constraint that holds that doctors cannot remove vital organs necessary to keep bodies alive from patients until they are dead—stood in the way.155 The view that opposes procuring vital organs until the donor is dead is widely held. Surgeons who transplant organs from patients are possibly culpable of homicide unless their patients were legally dead before the operation.156 Gary Greenberg noted “[b]y the nineteen-sixties, as doctors began to perfect techniques for transplanting livers and hearts, the medical establishment faced a paradox: the need for both a living body and a dead donor.”157 There is a tremendous need for organ transplantation even today, and over 120,000 people are currently on waiting lists for organ donation.158 Treating brain death as legal death made it possible to save many lives through organ transplantation without physicians having to violate the dead donor rule and suffer drastic legal consequences.

Is saving lives through organ transplantation sufficient to justify using brain death as a legal fiction? Is the justification for the legal fiction a purely utilitarian argument that neglects important ethical constraints? The dead donor constraint is both a legal and ethical constraint. Frank Miller and Bob Truog have argued that the current practice of organ donation, premised on using brain death as a legal fiction, is ethically justifiable.159 A patient must be in a state of irreversible coma to be declared dead under neurological criteria,

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153. See Shah & Miller, supra note 83, at 569.
154. President’s Council on Bioethics, supra note 29, at 8.
155. Miller & Truog, supra note 4 at 113. The dead donor rule is not an express legal prohibition but a long-standing and cross-cutting prohibition that is found in many places. As such, determining the limits of the dead donor rule are difficult, especially in order to determine whether it contemplates the use of a legal fiction to determine death. As this Article argues below, however, there is good reason to extend the legal fiction of brain death to apply to the dead donor rule.
156. John Robertson, Should We Scrap the Dead Donor Rule?, 14 Am. J. Bioethics 52, 52 (2014).
which is characterized by the permanent loss of consciousness.\textsuperscript{160} Although brain-dead patients can do many things that seem consistent with life and may persist for years on ventilators after being determined brain dead, they have permanently lost the ability to connect or interact with others in a meaningful way. Brain-dead patients cannot communicate with their loved ones, leave their hospital beds under their own volition, express desires or wishes, make decisions, or interact with others in any meaningful way. Though there are many published reports of brain-dead patients persisting on ventilators for many years, healing wounds, maintain warm body temperatures, and gestating babies, no single case exists of a brain-dead patient recovering consciousness or the ability to interact with others.\textsuperscript{161}

Miller and Truog, therefore, argue that brain-dead patients can be considered “as good as dead” for the purpose of deciding when to withdraw life-sustaining therapy and permit the procurement of organs. Because brain-dead patients have permanently lost consciousness and their ability to interact with the world in a meaningful way, as long as they or their surrogates give informed consent to withdraw therapy and donate their organs, they have not been harmed or wronged.\textsuperscript{162} After a determination of brain death, it is therefore ethically justifiable to allow patients to decide prospectively to serve as organ donors (through an organ donor card or an advance directive) or to allow their families to permit the procurement of organs from brain-dead patients. Miller and Truog also find it justifiable for hospitals to stop providing therapy for

\textsuperscript{160} Id. at 39.

\textsuperscript{161} For an overview of the evidence on outcomes related to brain dead patients and the preservation of integrative functioning, see President’s Council on Bioethics, supra note 29, at 40. Of course, the development of future technology could possibly change this. See, e.g., Norimitsu Onishi, A Brain Is Dead, a Heart Beats On, N.Y. Times, Jan. 3, 2014, at A10. Some would also argue that society may simply lack the evidence to know for certain whether some brain dead patients can recover, given that brain dead individuals typically are not maintained on life support for long periods of time since it is difficult to defend the extensive use of resources required to do so. See Ronald Cranford, Even the Dead Are Not Terminally Ill Anymore, 51 Neurology 6, 1531 (1998) (“It is impossible to know with certainty the extent of prolonged survival in brain death because a systematic clinical study in which the cardiac and circulatory functions are sustained for prolonged periods (weeks, months, or years) in a large number of patients is morally indefensible, extraordinarily expensive in terms of money and resources of manpower and intensive care unit beds, and legally prohibitive.”).

\textsuperscript{162} Miller & Truog, supra note 155, at 145–46. But see Nair-Collins, supra note 2, at 56 (“By contrast, theorists such as Paul Byrne, Michael Potts, and several others are in agreement with Miller and Truog that brain death is not death and organ removal kills the donor. However, these authors . . . accept the dead donor rule, and thus object to the removal of nonpaired vital organs from brain death patients, since such patients are, on this view, alive.”).
brain-dead patients though they leave open the possibility that hospitals should reasonably accommodate the views of individuals who do not accept brain death.\textsuperscript{163}

The legal fiction of brain death has previously under-recognized costs. The \textit{McMath} and \textit{Muñoz} cases discussed above demonstrate that treating brain death as legal death can lead to confusing and undesirable outcomes in a number of legal scenarios in which a brain death standard is not appropriate. The next Part explores whether creating limits on the legal fiction of brain death can manage these costs.

\section*{III. When to Suspend The Legal Fiction of Brain Death}

Even with the significant benefits this legal fiction offers, cases illustrate times when the legal fiction of brain death is unhelpful or counterproductive. Just as “piercing the corporate veil” occasionally suspends the legal fiction of corporate personhood,\textsuperscript{164} hospitals and doctors should sometimes decline to use the legal fiction of brain death and treat brain-dead individuals as alive instead.

One potential objection to this line of argument is that suspending the legal fiction of brain death in some, but not all, instances might lead to more confusion and might undermine the fiction’s utility. If legal fictions extend the law quickly and seamlessly into a new domain, then recognizing limits to a legal fiction will undermine that goal. Therefore, if limits to a legal fiction are needed, perhaps the law should abandon the fiction and transparently decide issues on a case-by-case basis.

This objection has some merit, and the legal fiction of brain death is clearly not ideal. Maintaining this legal “scaffolding” has some costs. Yet, since charges of death panels garner public attention and concern,\textsuperscript{165} states will likely keep the dead donor rule. In

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\textsuperscript{163} See Miller & Truog, supra note 155, at 45. Michael Nair-Collins recently raised an important caveat to this view while looking at the evidence about how consent for organ donation is obtained. He found several examples of inaccurate, if not deceptive, information about brain death given to individuals prior to asking for their consent. He rightly questions the validity of the consent currently obtained from individuals or family members, if this consent is given in reliance on misleading information. If brain death was transformed into a transparent, acknowledged legal fiction, hospitals would need to change the current practices of obtaining informed consent for organ transplantation and withdrawal of therapy from brain dead patients. \textit{Id.} at 81–87.

\textsuperscript{164} Thompson, supra note 18, at 3, 9.

this context, the legal fiction of brain death should become more transparent to ensure that it is accurately applied.

In some respects, recognizing limits to the legal fiction of brain death is nothing new. Doctors already treat brain-dead individuals differently than biologically-dead people. For instance, brain-dead patients are not immediately disconnected from ventilators to dispose of their remains. Physicians typically give families time to say goodbye and have qualms about burying a body still warm to the touch. The U.S. military has kept brain-dead service members on ventilators in order to give family members time to say goodbye.\textsuperscript{166} In one published case, a hospital accommodated the wishes of family members, who wanted to keep a brain-dead patient on a ventilator to try an alternative medicine remedy.\textsuperscript{167} Cases like these demonstrate that the practice of suspending the legal fiction of brain death in some cases is fairly well-accepted, even if it is not fully recognized. Regardless, the commentary on the McMath and Muñoz cases does not fully acknowledge that brain death is a legal fiction\textsuperscript{168} and therefore exposes the public to confusing and potentially misleading interpretations of these cases.

In sum, the McMath and Muñoz cases illustrate why it is important to avoid using the legal fiction of brain death with respect to: (1) legal accommodations for religious and moral objections to brain death, (2) insurance reimbursement for care of brain-dead patients, and (3) the balancing of constitutional rights and interests of pregnant women who are brain dead. This Part will also briefly touch on other situations in which doctors should recognize brain-dead individuals as alive and should treat accordingly.

A. The McMath Case: Religious and Moral Objections to Brain Death

In the McMath case, Jahi McMath became brain dead after complications from a surgical procedure.\textsuperscript{169} Given that the family did not expect this outcome, they may have lost trust in the physicians

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  \item \textsuperscript{167} Arthur Isak Apilbaum et al., \textit{A Family’s Request for Complementary Medicine After Patient Brain Death}, 299 J. ASS. M.D. ASS.’S 2188 (2008). In this case, the physicians kept the patient on the ventilator for a few days to accommodate the family and allow for another family member to arrive.
  \item \textsuperscript{168} See, e.g., Gostin, supra note 20; Magnus et al., supra note 144.
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and hospital staff and found it difficult to believe the doctors concerning brain death. The family may also have distrusted the physicians because they did not acknowledge that brain death is a legal fiction. Members of the lay public may find brain death hard to understand when they are told that their family members are dead but can see their loved one breathe, maintain warmth, and grow a beard, regardless of his dependence on a ventilator.\textsuperscript{170} Having a physician state unequivocally that someone who is brain dead is dead, despite displaying visible signs associated with life, is incredibly hard to believe. For those who already lack trust in their physicians, the claims are possibly even harder to believe. In the McMath case, the family did not appear to believe that Jahi McMath had permanently lost her ability to interact with the world in a meaningful way.\textsuperscript{171}

The McMath family might have had reasons to seek continued care for Jahi. First, if the family had strong views that all life is sacred and was willing to pay or obtain financing for Jahi’s care to keep her alive, their deeply held beliefs might have motivated their decision. For example, some segments of Orthodox Judaism and Japanese society reject a neurological determination of death, and there have been reports of some Roman Catholic and Islamic religious leaders also rejecting brain death.\textsuperscript{172}

Accommodating these views is important. First, robust democratic deliberations did not decide to treat brain-dead patients as biologically dead. As discussed in Subsection II.B, hospitals adopted neurological criteria for death based on the urging of the Harvard Ad Hoc Committee and the blessing of the President’s Commission. Neither organization transparently acknowledged doubts about brain death that existed at the time. If making sense of brain death relies on the idea that after certain brain functions permanently cease the person is gone forever, then this view is not strictly biological. It requires a broader sense of what a person is, which is a

\textsuperscript{170} G. Marmisa and J.L. Escalante, \textit{Organ Donation Interviews in Community of Madrid, Spain}, 34 TRANSPLANT. PROC. 23 (2002) (twelve out of 758 families refused to donate organs based on disbelief in the concept of brain death); see also Maryse Pelletier, \textit{The Organ Donor Family Members’ Perception of Stressful Situations During the Organ Donation Experience}, 17 J. Adv. Nurs. 90, 93 (1992) (in a small qualitative study of seven family members of deceased patients, found that two participants found brain death difficult to reconcile with death when their family members’ bodies were still warm and perspiring, and their beards were still growing, and one participant stated that her husband’s “heart was pumping away when he was pronounced dead. He appeared alive yet he [the physician] had just told me he was dead. How could I believe he was dead?”).

\textsuperscript{171} Fernandez, \textit{supra} note 169 (quoting Jahi McMath’s mother’s written plea to the court: “She is alive. I believe in God and that He can heal all. God created Jahi. He can save her.”).

\textsuperscript{172} Olick, \textit{supra} note 147, at 186.
contested notion for which there is no universal consensus. Religious accommodations have an important place in many different legal domains. Given the relatively shaky democratic foundations of the legal fiction of brain death, accommodating opposing views about death seems especially warranted.

Second, biology suggests that brain death is not a valid conception of death. The evidence about brain death suggests that although it may be “as good as dead” for some purposes, significant differences exist between brain death and a traditional, biological conception of death. If patients and families have very deeply held religious or moral views about the sanctity of life, it is reasonable for them to reject equating brain death and biological death. By contrast, consider a case involving people with religious beliefs that rejected a cardiopulmonary definition of death and believed, even after a body turns cold and stiff and begins to decay, religious intervention could bring a person back to life. There is little reason to accommodate religious or moral views that lack any biological plausibility. Furthermore, practical reasons support the medical profession or the law declining to accommodate such views. Hospitals should not keep corpses, which are taking the place of other patients, for days. The law’s concerns about the orderly distribution of assets and timely administration of criminal sanctions against people who have committed homicide support a sunset period.

The treating physicians and the hospital administration in the McMath case had to weigh the family’s claims for respect and accommodation against need to efficiently allocate scarce resources. Although the law should not force hospitals to provide the same care for patients who are not likely to meaningfully recover as care for patients with a better chance at recovery, they should acknowledge and respect patients and family members’ deeply held views, and facilitate transferring patients to capable facilities.

Currently, only two states require hospitals to accommodate patients and family members who have strong religious views about the sanctity of life that would impel them not to take brain-dead patients off ventilators. Particularly given that brain death is not the same as a traditional, biological death, the law should respect


174. Olick et al., supra note 147, at 183.
these deeply held beliefs. Additionally, the two states that allow exceptions to the neurological determination of death have not had significant trouble administering their laws. Thus, an important legal reform is for all states to require reasonable accommodation of religious and moral beliefs that brain death is not death.

One published case of accommodation raised questions about how long to provide care, who pays for that care, and whether health professionals could conscientiously object to participating in the continued care of a brain-dead patient. Hospitals have to balance scarce resources and other patients’ needs against any accommodation for brain-dead patients, especially since end of life care is very costly. Hospitals can place some limits on the care they provide to accommodate families through providing care for brain-dead patients for days at a time, caring for brain-dead patients outside the Intensive Care Unit (ICU), minimizing the interventions used to those that are necessary to ensure cardiac function continues, and reserving the right to withdraw all interventions if other patients are in greater need. Some reasonable limits on treatment make sense to give the family time to see if a transfer to a different facility is possible and in the period before such a transfer. Considerable disagreement may surround the proper limits of care, but everyone can likely agree on one example. Consider the somewhat far-fetched case of a family requesting that a brain-dead patient be placed on a waiting list to receive a donated organ. It is hard to imagine that anyone would think that equal consideration be given to the brain-dead patient as a person who is conscious, able to breathe on his or her own, and who can interact with others in meaningful ways.

Only New Jersey requires that insurance companies pay for care provided to brain-dead patients during the time of accommodation. In one case, the patient was not immediately declared brain dead because the spouse initially did not want the doctors to perform neurological tests in order to have the insurance company pay for the care as it would for any other patient. Likely, the delay in determining brain death led to increased costs of care. Hospitals

175. Id. Note that California also has a statute that requires “a reasonably brief period of accommodation.” See Thaddeus Mason Pope, Legal Briefing: Brain Death and Total Brain Failure, J. CLINICAL ETHICS 245, 247–48 (2014).
176. Olick et al., supra note 147, at 189.
178. Olick et al., supra note 147, at 188.
179. Id. at 198.
180. Id. at 189.
181. Id.
can pay for some of the care out of their charity budgets.\textsuperscript{182} Many other worthy uses of a hospital’s charity funds exist, including providing care for people who are likely to recover and cannot afford to pay. A policy that requires funding the care of brain dead patients also has the potential to exhaust the hospital’s charity funds. Should health insurance cover the care provided to accommodate religious and moral objections to brain death? This accommodation is possibly very expensive care. When brain-dead patients are maintained on ventilators for organ procurement, the organ procurement agency pays for the care since the care is for the benefit of the organ recipient.\textsuperscript{183} Thus, it may make sense to have the accommodated individual pay for the care. Individuals should be able to purchase insurance that will cover this possibility. This would allow people to buy policies or additions to policies to accommodate their deeply held views and provide reimbursement for care provided to brain-dead patients.\textsuperscript{184}

**B. The Muñoz Case: Constitutional Rights of Brain-Dead Patients**

The *Muñoz* case raises a more complex set of issues. The court deciding the case applied the statutory definition of death to determine that the statute requiring keeping pregnant patients on life support did not apply to Ms. Muñoz.\textsuperscript{185} This turned out appropriately but slightly different facts could have led to disturbing results. Deciding whether to continue life-sustaining therapy for a pregnant, brain-dead woman is one area to suspend the legal fiction of brain death because failing to do so obscures that important constitutional rights and fundamental interests are at stake.

Scholars and legal actors involved in creating the legal fiction of brain death did not anticipate that cases involving pregnant, brain-dead women were likely to arise. The legal fiction was created to

\textsuperscript{182} Id.
\textsuperscript{183} Id.
\textsuperscript{184} The existence of organizations such as the Terri Schiavo Foundation (www.terrisfight.org) suggests that sufficient demand may exist for an insurance market to provide care for brain dead patients.
\textsuperscript{185} Muñoz v. John Peter Smith Hospital, No. 096-270080-14, Judgment (96th Dist. Jan. 24, 2014) (holding that: “1. The provisions of § 166.049 of the Texas Health and Safety Code do not apply to Marise Muñoz because, applying the standards used in determining death set forth in § 671.011 of the Texas Health and Safety Code, Mrs. Muñoz is dead. 2. In light of that ruling, the Court makes no rulings on the Plaintiff’s constitutional challenges to § 166.049.”).
save lives through organ donation and to ease the burdens on hospitals and families. By contrast, when a pregnant woman becomes brain dead, the question of maintaining her on life support has a direct impact upon the fetus she is gestating.

Muñoz is also important because this situation may recur. Texas lawmakers are considering modifying the law to address future cases, but lawmakers on different sides of the aisle have contrasting inclinations about the statute’s application to pregnant women. Prior to 2009, twenty-two published reports of maintaining pregnant brain-dead women to save their fetuses were found, and all but two of these resulted in the fetus being born alive. Another case has since arisen in Canada, but in that case the brain-dead woman’s physicians and partner agreed to continue treatment. The child was born after twenty-eight weeks gestation and appears healthy.

Previous cases of pregnant women becoming brain dead have sparked controversy, with some commentators expressing strong views about the need to preserve the life of the fetus at all costs and others raising concerns about the pregnant woman’s dignity. Additionally, one scholar argued that in jurisdictions that accept brain death, a brain-dead pregnant woman “could be viewed as a newly deceased, still-respiring cadaver being used as an incubator for her fetus.” Veatch contends under those circumstances, the “relevant legal and ethical literature is now clear that the use of a newly dead, respiring cadaver should be governed by the provisions

186. See Ad Hoc Committee, supra note 31, at 677.
188. Anita J. Catlin & Deborah Volat, When the Fetus Is Alive but the Mother Is Not, 21 CRIT. CARE NURS. CLIN. N. AM. 267, 268 (2009). The authors found that some fetuses had been maintained from as early as fifteen weeks’ gestation. Additionally, one pregnant woman stayed on life support for as long as 107 days. See id. at 269.
190. Id.
191. See, e.g., Christoph Anstötz, Should a Brain-Dead Pregnant Woman Carry Her Child to Full Term?, 7 BEOETHICS 340, 341–42 (1993) (quoting the assistant medical director at the university hospital as saying “on the grounds of proportionality . . . it is probably reasonable to impose on the mother, through the use of her body, for the benefit of the child . . . ” and “we don’t see any ethical reason simply to let the embryo die.”).
192. See, e.g., id. at 344 (quoting Hanna Wolf, a governmental spokeswoman for Women’s Affairs, as saying the following: “What is happening in the clinic is a scandal and inhuman. The mother is degraded to a nutrient fluid, disposable after use” and raising concerns about whether keeping the pregnant woman on the ventilator violated the provision of the German constitution protecting human dignity).
of the Uniform Anatomical Gift Act (UAGA).”¹⁹⁴ He states that to use this woman’s body to support her fetus, the UAGA would require either that the woman had prospectively consented to be an organ donor or that her next of kin give proxy consent to use her organs.¹⁹⁵ This is the kind of convoluted reasoning the legal fiction of brain death requires, and it seems unhelpful for resolving cases like these. Simply in terms of who will be affected by the decision, consent to organ donation is very different from consent to continue to treat a pregnant, brain-dead body. It is also unclear how to apply the UAGA to cases involving brain-dead, pregnant woman—is the fetus the “gift”, the recipient of the donation, or both?¹⁹⁶ The intent behind organ donation is also very different than a pregnant woman’s decision about her fetus. A pregnant, brain-dead woman might have wanted to save others’ lives as an organ donor but not to continue a particular pregnancy after brain death. On the other hand, some women may have qualms about organ donation but would want to save their fetus at any cost.

Some courts have suggested that pregnant, brain-dead women may have diminished or extinguished constitutional rights. In one case, the hospital withdrew treatment once court-appointed physicians determined that a pregnant woman was brain dead, even over her common-law husband’s objections, without trying to determine her prior wishes.¹⁹⁷ Another case involved a brain-dead pregnant woman on a ventilator, who was at twenty weeks gestation when her husband sought to have her taken off the ventilator.¹⁹⁸ Her husband was not her child’s father, however, and the biological father sought an order to maintain her on life support.¹⁹⁹ The woman’s prior wishes were not discussed, and the court might not have known them.²⁰⁰ That case held that the woman should be maintained on life support but also that the mother’s right of privacy was extinguished when she was declared brain dead.²⁰¹

In analyzing cases involving pregnant, brain-dead women, the first question that arises is whether the rights of brain-dead individuals are extinguished when they are determined brain dead. This

¹⁹⁴. Id.
¹⁹⁵. Id.
¹⁹⁷. See, e.g., Does say mom, fetus dead; Finding ends fight over life support, SAN ANTONIO EXPRESS-NEWS, Aug. 14, 1999, at 8B. In that case, a neonatologist found no evidence of a fetal heartbeat.
¹⁹⁹. Id. at 3.
²⁰⁰. See id. at 2–3.
²⁰¹. Id. at 4–6.
conclusion seems flawed because courts have recognized that even people who are biologically dead have constitutional rights worthy of legal protection.\textsuperscript{202} Kirsten Smolensky noted that courts have recognized that celebrities’ right of publicity can survive their deaths\textsuperscript{203} and have protected the right to reproductive autonomy after death in cases involving the use of frozen sperm or embryos.\textsuperscript{204} The Supreme Court has recognized that attorney-client privilege extends after death.\textsuperscript{205} Since both living and dead persons’ constitutional rights are legally protected, whether someone is brain dead should not determine whether his or her constitutional rights deserve respect. However, given that brain-dead people will never regain consciousness, sufficient ethical justification may support a legal recognition that their interests have diminished value if they will not thereby be harmed or wronged.\textsuperscript{206}

Smolensky addressed maternal brain death cases, briefly noting that some states will invalidate an advance directive that expresses a woman’s preference to terminate life support after brain death. Smolensky suggested two possible reasons: either the harm of remaining on mechanical ventilation after death is diminished if one is already dead, or states simply do not like that the fetus may die along with the woman.\textsuperscript{207} This second possibility is problematic, particularly if it impinges on a woman’s valid constitutional rights. But it is less clear how to determine the degree of harm done by violating brain-dead patients’ autonomous wishes and fundamental rights.

Muñoz raises one of the most fundamental rights at stake in cases of brain-dead pregnant women—the right to withdraw therapy. The Supreme Court recognized a fundamental right to withdraw life-sustaining therapy in \textit{Cruzan} case in 1990, stating that “[t]he logical corollary of the doctrine of informed consent is that the patient generally possesses the right not to consent, that is, to refuse treatment.”\textsuperscript{208} The Court decided that states can require a heightened evidentiary standard for withdrawal of therapy because of the decision’s irreversible nature, the potential for abuse by family

\textsuperscript{203} See id. at 771.
\textsuperscript{204} See id. at 784–86.
\textsuperscript{206} Miller & Truog, supra note 155, at 41.
\textsuperscript{207} See Smolensky, supra note 202, at 786–88.
members, and the state’s interest in preserving life.\footnote{209} *Cruzan* found that the state’s interest in preserving life even applied to patients who had very little quality of life, as Nancy Cruzan was in a persistent vegetative state and likely had permanently lost consciousness and significant cognitive function.\footnote{210} Although courts have not directly addressed the issue, *Cruzan* suggests that the state still has an interest in preserving the lives of brain-dead patients. Applying *Cruzan* to cases involving pregnant, brain-dead woman complicates the issue since the state has an additional interest in preserving the life of the fetus.\footnote{211}

Primarily, cases addressing the right to have an abortion have discussed the balance between a woman’s autonomy and the state’s interest in preserving the life of a fetus. In *Roe v. Wade*, the Supreme Court recognized that women have a right to have an abortion before the fetus is viable; however, after viability, the state can restrict abortions with certain exceptions permitting abortion to save the life or health of the mother.\footnote{212}

The subsequent case of *Planned Parenthood v. Casey* challenged *Roe v. Wade*.\footnote{213} Recognizing the importance of *stare decisis*, the Supreme Court upheld that the state’s interest in the fetus exists “from the outset” of pregnancy, but changed the focus from the trimester of pregnancy to the question of fetal viability.\footnote{214} *Casey* permitted the government to place restrictions on abortions before viability, provided that those restrictions do not unduly burden the woman’s right to have an abortion, and allowed more restrictions post-viability.\footnote{215} When a fetus is viable depends on the available technology, and fetuses are viable at earlier gestational ages now than at the time of *Roe* and *Casey*.\footnote{216} Taken together, *Cruzan*, *Roe*, and *Casey* suggest that, in cases involving a brain-dead pregnant

\footnote{209. Id. at 282 (holding that “we think a State may properly decline to make judgments about the ‘quality’ of life that a particular individual may enjoy, and simply assert an unqualified interest in the preservation of human life to be weighed against the constitutionally protected interests of the individual.”).}
\footnote{210. Id. at 266.}
\footnote{211. See, e.g., Planned Parenthood v. Casey, 505 U.S. 833 (1992); Roe v. Wade, 410 U.S. 113 (1973).}
\footnote{212. See *Roe*, 410 U.S. at 163–64; see also Linda J. Wharton and Kathryn Kolbert, *Preserving Roe v. Wade . . . When You Win Only Half the Loaf*, 24 STANF. L. & POL’Y REV. 143, 151 (2013). Viability of a fetus “means having reached such a stage of development as to be capable of living, under normal conditions, outside the uterus.” As of 2012, one article reported that fetuses in the U.S. are typically viable after twenty-four weeks. G.H. Breborowicz, *Limits of fetal viability and its enhancement*, 5 EARLY PREGNANCY 49, 49 (2001).}
\footnote{213. Casey, 505 U.S. at 833.}
\footnote{214. Id. at 846.}
\footnote{215. See Wharton & Kolbert, supra note 212, at 151.}
\footnote{216. See Breborowicz, supra note 212, at 49.}
woman, courts should balance the woman’s autonomy interests against the state’s interest in preserving her life and the life of her fetus. Some commentators have argued that this would cause the following schema: (1) pre-viability, a brain-dead pregnant woman’s views should be respected, and (2) post-viability, the state’s interest in preserving the life of the fetus should trump any interest a brain-dead pregnant woman might have had in terminating treatment.217

Surprisingly, however, the legal distinction between killing and letting someone die may make the abortion jurisprudence inapplicable in cases that involve removing pregnant women from ventilators. Although a strong ethical reason justifies rejecting this distinction,218 courts have relied upon it to recognize a fundamental right to withdraw therapy but to deny a fundamental right to physician-assisted suicide or euthanasia.219 In Vacco v. Quill, the Supreme Court held that a rational reason supported states’ decisions to regulate the withdrawal of therapy and physician assisted suicide differently. The Court held that “when a patient refuses life-sustaining medical treatment, he dies from an underlying fatal disease or pathology; but if a patient ingests lethal medication prescribed by a physician, he is killed by that medication.”220 The Court also argued that these two situations were critically different—a physician who withdraws therapy intends to respect the patient’s wishes and stops providing unnecessary treatment, but a physician who assists a patient in committing suicide (or who euthanizes a patient) has the primary intent of ending the patient’s life.221 Thus, withdrawing therapy from a pregnant, brain-dead patient merely results in the death of the fetus, but was not intended to do so and is not the direct cause of the death. This suggests that abortion case law would not apply to cases of withdrawing therapy from a brain-dead pregnant woman, and that the only fundamental constitutional right at stake is the woman’s right to refuse therapy. Nevertheless, the fact that there are strong ethical arguments against maintaining this legal distinction may place decision-makers in a bind. In particular, judges who are inclined to apply the abortion case law may struggle to reconcile their ethical and legal duties.

Courts have balanced the right to refuse therapy against the state’s interest in preserving the life of a fetus in cases involving pregnant women who are Jehovah’s witnesses and refuse to consent

220. Id. at 801.
221. Id.
to life-saving blood transfusions based on their religious beliefs. In two cases, courts have ordered blood transfusions to preserve the life of a fetus, even though in one case, the fetus was not yet viable.\footnote{See In re Jamaica Hosp., 128 Misc. 2d 1006, 1008 (N.Y. Sup. Ct. 1985) (recognizing that “[i]n this case, the State has a highly significant interest in protecting the life of a mid-term fetus, which outweighs the patient’s right to refuse a blood transfusion on religious grounds.”); Raleigh Fitkin-Paul Morgan Mem’l Hosp. v. Anderson, 42 N.J. 421, 423 (1964) (directing the trial court to undertake the following actions: (1) to appoint a special guardian for the infant; (2) to substitute such guardian as party plaintiff; (3) to order the guardian to consent to such blood transfusions as may be required and seek such other relief as may be necessary to preserve the lives of the mother and the child; and (4) to direct the mother to submit to such blood transfusions and to restrain the defendant husband from interfering therewith.”).} In another case, the court found the decision was very difficult but ultimately held that “the State may not override a pregnant woman’s competent treatment decision, including refusal of recommended invasive medical procedures, to potentially save the life of the viable fetus.”\footnote{In re Brown, 294 Ill. App. 3d 159, 171 (1997).} These cases suggest that a considerable tension exists between a pregnant woman’s right to refuse treatment and the state’s interest in preserving the life of her fetus. They also demonstrate that courts have previously overridden a woman’s autonomy interests in refusing treatment.

Returning to the \textit{Muñoz} case, the family was clear that they and Marlise Muñoz wished to terminate life support.\footnote{Complaint at 3–4, \textit{Muñoz v. John Peter Smith Hospital}, No. 096-270080-14 (Tex. 96th Dist. Ct. Jan. 24, 2014), available at http://www.thaddeuspope.com/images/Munoz_v_JPS_Jan_2014_.pdf.} Requiring her to remain on a ventilator against her wishes for weeks on end was a tremendous burden on her constitutional right to withdraw therapy. Does that right still apply to a brain-dead patient who has permanently lost consciousness? There is no reason to think that it would not. The Supreme Court first recognized a fundamental right to withdraw therapy when the individual involved, Nancy Cruzan, was in a persistent vegetative state.\footnote{Cruzan v. Dir., Mo. Dep’t of Health, 497 U.S. 261, 270 (1990).} Ms. Cruzan had some brain stem function and could breathe without mechanical support, but she had permanently lost consciousness.\footnote{Id. at 266–67 n.1.} This suggests that the right to consent or withhold consent from intervention is, at most, slightly diminished for a brain-dead patient. The state’s interest in preserving Ms. Muñoz’s life was also diminished but not extinguished.
The hospital and the state should have discontinued Ms. Muñoz’s treatment because the fetus was developing abnormally. 227 If the fetus was not going to be born alive, that fact negates any interest the state had in preserving the fetus’ life. All of these factors suggest that the hospital and the state should not have kept Ms. Muñoz on life support contrary to her and her family’s wishes. In Muñoz, then, the legal fiction of brain death led to the same result as a more complex analysis of constitutional rights. But circumstances exist in which the applying the legal fiction of brain death produces a questionable outcome.

Consider a case in which family members of a pregnant, brain-dead patient have evidence that the patient would have wanted to maintain the pregnancy. When family members’ interests and the state’s interest in preserving the fetus’ life align, hospitals and family members may agree to continue to treat a brain-dead, pregnant woman in the hopes that her fetus will remain viable. In those cases, it is hard to imagine why anyone would invoke the legal fiction of brain death.

In other cases, different conflicts could arise. If a pregnant woman were very close to term and became brain dead, but no evidence existed regarding her wishes for the fetus, should she remain on life support? What if the pregnant woman had felt ambivalent about the fetus or had not wanted a child? Likely at some point—not necessarily the point of viability, but some point after the fetus becomes viable—the state’s interest in preserving the fetus’ life trumps a woman’s constitutional right to withdraw therapy. As the pregnancy advances, the woman’s interest in withdrawing therapy might be insufficient to overcome the state’s interest. The state’s interest in preserving fetal life increases depending on the fetus’ condition, how far along the pregnancy is, and evidence that the fetus is will survive after birth. Treating brain death as a legal fiction avoids these difficult questions by suggesting that the pregnant woman should be treated as if she were biologically dead and removed from the ventilator.

Finally, ethical questions also arise when brain-dead pregnant women are maintained on mechanical ventilation. Physicians and families have to decide how much effort and resources to expend to try and preserve the fetus’ life. 228 Two maternal brain death cases


228. If public or pooled resources are used to preserve a fetus, answering how much effort to undertake has even larger implications since more stakeholders have a say.
from the early 1980s demonstrate the complications in deciding whether to try to save the unborn child of a brain-dead mother and how physicians somewhat opaquely take these challenges into account. In the first case, significant questions arose about “the status of the fetus,” and the case was very complicated because the mother was never formally declared brain dead. Life support was terminated in this case. In the second case, the fetus was successfully carried to term. Given the relative obscurity around decision-making in cases like these, physicians likely make explicit or implicit judgments about when the medical prospects for a viable fetus are not good enough to try to maintain a pregnant woman and about what costs would be excessive. Physicians should also be cautious about encouraging false hope in families when a fetus might be too early in gestation to survive, and they should clearly inform families about the likelihood that a fetus who survives would suffer from serious morbidities.

C. Other Limits: Research with Brain-Dead Patients

The above Subsection suggests that the legal fiction of brain death does not mechanically extend to new contexts; instead, each extension of the fiction needs a legitimate purpose and must make sense. Other situations may exist in which the legal fiction of brain death may be useful. According to the scholarship on legal fictions, extending a legal fiction beyond its original purposes must be done cautiously since extension into new areas may not make sense. Legal fictions allow existing law to cross boundaries relatively easily and opaquely, and should, therefore, be used sparingly and with clear boundaries. Through briefly touching on biomedical research, an area where it may make sense to use the legal fiction of brain death, this Subsection demonstrates how limiting the legal fiction of brain death might work.

230. Id. at 1091.
231. Id.
232. Id.
233. Siegler & Wikler, supra note 132.
234. See Anstötz, supra note 191, at 342 (describing medical efforts doctors would not take to preserve the life of the fetus).
235. See Pernick, supra note 59, at 10 (citing Henry K. Beecher, Ethical Problems Created by the Hopelessly Unconscious Patient, 278 N. Eng. J. Med. 1427, 1430 (1966)) (noting that one of Henry Beecher’s motivations for supporting the concept of brain death may have been to find an alternative and less ethically troublesome way of conducting medical research).
Practically, research on brain-dead patients is different than research with biologically-dead people (“cadavers”). Unlike research with cadavers, conducting research with brain-dead individuals could interfere with valuable organ donation. Considerable medical resources are required to maintained brain-dead patients, even for research purposes. There are also important concerns about the disrespectful treatment of individuals who are diagnosed as brain dead, but who are not biologically dead. For example, consider a study testing the effects of explosive land mines on brain-dead bodies. This raises an intuitive reaction of concern or even disgust. These considerations support avoiding the application of the legal fiction of brain death in the research context and a need for more contextual analysis of the specific research projects and the costs they involve.

However, some research with brain-dead patients is easier to justify. One oncology researcher sought to test a method for targeting cancer therapies to particular organs that carried uncertain risks and would require multiple, invasive biopsies. These risks seemed excessive for patients who still might have a meaningful recovery from their cancer and could also take away time spent with their loved ones. Meanwhile, the researcher contacted families of brain-dead cancer patients who knew that their loved ones would have wanted to participate in research that could help others. This research does not raise concerns about reducing the supply of organs available for transplantation to save the lives of others, because organs from metastatic, end-stage cancer patients are not typically used for transplantation based on worries that the organ recipient might develop cancer. Individuals should be allowed to prospectively consent to such research, since concerns about harm to the brain dead patients are reduced. The families of brain-dead patients who did not express their wishes about research when they were capable of making such a decision should be permitted to give proxy consent for research on them.

236. Jim Ritter, Ethical Frontier, Chi. Sun-Times (2006) (noting that such research has been conducted with cadavers).
238. See id.
240. See generally Miller & Truog, supra note 155.
Several scholars have given considerable thought to research on brain-dead patients and have published ethical guidelines for research on people who are brain dead.\textsuperscript{241} The existing ethical guidance appears to rely on the legal fiction of brain death without fully acknowledging it.\textsuperscript{242} Within existing guidelines, there are provisions that seem to be motivated by concerns that are different from the concerns about research on corpses. For instance, the guidelines suggest a time limit on the research because “[t]he prospect of prolonged storage of ventilated and perfused bodies for research is deemed abhorrent to many and risks undermining public support for research with the recently deceased.”\textsuperscript{243} In sum, researchers should not use the legal fiction of brain death to determine when research is ethically permissible on brain-dead individuals and instead should separately analyze how to apply the legal and ethical principles governing research to brain-dead participants.

IV. CONSIDERATIONS FOR CREATING AND USING LEGAL FICTIONS

In light of the previous discussion, how should judges and legislators determine when to apply the legal fiction of brain death? Are there limits that would have helped in cases like \textit{McMath} and \textit{Muñoz}\textsuperscript{2}\textsuperscript{2} First, highlighting that brain death is a legal fiction is useful because this alerts lawmakers to consider whether brain death is an appropriate standard when they are creating a law that relies upon legal standards for death. Once the legal fiction of brain death is recognized, however, legal actors should not assume that brain death applies by default to new laws that require a determination of death. In drafting statutes that require the continued provision of life-sustaining treatment for pregnant women, the legislature should realize that the statute would, in some cases, require the continued provision of care to brain-dead women whose fetuses are not viable. Then, the legislature should determine whether the statute simply should apply to viable fetuses.

Even in cases that involve viable fetuses, questions remain as to whether a statute that requires life-sustaining treatment for pregnant, brain-dead women, such as in Texas, is constitutional. Cases

\textsuperscript{241} See Rebecca D. Pentz et al., \textit{Ethics Guidelines for Research with the Recently Dead}, 11 Nat. Med. 1145, 1146 (2005) (Table 1) (comparing existing guidelines for research involving the dead—each column of the table cites a different guideline).

\textsuperscript{242} \textit{Id.} at Table 1.

\textsuperscript{243} \textit{Id.} at 1148.
involving brain-dead pregnant women require a complicated balancing of the mother’s rights against the state’s interests, which includes weighing a woman’s autonomy and privacy rights and the state’s interest in preserving the fetus’ life and, to a much lesser extent, the life of a pregnant woman who is not biologically dead. Thus, removing the legal fiction reveals that the Texas statute is constitutionally suspect even for cases involving pregnant women who are not brain dead. Although this is a bolder approach, it is easier for courts to justify and more likely to set the right precedent for future cases. Simply defaulting to the brain death legal standard short-circuits this important, if complicated, analysis.244

More generally, the previous analysis suggests that status legal fictions have clear and valuable uses, but that they can also extend beyond reasonable limits. Courts should not adopt a fiction that is likely to spread inappropriately. For instance, Louise Harmon argues that, in its initial case, the fiction of substituted judgment fairly distributed money from a well-off uncle to a needy niece.245 Yet in future cases, courts used this same legal fiction to justify sterilizing incompetent adults.246 Harmon is concerned that all legal fictions may eventually be stretched beyond their initial purposes and cause harm, and that it is difficult to predict how this will happen.247 Thus, she recommends a healthy suspicion towards legal fictions.248 Harmon does not fully acknowledge, however, that some of the legal fiction’s unforeseeable future uses were appropriate and perhaps even beneficial. For instance, using the legal fiction of substituted judgment in the Cruzan case led the Court to require clear and convincing evidence for a family to withdraw life-support,249 implicitly recognize the right to withdraw life-sustaining therapy,250 and possibly provide room for the law to grow.

Thus, merely identifying harms a fiction causes is not sufficient to condemn its creation or use. Courts should consider both its valuable and harmful uses when they determine whether to create a legal fiction in the first place. Moreover, sometimes it is clear that

244. The court was possibly interested in a pragmatic and fast solution that was unlikely to be appealed and might have thought that a statutory analysis would be harder to challenge. It is difficult to fault the judge in this case but important to note that a different approach could have reached the same outcome and might have set a better precedent.
245. Harmon, supra note 107, at 20–21.
246. Id. at 27–33.
247. See Harmon, supra note 107, at 60–63.
248. See id. at 70.
249. Kenneth P. Miller, Defining Rights in the States: Judicial Activism and Popular Response, 76 Ala. L. Rev. 2061, 2103 n.44 (“The U.S. Supreme Court has recognized a federal constitutional right for persons to refuse life-sustaining treatment.”).
the court needs to use a legal fiction to avoid considerable injustice, and that using that particular legal fiction should be discretionary. If the court can anticipate that the legal fiction might create significant future harms, the author of the fiction should construct it as narrowly as possible.

Predicting the future use of a legal fiction is difficult and stretches beyond the domain of medicine. Medical technology, with its large potential for future development, is just one example of a regime that is difficult to regulate. Another area of rapidly changing jurisprudence is determining which campaign contributions the legislature may prohibit or regulate as speech. Courts should only create legal fictions when the court can delineate the fiction’s limits in advance and when the fiction’s value is significant enough to risk overextension.

Measuring the value of a legal fiction is also a difficult task and is different for judges and legislators. Legal actors have different available alternatives. Judges generally lack authority to create new legal rules out of whole cloth and are bound by precedent. Legal fictions expand the judges’ boundaries in a way that is potentially dangerous. Yet, judges may appropriately create legal fictions where applying the rule seems patently unjust. On the other hand, legislators typically have more discretion to create new rules and are mainly constrained by public perception of the rules. Because legislators have greater authority for rulemaking than judges, they should rarely create or rely on legal fictions.

Those who create legal fictions should seek to limit future expansion. Whenever a legal fiction is created and each time it is extended, the court or legislature should state the fiction’s purpose and build limits directly into it. Then, it would be harder for a future court to improperly extend the legal fiction, since the constraints are already in place. For most legal fictions, however, no such process has happened, and judges can easily extend the fiction. Good reasons support making legal fictions more difficult to develop. Legal fictions are very costly to create, given the damage they can cause, and the authors of legal fictions are not sufficiently sensitive to the costs of their creations. Because legal fictions are relatively easy to create and extend, resisting them is more difficult than it should be, given their potential for abuse. Various legal actors should recognize the dangers of legal fictions and provide more careful and clear descriptions the legal fiction’s created intent, which will hopefully lead to the more cautious and judicious use of legal fictions.
Conclusion

The McMath and Muñoz cases illustrate how the lack of transparency around the legal fiction of brain death has developed to where the fiction has become overused. Although many scholars have written about different types of legal fictions and the historical basis for them, they have not discussed what happens to legal fictions over time and what characterizes legal fictions that are likely to be misused and overextended. Unacknowledged legal fictions are especially under-recognized and under-studied. Additionally, scholars have not explored what impact the lack of transparency concerning legal fictions has in areas such as public trust or collective action. In this vein, it is unsurprising that courts use legal fictions to determine death, an area fraught with controversy. The legal governance of medical advances is difficult since legal actors must work with medical and scientific experts to understand new medical technologies and how best to regulate them. In some cases, courts may even unwittingly create legal fictions because they fail to understand the implications of new technology. The development of the legal fiction of brain death may serve as a valuable illustration of the useful and pernicious aspects of a legal fiction.

Future scholarship should explore the development of legal fictions and their trajectories over time. Scholars should work to understand when legal fictions likely arise and determine when legal fictions are dangerous enough to diminish or even negate their value. It would also be interesting to study whether legal fictions largely created outside of the legal profession (such as the legal fiction of brain death) have less legitimacy than those fictions judges and legislators construct. Legal fictions are not a historical remnant of the law; they are a legal tool that courts and legislatures are unlikely to abandon. Future scholarship should recognize this, develop a richer understanding of legal fictions, and provide guidance on how legal actors should craft limits on legal fictions.