A Moral Argument against Turning Off an Implantable Cardiac Device: Why Deactivation Is a Form of Killing, Not Simply Allowing a Patient to Die

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Introduction

To many bioethicists, it may sound almost old-fashioned to address the supposed moral distinction between "killing" and "allowing-to-die" (K/ATD).1 This is in contrast to the world of medical practice (and of a minority of mostly physician-bioethicists), in which that distinction seems to be alive and well. On the one hand, most physicians are opposed to so-called physicianassisted death (that is, "killing")2; and on the other hand, they generally accept that it is morally acceptable to withhold or withdraw life-sustaining therapies ("allowing-to-die") under certain conditions.3 Furthermore, professional societies generally affirm the validity of the distinction.⁴ And yet, physicians too often assert the importance of the K/ATD distinction without analyzing its moral cogency.

The physician-bioethicist Dan Sulmasy offers an analysis, defending the K/ATD distinction, notable for its rigor and for its presence in the medical literature. Some who wish to retain the K/ATD distinction, however, have found his work inadequate in relation to the issue of deactivation of cardiac implantable electrical devices (CIEDs). Sulmasy's analysis suggests that in appropriate contexts, such deactivation can properly be construed as withdrawal of support. Many who follow Sulmasy's general argument regarding the K/ATD

distinction disagree with his analysis of deactivation of CIEDs and assert that such deactivation is in fact, killing rather than allowing-to-die.

In what follows, I shall seek to defend the K/ATD distinction as physicians draw it. I shall do so by questioning the characterization of the distinction offered by both its prominent contemporary defender, Dan Sulmasy, and many bioethicist critics of the distinction. The K/ATD distinction is generally understood by both its critics and defenders to be a distinction between differing causal relationships (active and passive) between agency and negative outcomes. Moral judgments of agency are taken to follow (or not) from the causal categorization. My suggestion will be that the distinction ought not be taken, at bottom, as a causal distinction upon which moral judgments are imposed. It is better understood as a practice-specific assignment of both causal and moral valence to human agency as regards negative outcomes. It is the moral framework of given practices that determines the assignment in those practices. "Killing" and "allowing-to-die," if my argument succeeds, shall be seen to be not merely descriptive but instead, to be like other "thick" concepts, involving both descriptive and normative elements. My analysis will further suggest that the K/ATD distinction in medicine is an instance of a family of distinctions between doing and allowing, that are commonly drawn in many human practices. This more general distinction, I shall maintain, following Warren Quinn, identifies a morally important difference between positive and negative agency in relation to negative outcomes. I shall suggest that the disagreement in medicine over whether deactivating life supporting CIEDs is killing or allowing-to-die offers a way into understanding the more general distinction between doing and allowing.

I will begin by considering the K/ATD distinction, as elaborated in causal terms by Sulmasy. I will show that this version of the distinction is powerless to resolve physician disagreement over the moral status and causal significance of deactivating life-supporting CIEDs. In the next section of the paper, I will offer an account of the K/ATD distinction as it appears, to me, to be actually drawn in medical practice. The distinction in medicine will be seen to parallel a distinction to be drawn between "ongoing" and "completed" medical treatments. Life sustaining CIEDs are seen by many physicians as "completed" treatments in important respects, leading to the construal of their deactivation as killing, rather than allowingto-die. I shall suggest that the causal relations corresponding to killing and allowing-to-die in medicine are somewhat specific to medical practice; this conclusion follows from comparing the causal configuration of the medical K/ATD distinction to the analogous distinction in the differing practice of fire rescue triage. Finally, I will draw implications of the foregoing analysis for the more general distinction between doing and allowing. The suggestion will be that viewing the distinction as one in which normative elements are an essential aspect draws the teeth of a common objection to the cogency of the general distinction: that its adherents have not succeeded in identifying a common causal model that encompasses the ways in which the distinction is drawn in differing cases. According to my analysis, there can be no such common model because the distinction is not, at bottom, a purely causal distinction—it is a distinction identifying morally important differences between active and passive human agency in relation to negative outcomes, the causal correlates of which will differ across practices. The various distinctions, as elaborated in what follows, will correspond with one another as in table 1.

I. Withdrawal of support and the K/ATD distinction

To begin my analysis, it is important to point out that the K/ATD distinction as drawn by physicians and by professional societies is generally not accompanied by ethical analysis. As such, the careful writings of Dan Sulmasy stand

Table 1.

	Positive agency in regard to an adverse outcome	Negative agency in regard to an adverse outcome
General distinction	Doing	Allowing
Medical distinction	Killing (K)	Allowing-to-die (ATD)
Usual specification of the K/ATD distinction in medicine	Interfering with a life- sustaining "completed" treatment (always)	Interfering with a life- sustaining "ongoing" treatment (sometimes)

in stark contrast, as Sulmasy's analysis of the distinction may, in fact, be the only analysis in recent medical literature. His position stands in opposition to that defended in much of the contemporary bioethics literature: namely, that there is no morally useful distinction to be drawn between "killing" and "allowing-to-die." That is, there is no moral difference between killing and allowing-to-die, insofar as either is construed solely as situating the physicianagent in a causal sequence involving a patient. According to much bioethics orthodoxy, the moral significance of doing or allowing resides in the intentions and wishes of the people involved in a causal sequence, not in the mere causal relations that make such sequences doings or allowings.⁶ In contrast, Sulmasy argues that a moral distinction between killing and allowing-to-die should be retained. In common with bioethics orthodoxy, he holds that the core of the distinction lies in the relation of the causally related agent to the sequence of actions leading to death. He, thus, defines the concepts as follows:

> Killing: an act in which an agent creates a new, lethal pathophysiological state with the specific intention in acting of thereby causing a person's death.

> Allowing to die: an act in which an agent either performs an action to remove an intervention that forestalls or ameliorates a pre-existing fatal condition or refrains from action that would forestall or ameliorate a preexisting fatal condition, either with the specific intention of acting that this person should die by way of that act or not *so* intending.⁷

It should be emphasized that these definitions tie the concepts of killing and allowing-to-die firmly to natural facts about causal sequences. These natural facts allow the classification of patients into one of three categories: (1) a physiological equilibrium in which, if unimpeded, life will continue; (2) a pathophysiological trajectory that will issue in death; or (3) a pathophysiological trajectory toward death that has been arrested by an intervention. "Killing" is thus any act intentionally inducing a new lethal trajectory in all categories or accelerating a preexisting lethal trajectory in category 2. "Allowing" is a refraining from ameliorative action on a patient in category 2 or any act on a patient in category 3 that removes an intervention arresting a fatal pathophysiological trajectory irrespective of intention.

Sulmasy's definitions and schema, while a bit technical, can be comfortably accommodated by physicians' common sense view of the K/ATD distinction. Patients that physicians allow to die are in categories 2 or 3. Those from whom life sustaining treatment (such as mechanical ventilation or dialysis) is withdrawn are in category 3. Most physicians would likely construe as killing, a physician who, with maleficent intentions, forgoes interventions (e.g. a homicidal physician removing a ventilator-dependent patient from mechanical ventilation). Sulmasy construes such acts as illicit allowings, in line with his view that the concepts of doing and allowing contrast differing kinds of causal sequences. Once a causal sequence has been properly characterized in causal terms (doing and allowing), intentions and other relevant factors can then be considered to determine the moral valence of actor/ bystander agency in the sequence. That is, both the causal relevance of an actor or bystander to an outcome and other factors such as intentions figure into the determination that a given act of doing or allowing is licit (or not) in Sulmasy's schema.

Turning, then, to the use of CIEDs, Sulmasy's analysis equates the withdrawal of CIEDs to withdrawals of other medical treatments such as mechanical ventilation or dialysis.8 It does so by (a) determining that patients who have CIEDs are in category 3 above and (b) defining a CIED (such as an antibradycardia pacemaker in a pacemakerdependent patient) as "an intervention that forestalls or ameliorates a preexisting fatal condition." It follows, then, that removing such a pacemaker is an allowing-to-die that is licit if the patient is requesting removal and the physician's intentions are beneficent.

While this logic seems sound, many physicians who adhere to the K/ATD distinction do not view the deactivation of CIEDs as a mere "allowingto-die." In fact, 37% of responding physicians in a 2008 survey equated the deactivation of pacemakers in pacemaker-dependent patients with physician-assisted suicide. Of course, I'm not suggesting that many physicians are even aware of the Sulmasy analysis and simply fail to heed its insights. Instead, I suggest that this expressed discomfort with deactivating pacemakers is a clue to how the K/ATD distinction is actually drawn in medical practice—a practice-based distinction which Sulmasy's analysis fails to adequately capture, failure which undermines the strength of his analysis.

Implanted cardiac devices highlight an ambiguity in the Sulmasy version of the K/ATD distinction. How does one decide whether one is introducing a "new" pathophysiology? For most treatments hitherto readily withdrawn under the Sulmasy analysis, it has seemed obvious to physicians that withdrawal removes an obstacle to the progress of a preexisting pathophysiology. But in the case of implanted cardiac devices such as pacemakers, that is not so clear. That is, it is plausible to see the pacemaker-dependent patient not in category 3 but in category 1 that is, as not as in a state of arrested pathophysiology but as in a state of equilibrium induced by the pacemaker. If that is a better way to view the pacemaker-dependent patient, the pacemaker itself is acting less like a finger in the hole in the dike (analogous to a ventilator arresting lethal respiratory pathophysiology) and more like a repair of the dike. Deactivation of the pacemaker would then not be the "removal of an intervention that forestalls or ameliorates a preexisting fatal condition"10; it would instead be the introduction of a new pathophysiology impinging upon a stable physiologyand, hence, a killing rather than an allowing-to-die.

At issue between those who disagree over the status of deactivating pacemakers is how to describe pacemakerdependent patients. Are they in a state of arrested pathophysiology (category 3) or are they in a state of physiological equilibrium (category 1)? Sulmasy's analysis seems powerless to resolve this disagreement because whether a new pathophysiology has been introduced, the distinguishing criterion of killing in Sulmasy's schema, is what is at issue in the disagreement—a disagreement not over natural facts but over the appropriate description of those facts.

II. The K/ATD distinction as drawn in medical practice and its difference in causal structure from the similar distinction drawn in fire rescue triage

Implicit in Sulmasy's analysis is the view that the physician classifies alternative actions as doing or allowing according to bare descriptions of acts and the causal structure in which they contribute to outcomes. Such classification, along with actor intention, suffices for assessing the morality of actions. Analyzing the medical K/ATD distinction in terms of causal sequences is also the strategy of bioethicists who argue against finding moral significance in the distinction. The common thought is that the categories "killing" and "allowing-to-die" identify the differing position of agents in causal sequences leading to the outcome of death; normative evaluation is a conceptually separate issue.

The phenomenon of many physicians viewing the deactivation of lifesupporting CIEDs as killing rather than allowing-to-die suggests a different view of the K/ATD distinction than either Sulmasy or his critics would take. This alternative view, for which I shall argue, posits that instead of moral judgments following causal assessments in regard to doing and allowing, we see situations in terms of both kinds of judgment simultaneously. Description and evaluation are woven together in given practices such that descriptions of acts as killing or allowing-to-die in one practice may come apart in a second practice from the kinds of causal relations associated with those descriptions in the first practice.

Consider the K/ATD distinction in medicine and compare it with the analogous distinction in the differing practice of fire rescue triage. I suggest that the distinction in any practice aims at properly characterizing agency as positive or negative in relation to the outcome of death. In medicine, physicians describe physician acts interfering with life sustaining treatment as "allowing-to-die" or "killing," according to whether physician agency in the treatment prior to interference is ongoing, or completed. Physicians discontinuing treatments in which their involvement

is ongoing, such as dialysis or mechanical ventilation, allow their patients to die (presuming other conditions are met). If physicians were to remove or otherwise deactivate life sustaining treatments in which their involvement was past, such as prosthetic heart valves or organ transplants, that would be killing (once again, presuming other conditions are met). The distinction between ongoing and completed treatments corresponds with physician judgments that patients are in an arrested downward trajectory or in physiological equilibrium. That is, if physician agency in a treatment is ongoing, as in hemodialysis or mechanical ventilation, the physician is judging the patient to be in an arrested downward trajectory, and it is sometimes permissible for physicians to withdraw their agency and allow the patient to die. If a treatment is independent of physician agency (or to the degree that it is), the patient is judged to be in equilibrium. Disturbing this equilibrium is a form of doing (here, killing) rather than allowing. Hence, interference with life sustaining "completed" treatments (such as heart valves or organ transplants) is generally regarded as impermissible.

If causal relations alone sufficed for labeling human agency leading to death as killing or allowing-to-die, we would expect consistency in the sorts of causal relations so labeled in differing practices. But as we shall see, fire rescue triage presents a causally differing construal of killing and allowingto-die than does medicine, as suggested by Jeff McMahan's example of interference with an obstacle to harm, Burning Building II.¹¹ In Burning Building II, the fireman places a net under a falling jumper but then notices two jumpers whom he could save by moving the net from under the one to under the two. McMahan plausibly suggests that having so moved the net, we judge that the fireman allows the first jumper to die.

In this example, the causal relations between the fireman, the net, and the first jumper exactly parallel that of a physician having set in motion a treatment obstructing a patient's fatal trajectory. Unlike the fireman, if the physician was then confronted with two other patients not under her care who could be saved by transferring said treatment from the patient under her care, her doing so would not be judged an allowing of the first patient to die. It would be a doing—as physicians must not abandon patients even if doing so would lead to saving the lives of a greater number of other patients not under their care. In this pair of cases with a similar causal structure (Burning Building II and a hypothetical physician confronted by two patients not under her care whose lives could be saved through the use of a treatment presently committed to her patient who would die without it), our assignment of positive or negative agency to the removal of a lifesaving intervention from one, to save two, varies according to the character of responsibility inherent in the roles of physician and fireman. Because the fireman's commitment to the first jumper does not preclude removing the net from under that jumper to save two other jumpers, if he does move the net it can be viewed as an allowing. Because the physician's commitment to her patient precludes abandonment irrespective of the needs of others who are not her patients, her removing a lifesaving treatment from her patient to save two would be a doing.

In standard cases of physician withdrawal of life-saving treatment, the notions of equilibrium or "arrested fatal trajectory" correspond to completed and ongoing treatments. Both also correspond to forbidden doing, or

possibly-permissible allowing. Burning Building II suggests that these assignments are not a function merely of the differing causal structure in relevant pairs of cases. In this example, we would likely say the first jumper was in an arrested fatal trajectory rather than in an equilibrium (even though the fireman's agency is not active in the position of the net once it has been placed). This judgment corresponds with our judgment that the removal of the net from under the first jumper to save two is an allowing. But this judgment differs from the analogous judgment in the physician's case. If the physician's agency is not presently active in the life saving treatment (say, an implanted heart valve), we are prone to say that the patient is in an equilibrium rather than an arrested trajectory. And we classify interference with such a treatment as a doing rather than an allowing. Instead of causal structure determining our characterization of situations as equilibria or arrested fatal trajectories, it is situations in a normative framework (in these cases, the respective normative frameworks governing obligations of firemen to jumpers and physicians to patients) that direct our classifications of situations as equilibria or arrested fatal trajectories.

My suggestion is that the belief of many physicians that deactivating lifesustaining CIEDs is killing follows from viewing such patients as in an equilibrium rather than in a state of arrested pathophysiology. CIEDs, including pacemakers, straddle the divide between ongoing and completed treatments. While they generally function independently of physician agency, they need more or less physician adjustment and monitoring over time. Thus, on the one hand, interference with the device's normal function (completed treatment) is a doing, and on the other hand, refraining from normally necessary adjustment and monitoring in this setting (ongoing treatment) can be an allowing. As such, physician agency in regard to the CIED is apportioned to "doing," or "allowing," according to the CIED's "completed" or "ongoing" aspects, respectively.

III. Implications for the doing/ allowing distinction beyond medical contexts

I have suggested that the notions of doing and allowing in medicine do not lead to normative judgment by way of being first read off from natural facts about cases. Instead, normative judgments common to the practice of medicine are implicit in construals of doing and allowing in medical contexts. When considered in the light of contemporary discussion of causation, this is not a surprising finding. Numerous analysts of causation have concluded that our causal notions are plural and conditioned by normative considerations.¹² That is, the causal structure of a situation does not of itself specify the causally relevant condition that we pick out as the "cause" of an outcome of interest. Our picking out of causes depends upon their contextual salience as determined by normative considerations. Such salience is a function of different models of causation in different contexts. My suggestion is that "doing" or "allowing" are similar notions;13 and that the medical context confers a specific normative framework that conditions physician judgments about doing and allowing.

An advantage of regarding the distinction between doing and allowing in this way is that it would explain the difficulty analysts have had in assimilating the various ways this distinction is drawn across differing cases, with a common model satisfactorily encompassing them all. If in fact, doing and

allowing are family resemblance concepts¹⁴ differing in the ways they distinguish doing and allowing across human practices, it is unsurprising that they should draw lines differently in different sorts of cases.

The kind of account of the doing and allowing distinction offered here presumes a particular view of the relation of description and evaluation in moral judgment, an approach that opposes what I take to be that implicit in both the Sulmasy account of the distinction and in attacks upon the distinction mounted in much of bioethics literature. Both Sulmasy and many bioethicists who deny the validity of a moral distinction between doing and allowing per se suggest that doing and allowing are notions derivative from bare descriptions of causal structure; and that evaluative significance is imposed on the doing or allowing relations between agent and patient. My suggested account denies that description and evaluation can be disentangled in ascriptions of doing and allowing; in effect, asserting that these are thick rather than thin concepts. The normative evaluation of an act differs in differing human practices according to the differing norms of those practices.

It may be plausibly asserted that this account of the doing/allowing distinction is too deferential to particular moral practices. Why should the fact that physicians tend to draw the distinction in a particular way give any authority to their mode of practice? Perhaps they should divide doing from allowing differently than they currently do; and perhaps they should acknowledge that the distinction does not confer a negative moral valence on physician killing in certain situations at the end of life. Many defenders of the doing/allowing distinction who defend physician-assisted death (PAD) would say just that: that although morally distinguishing killing and allowing-to-die is often important, in the medical context at the end of life the distinction ought not to be taken to rule out PAD.¹⁵ This is a cogent objection in so far as we see moral practice as properly subservient to given moral theory—in this case, theory that privileges patient autonomy and selfdetermination over physician scruples regarding their own positive agency in patient death. The traditional medical answer to this objection, that patient self-determination cannot and does not outweigh the importance of physicians not killing patients, likely seems facile to those who make the objection. It is, however, persuasive to those who stand within the tradition. There is, perhaps, no better answer from a theoretical standpoint, than to observe that it is unclear that one must necessarily view the task of moral theory primarily as one of reforming moral practice rather than as rationalizing it. What I have tried to provide here is a rationalization, a more satisfactory account of the usual physician-drawn distinction between doing and allowing than that of Sulmasy. If my argument succeeds, this account shows that the distinction as (many) physicians draw it is both intelligible and defensible in terms of the desirability of a physician identity that eschews action contrary to patient life and health; and my account coherently assimilates objections to the deactivation of CIEDs, in at least in some situations, to usual physician objections to positive physician agency in the death of patients.

Notes

- See, for instance, Rachels J. The End of Life: Euthanasia and Morality New York: Oxford University Press; 1986, Ch. 7; Brock D. Taking human life. Ethics 1985;95:851–65.
- Solomon MZ, O'Donnell L, Jennings B, Guilfoy V, Wolf SM, Nolan K et al. Decisions

- near the end of life: professional views on life sustaining treatments. *American Journal of Public Health* 1993;83:14–23; Caralis PV, and Hammond JS Attitudes of medical students, house staff, and faculty physicians toward euthanasia and termination of life-sustaining treatment. *Critical Care Medicine* 1992;20: 683–90. More recent, if less rigorous, evidence for physician opinion on physician assisted suicide are the results of an online poll of NEJM's USA readers, of which 67% opposed physician assisted suicide: Colbert JA, Schulte J, Adler JN. Physician-Assisted suicide—polling results. *New England Journal of Medicine* 2013;369:e15(1).
- Asch DA, Faber-Langendoen K, Shea JA, Christakis NA. The sequence of withdrawing life-sustaining treatment from patients. American Journal of Medicine 1999;107:153–56.
- 4. Bone RC, Rackow EC and Weg JG. Ethical and moral guidelines for the initiation, continuation, and withdrawal of intensive care. Chest 90;97:949–58. American Thoracic Society. Withholding and withdrawing life-sustaining therapy. Annals of Internal Medicine 1990;115;478–85. Truog RD, Campbell ML, Curtis JR, Haas CE, Luce JM, Rubenfeld GD et al. Recommendations for end-of-life care in the intensive care unit: A consensus statement by the American Academy of Critical Care Medicine. Critical Care Medicine 2008; 36:953–63.
- Sulmasy DP. Within you/without you: biotechnology, ontology, and ethics. *Journal of General Internal Medicine* 2008 Jan;23 Supplement 1: 69–72.
- For a recent explication of this position, see Miller FG, Truog RD and Brock DW. Moral Fictions and Medical Ethics. *Bioethics* 2010; 24:453–60.
- Sulmasy DP. Killing and allowing to die: another look. *Journal of Law Medicine and Ethics* 1998;26:55–64.
- Mueller PS, Hook CC, and Hayes DL. Ethical analysis of withdrawal of pacemaker or implantable cardioverter-defibrillator support at the end of life. Mayo Clinic Proceedings 2003;78:959–63.
- Kapa S, Mueller PS, Hayes DL and Asirvatham SK. Perspectives on withdrawing pacemaker and implantable cardioverterdefibrillator therapies at end of life: Results of a survey of medical and legal professionals and patients. Mayo Clinic Proceedings 2010;85:983.
- 10. See note 7, Sulmasy 1998, at 57.
- 11. McMahan J. "Killing, Letting Die, and Withdrawing Aid." *Ethics* 103(1993):250–79 at 262.

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- Cf. Cartwright N. Hunting Causes and Using Them: Approaches in Philosophy and Economics. Cambridge: Cambridge University Press, 2007; Driver J. Attributions of causation and moral responsibility. Moral psychology 2(2008):423–40; Hitchcock C. and Knobe J. Cause and norm. Journal of Philosophy 11(2009):587–612; Alvarez M. "Letting happen, omissions and causation." Grazer Philosophische Studien 61(2001):63–81; and Godfrey-Smith P. Causal pluralism. Oxford Handbook of Causation 2009:326–37.
- 13. As is suggested by recent empirical work on how people draw these distinctions. See

- Cushman F., Knobe J., & Sinnott-Armstrong W. Moral appraisals affect doing/allowing judgments. *Cognition* 2008;108:281–89.
- Compare with Cartwright, on causation as a family resemblance concept, note #15, Cartwright 2007; and Cartwright N. "Comments on Longworth and Weber." Analysis Reviews 2010;70:325–330.
- 15. For example, Woolard F. The Doctrine of Doing and Allowing II: The Moral Relevance of the Doing/Allowing Distinction. *Philosophy Compass* 2012;7:465. FitzPatrick W. Intention, Permissibility and Double Effect. *Oxford Studies in Normative Ethics* 2012;2:97–127.