Warhol, Andy, Telephone, 1961, The Andy Warhol Foundation, Inc./Art Resource, New York

Special Section: Cyberethics:
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Ethics and Internet Healthcare: An Ontological Reflection

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Recently, when I was diagnosed with an incurable and terminal bone marrow disease, I was dismayed to hear my doctor tell me that there were only three treatments available, two of which were unavailable to me because of my already frail condition. Furthermore, only 15% of patients responded at all to the third treatment, which would not cure but only impede the development of the disease. My response was to verify this information by going to the World Wide Web, and to my delight I found some 20 other treatments (albeit experimental) that my doctor had not mentioned. My experience typifies one of the significant advantages to patients arising out of the development of Internet medicine, and particularly of web sites devoted to health issues: Information previously parceled out by one's doctor is now easily available to anyone with access to a computer.

There are several significant dimensions to this access. First, as in my case, one can find out about the latest, most sophisticated research on medical conditions as well as alternatives to traditional methods of treatment. By "one" I mean virtually anyone, and this brings a new egalitarianism to healthcare, because the opportunity to find out about medical issues is no longer determined by the patient's financial resources or proximity to Stanford or the Mayo Clinic. The information is free, requiring not even minimal insurance for an online "consultation," and it is as available to people in Boston or San Francisco as it is to people in Hilo or Borneo.

Universal access to information is good because it promotes autonomy. Furthermore, because the information is universally available independent of finances, insurance, or location, it promotes justice in the dispersal of medical information. Given that, as Beauchamp points out, justice and autonomy are increasingly seen as the primary foundations for an ethical relationship between the patient and healthcare givers, Internet medical care would seem to be on the front line of biomedical ethics.[1]

But as Beauchamp also says, this emphasis on autonomy and justice has led to a mitigation of the roles of other significant principles in medical ethics, viz., beneficence and nonmaleficence.[2] The ethical importance of beneficence as a determining principle in the dispersal of information has been acknowledged at least since Percival claimed in his seminal work on medical ethics in the early part of the last century, that the patient's right to knowledge was "suspended" if it would cause him or her harm.[3] Of course, Percival's position is controversial and few would hold it without qualification; nonetheless, the Internet removes any such control over medical knowledge. Furthermore, if one accords paternalism even a modest role in medical ethics, the implicit

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anonymity of web site visits would seem to eliminate the possibility of even the modernized version of paternalism for which Weiss argues.[4]

It is not simply beneficence and nonmaleficence as well as paternalism that are threatened by Internet medical care, but moral agency itself. Given that the autonomy of the patient and the moral agency of the doctor exist in tension with one another, if one is absolute then the other ceases to exist. As Childress and Siegler claim, the technician model of a doctor-patient relationship—of which the relationship one has to the web doctors seems to be a high-tech variation—"offers autonomy to the patient, whose values dominate (at least in some settings) at the expense of the professional's moral agency and integrity."[5] In fact, if Pellegrino is correct that the "central pediment of biomedical ethics is the doctor/patient relationship," one can infer that Internet medicine represents a serious challenge to biomedical ethics because it inclines toward the elimination of any such relationship in the dispersal of healthcare information.[6]

One could argue that the concern with medical ethics is generally couched within the responsibilities of the physician in medical practice, not the process of simply relaying medical information that is useful only to the degree that it leads to a decision. Even if the patient has autonomy in this arena, it is unlikely that it would constitute his or her only contact with medical caregivers. Given that doctors would likely be involved at some point in a patient's decisionmaking process, their moral agency would eventually come into play. Although doctors might have to deal with the better informed (and in some cases, misinformed) patient, the patient's autonomy would not be absolute. Thus, one might argue that the effect of the morally neutral character of the patient's relationship to the Internet would eventually be mitigated.

Yet the limited relation that the patient has to the caregiver in the dispersal of medical information can be considered an aspect of medical practice, and its eventual mitigation cannot disguise this fundamental lack of the caregiver's moral agency. This is particularly obvious in those cases where information gleaned from the Internet leads a patient to shun medical treatment or pursue harmful "alternative" treatments. So even though other aspects of the doctor-patient relationship may remain in the purview of the principles of medical ethics, the relationship of the patient to the Internet caregiver does not.

Should one conclude, then, that the proliferation of Internet web sites for healthcare should be stopped or at least regulated according to some system of ethics? Should access to them be monitored, perhaps by a paternalistically inclined panel of doctors? Such courses of action might be justified ethically. Whatever advantages to autonomy and justice are gained may be offset by the loss of beneficence and even nonmaleficence to this moment in the process of medical practice. Yet, the opportunity for patients to have a resource for diverse and sophisticated information—not to mention the opportunity for the advertisers that support web sites to have the resource for their products—creates such a formidable force for their development and expansion that it seems unrealistic to imagine halting the advance of such technology. One could no more stand in the way of the development of web sites devoted to healthcare with ethical arguments than earlier ethicists could halt the advent of the Atomic Age, in which ethical concerns with nuclear waste were pitted against the promise of a new resource for electricity.

So, how does one reconcile traditional principles of ethics with the proliferation of a technology that seems at best amoral, and at worst to subvert one

arena of healthcare that had previously been under the purview of ethics? This apparent tension between ethics and the Internet points to the need to look at Internet technology more fundamentally, at the level that makes a coherent relationship between the two possible. As Heidegger claims, the essence of technology is not technological, but it is a way of revealing Being, or in less mystical terms, a way of constituting reality.[7] This process is dependent on a mode of thinking, the system of ordering what we encounter and create. Because ethics is also a mode of thinking, or a way of constituting reality, the question is not whether the technology of the Internet can be reconciled with ethics, but whether the principles of thinking that allow for Internet technology can be reconciled with the principles of ethics fundamental to healthcare. In this paper, I attempt to forge such a reconciliation by drawing on Heidegger's reflections about the thinking that makes technology possible. After outlining Heidegger's idea of how we have come to conceive of the world in terms of resources, I discuss how that mode of thinking has impoverished the concept of healthcare that is presumed by the Internet. I argue that a notion of health that is grounded in Heidegger's concern for Being provides a direction for thinking that opens up a relationship between ethics and Internet healthcare.

Autonomy

As I suggested in the introduction, one of the primary advantages of Internet healthcare is the promotion of autonomy. Autonomy, on the other hand, presumes an underlying subjectivity in that the aspiration for the freedom for self-determination of the subject allows autonomy to be considered a value. Such subjectivity presumes a subject/object metaphysics, the essence of which is the idea that there is an external reality independent of the individual, and it is up to the individual to determine the nature of that reality. According to Heidegger, this concept of metaphysics begins with Plato, who first gives the individual the responsibility for determining reality and thus sets up the possibility for the development of subjectivity.[8] Heidegger develops this claim in terms of his overall project to reveal the history of metaphysics as the history of the forgetfulness of Being. This forgetfulness of Being, claims Heidegger, is made possible by what he calls a "productionist metaphysics," a metaphysics that ultimately replaces our attention to Being (*Sein*) with a focus on beings or entities (*seiendes*). That is, our focus is on materiality rather than essence, or the *physica* (physical) rather than *mataphysica* (transcendent to the physical; spiritual).[9]

Although Heidegger sees the evolution of the forgetfulness of Being as manifesting itself in all subsequent Western philosophy, from Aristotle to its consummation in the blind will to power of Nietzsche's nihilism, for healthcare the most obvious modern appearance of this subjectivist metaphysics is in Descartes. In the *Meditations*, for example, Descartes makes at least three claims that become critical for the science that leads to our contemporary notion of healthcare. First, he underscores the subject/object metaphysics by locating the responsibility for what "is" in the mind of the perceiver. As Glazebrooks points out:

> There is no truth for Descartes about the external world, i.e., the world of nature which includes even the bodily subject, until the subject has first secured itself in the *cogito*. Truth lies in such an account in the certainty of the subject's representation of its object.[10]

By claiming that the basis for reality is the *cogito*, he sets in motion the inevitable and irreconcilable split between self and world that is necessary for autonomy to develop as a virtue, and for those technologies such as the Internet that promote autonomy. Second, he establishes the basic outlook of contemporary medicine as a science that deals with the body as a machine when he makes precisely that claim in the sixth meditation:

> the human body may be considered as a machine, so built and composed of bones, nerves, muscles, veins, blood, and skin that even if there were no mind in it, it would not cease to move in all the ways that it does at present when it is not moved under the direction of the will, nor consequently with the aid of the mind.[11]

Such a concept of the body as machine eliminates a relationship to the self or individual as a necessary part of healthcare and, again, makes possible technologies such as the Internet that do not presume any relationship to the self as necessary to the promotion of health.

Finally and most importantly, Descartes emphasized the *cogito* over the *sum*. The implication of this for the subsequent metaphysics is substantial, because it eliminates the question of Being. As Heidegger explains in *Being and time*

> with the "*cogito sum*" Descartes had claimed that he was putting philosophy on a new and firm footing. But what he left undetermined when he began in this "radical" way, was the kind of Being which belongs to the *res cogitans*, or—more precisely—the *meaning of the Being of the "sum."*[12]

All that "is" in such a metaphysics, is the entity. This movement in metaphysics leads to a concept of health that has only to do with the materiality of the body, not the relationship, for example, of the body to the self or the self to the world. The thinking that emphasizes mere objects leads to what Heidegger characterizes as essential to technology: thinking in terms of the "standing reserve" or "resources."[13]

The inherent danger in such thinking is apparent in light of three concepts Heidegger uses to develop his notion of such technological thinking in *The Question Concerning Technology*: *Gestell*, *bestellt*, *and Verwahrlosung*. *Gestell*, usually translated as "enframing," refers to the mode of thinking that puts everything in its place. But Heidegger's emphasis on the *stellen* in *Ge-stell* also suggests a kind of challenging, a tendency to bring to bay that which it hunts down. This idea of enframing is combined with *bestellt* (*das Gestell bestellt*), which refers to the process of ordering. The normal translation of *bestellt* as "orders" does not adequately convey the other German senses of "sends for" and "cultivates," which are critical to an understanding of the way things are ordered into material ready at hand.[14] That is, the thinking of things as resources is actually a mode of thinking that sends for everything, challenges everything, hunts it down, and cultivates it as nothing but material ready at hand for some purpose. Although Heidegger's concern is much larger than any particular technology, the basic idea that applies to the technology of healthcare is that such thinking is characterized by an ordering that fosters only the relationship of material ready at hand for some other purpose. In such an ordering, the notion of a "world," for example the life-world of either the patient or the

doctor, no longer has any relevance. For this loss, Heidegger uses *Verwahrlosung,* which means neglect. But *verwahren*, which is "to guard" with its root notions of *wahren* ("to protect") and *wahr* ("true"), also means "to watch over the thing so that it can present itself as the thing it is, as it is in truth"; *Verwahrlosung* is therefore a refusal of this world as truth.[15] So, the thinking that orders things only as a resource for a secondary purpose does so at the expense of the world that in fact holds things and allows them to be as they are. Heidegger illustrates this idea with the way that a river like the Rhine moves from being a part of the earth, beautiful and meaningful in itself, to a resource for producing hydroelectric power. As a resource it can be used up and violated, because it is regarded as having no value except its use for some other purpose, and once that purpose is exhausted or supplanted its justification for existence is lost.[16] Although our focus with such thinking is the Internet, this is but one symptom of the perspective in healthcare. Resource-thinking, for example, allows for the view of the doctor as a mere technician, as well as phenomena such as "managed" care, which at least at times is a euphemism for healthcare based on principles for the allocation and preservation of resources rather than patient care.

This technological, resource-based mode of thinking orders things such that they exist only as material ready at hand for some other purpose. Resource-thinking orders through the neglect of the thing as something in itself, and the neglect of the world of meaning that supports it as having an essential meaning more fundamental than its purpose. This way of thinking could be seen as having a bearing only on the Internet as a resource for information that is always ready at hand for the patient who needs it to assess his or her medical situation. The range of such thinking, however, is much more insidious. For it is not just that the information is a resource, but that both the doctor and the patient also become resources. As Heidegger points out, the great danger of such thinking is not just that the world and its things are turned into mere resources, but that people too become ordered as material ready to serve some secondary purpose. In his terms:

> As soon as what is unconcealed no longer concerns man even as object, but does so, rather, exclusively as standing-reserve, and man in the midst of objectlessness is nothing but the orderer of the standing-reserve, then he comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve.[17]

Such thinking that turns humans into the standing-reserve not only denies the possibility of deontological ethics based on Kant's categorical imperative—that humans never be treated as mere means but always also as ends in themselves—it also undermines the possibility of patients and doctors appearing as they are, in the truth of their humanity. The implications of this to healthcare will be the subject of the next section of this paper.

The Notion of "Care"

If healthcare becomes rooted in a kind of thinking that disposes of both the world of the patient and the world of the doctor, and turns each into a resource useful to the other for their own purpose, the possibility of ethics is eliminated.

This becomes particularly clear when one considers that the root notion of ethics means precisely to be grounded in a particular world or place. Ethics is not all that is lost in such a transformation. Ultimately, such thinking erodes the notion of "care" that is central to the possibility of health. To see how this occurs, I will first consider the effect of such thinking on both the doctor and patient, then use that analysis as the foundation for a reflection on the meaning of health. From this will emerge a notion of care that can stand in opposition to the hegemony of technological thinking and opens up the possibility of a more authentic relationship to Internet healthcare.

In the doctor-patient relationship, the doctor is generally seen as the giver, the patient the recipient. In addition to skill, the doctor disperses information, and it seems efficient to transfer this responsibility to the Internet through web sites. Rabinowitz points out, however, that the doctor can also be a recipient in at least three ways.[18] First, the emotional development of the doctor is conditioned by his or her experience with patients. This includes such direct influences as the despair and depression of illnesses, chronic disease and death, as well as the gratitude and recognition accorded doctors by both individual patients and society. Second, a doctor derives benefit from patients as sources of knowledge. A physician's effectiveness is deeply rooted in the doctor's particular experience with the variety of manifestations of even the same illness as well as patients' responses to it. Finally, Rabinowitz claims that "the patient and their families serve as a source of something which is much more than emotions and knowledge: this could be called 'life experience.' "[19] By this she means the benefit one gets from the day-to-day encounter with life, its unexpected turns, and the consequent refining of observation and discrimination that arises from this contact.

The underlying characteristic of these benefits, according to Rabinowitz, is care: the patient caring for the doctor, albeit unintentionally or at least indirectly. But by giving to the doctor in this way, and thus increasing the doctor's effectiveness, the patient also cares for himself or herself. There are, unfortunately, a number of situations in which this care becomes truncated. Rabinowitz acknowledges a few: a desire by the doctor not to have his or her life disrupted by the patient, an overemphasis on giving that blocks out the possibility of reciprocation by the patient, involvement in medical politics and administration that leaves little room for giving attention to patient care, and so on. But the important issue is that, in all cases, the lack of care that the doctor receives impoverishes him or her as a doctor, causing an arrest in development, or an inability to grow as a doctor. Clearly, this is also the case with the doctors that stand behind the anonymity of the Internet; they too suffer from a lack of care. But again, it is not the Internet per se that deprives the doctor of care, but the kind of thinking that turns the doctor into a mere resource, to be used for the patient's benefit. Given that what constitutes a healthy relationship is the openness to care, to the degree that the doctor becomes transformed merely into a resource, the possibility of care is sacrificed. The situation is similar for the patient.

The care of the patient seems to be the obvious intention of any form of healthcare, even Internet healthcare. But the nature of that care is deeply rooted in the definition of health that is assumed. The Cartesian notion of the body as a machine puts the emphasis on its repair, and to care for a patient is generally assumed to be to respond appropriately to the patient's illness, either by curing

it or by helping the patient deal with it. As Kushner describes this traditional model, "the relationship between physician and patient is one where the controlling expert relates to the patient as an object to be carefully observed, evaluated, and expediently dealt with by effecting a cure."[20] Pellegrino also says:

> The ends of medicine are ultimately the restoration or improvement of health, and more proximately, to heal, i.e. to cure illness and disease or, when this is not possible, to care and help the patient to live with residual pain, discomfort or disability.[21]

It would seem that the Internet could be an important part of this process of curing illness simply by providing information about the illness and treatments. In fact, it would seem that it could replace much of what a doctor actually does.

But this assumes a pathological view of doctor-patient care that recent studies have not substantiated. For example, according to the National Ambulatory Medical Care Survey, 80% of the visits a general practitioner receives are nonpathological. That is, they are visits by people with diseases to which the individual has successfully adapted, are diseases that have an emotional rather than biological foundation, are related to prevention, and so on. In other words, only 20% of visits to a general practitioner fit what Kushner calls the "clinical model."[22] On the one hand, if one takes the Cartesian view that disease is merely a problem with the body—a view that focuses on the thing rather than the world that holds the thing in its essence—there is a temptation, as Kushner points out, to regard the 80% as not really ill and therefore wasting the doctor's time. On the other hand, if one extends the notion of health to incorporate the well-being of both the body and its world, one can conclude that the other 80% are dis-eased if not diseased, and consequently still in need of care.

But such a notion of health is incompatible with the kind of thinking that transforms doctors and patients into resources. A pathological illness lends itself to "enframing," "challenging," and "ordering." It can be hunted down, challenged to reveal itself and then eliminated, mitigated, or accepted. But care for the illnesses that are nonpathological, the dis-ease of a patient with his or her world, do not lend themselves to such a calculative approach. Indeed, from the perspective of technological thinking determined to "enframe" and "order," such patients are necessarily "neglected"; their illnesses do not "exist." As Kushner points out, the tendency among doctors is to presume that such patients are simply not within the purview of their concern. Yet, she continues, the problem is not with the patients, but with the conception of the doctor-patient relationship.[23] In particular, a notion of health that disregards 80% of the patients seeking physician assistance must be reconsidered.

Thus, it would seem that the technologically based notion of healthcare with its Cartesian emphasis on the body as machine independent of world leads to an impoverished notion of healthcare for both caregivers and recipients. Caregivers as mere resources are deprived of the possibility of enrichment in their world, and patient care is limited to quantifiable, physiological disease. To overcome these limitations, a notion of health is necessary that looks at both patient and doctor not as beings or objects, but acknowledges them in their being or "world."

Health and Internet Healthcare

Drawing on Heidegger, Charles Scott develops a perception of health that can be expanded to accommodate attention to more than the broken bodies of patients, and also makes room for the doctor to be acknowledged as more than a resource exploited for the patient's well-being.[24] After an exposition of this idea, I will consider how it can alter our relationship to Internet healthcare in particular.

Scott acknowledges that the traditional notion of human illness "is solely a matter of physical malfunctioning, that health is fully restored when an ill part of a physical structure begins to function properly." Accordingly, on the basis of such an assumption, "the human body is best understood in totally objective, materialistic terms."[25]

Contrary to this view, Scott suggests that health is a way of being, as is illness, not something that we possess as secondary to our existence. But if we are healthy or ill, we need to understand something about the "are" or what it means "to be." Heidegger claims that humans are characterized by *ek-stasis*: standing out into "the open." Scott interprets this as meaning that human beings are an event that happens as both claim and answer, suggesting that health has to do with how one attends to the claims and the responsiveness that make up his or her being in the world. The claims that Scott refers to are the beings or entities that constitute the human's world. "Claim" means "to say itself" or "to call out." As Heidegger points out in *Being and time*, things are never just there; they exist first and foremost in a context that gives them the possibility of address, the possibility to be affirmed, negated, ignored, modified, and so on.[26] Our existence is not just as a being among beings or thing among things. Rather, who we are is constituted by our relationship to our world. A professor, for example, is not simply a body moving next to books, committees, classrooms, and students. She is a professor because she lives in the world of a professor that draws its identity from her relationship to these (and other) entities. Existentially, who she is is constituted by her response to such claims as those made on her by committees, students, and colleagues.

Her response is her answer, for the counterpart to claiming is answering. As Scott says, "Human existence says itself." It does this by being itself, which is to be in "a state of giving heed in the presence of beings."[27] Health, then, has to do with a human's composure in the face of beings' claims. That is, his or her ability to answer the claims by standing out in the openness of beings is the determination of health. As Scott says:

> well-being occurs as a fulfillment of "possibilities for world relation" which as either a deprived or fulfilled state occurs as the structure of world-openness, as the way in which beings come forth and compose the concreteness of an individual's life.[28]

To deprive a person of these possibilities for world relations is, by contrast, unhealthy. Yet this is precisely what characterizes the technologically (or Cartesian) based notion of healthcare that separates the body from its world in an effort to cure it. I am often struck, for example, by the incongruity implicit in being told by my doctors that I need to stay in the hospital for observation—despite the fact that it may mean missing critical meetings or deadlines I have as a professor—because "your health is more important than work." It is a

similar mode of thinking that led one of my doctors recently to refuse to lessen my dialysis time so that I would have the energy to perform my academic duties because it might flatten the longevity curve. This concentration on achieving the right numbers might be a reasonable concern if I did not have a terminal illness that rendered such curves meaningless. As these examples illustrate, if a doctor is able to sever a patient from his or her world, such conclusions that focus on achieving quantifiable results are reasonable. But if participation in the world is seen as essential to health, they become questionable. These concerns are often expressed as "quality of life" issues, but if health is being able to engage in the possibilities of world relation, then saying that "health is more important than work" is contradictory; health is engagement, and healthcare makes engagement a possibility.

Healthcare, then, is that process of caring that allows an individual to stand composed in his or her world. This notion of "care" also draws on Heidegger's assertion that care is not fundamentally solicitude, nor is it a matter of jumping in and taking someone else's place or "taking over" for them.[29] Rather, care is the "natural light" of humans that shines on beings and lets them emerge in their being. Care is allowing something to be, and healthcare is allowing a human to be composed, responsible in the world in which he or she finds him- or herself, regardless of whether or not some part of them is "broken." Healthcare also allows the doctor to experience the claim of the patient in the truth of his or her world and to answer that claim such that he or she is also composed. Can such a way of conceiving healthcare inform our relationship to the Internet, or does this perspective simply stand in opposition to such healthcare?

It would be easy and tempting to conclude that, because the essence of the thinking that makes the Internet possible is calculative, materially based, focused on resource applications, and unable to acknowledge beings as existing in a world of interrelated meaning, the Internet is simply incompatible with healthcare. Healthcare, after all, is grounded in a mode of thinking that is reflective, focused on patients as ends-in-themselves, acknowledging that they are suspended in a world that gives their life meaning. Such a conclusion of incompatibility would demand that the ethicist decry the Internet, and work to eliminate its influence in healthcare.

This, however, is precisely what must not be done. As Heidegger says, our attitude must not be one of rejection not merely because any attempt to stop the proliferation of technology in general or in particular would fail. Rather, just as resource-thinking threatens humankind with the claim that "a thing does not exist if it cannot be measured," so also insurance against that danger is offered by technology. Borrowing from Holderlin, Heidegger claims that "where danger grows/The saving power also."[30] This is true because the essence of technology is not technological, even the technology of Internet healthcare. The essence of Internet healthcare is its mode of thinking. Any thinking, including that which grounds technology, is a mode of revealing Being. This means that it is a mode of projecting a particular world of interrelationships. Although the Internet as we now conceive of it is resource based, grounded in what Heidegger calls the technological thinking that has "enframing" and "ordering" as its objectives, this need not be the case. It is possible to imagine Internet healthcare as an extension of a more fundamental mode of thinking. Indeed it is not, again, the Internet that is the danger, nor even the mode of thinking that we currently use to relate to it. The danger is that we will think that it is the only

legitimate mode of thinking, of structuring the world in which we live. The objective, then, is not to change the technology directly but to change the way we think of it. As long as we approach it as a resource and in exchange for that service offer ourselves up as resources to the doctors and advertisers that support the Web, we will be unable to free ourselves from the ordering and enframing that stand in the way of health and an openness to the world relations that constitute it. The first step in overcoming the dominance of such resource-based thinking may be a reconsideration of our understanding of health.

Notes

1. Beauchamp TL. The Four Principles Approach. In: Gillon, Raanan, eds. *Principles of Health Care Ethics*. New York: Wiley, 1994:2–12.
2. See note 1, Beauchamp 1994:2–12.
3. See note 1, Beauchamp 1994:2–12.
4. See note 4, Weiss 1985:184–7.
5. Childress J, Siegler M. Metaphors and models of doctor-patient relationships: their implications for autonomy. *Theoretical Medicine* 1984:17–30.
6. Pellegrino E. The Four Principles and the doctor-patient relationship: the need for a better linkage. In: Gillon, Raanan, eds. *Principles of Health Care Ethics*. New York: Wiley, 1994:353–65.
7. Heidegger M, Lovitt W, trans. *The Question Concerning Technology*. New York: Harper & Row, 1977:4.
8. For a version of this interpretation authorized by Heidegger, see Richardson W. Heidegger's way through phenomenology to the thinking of Being. *Listening* 1977:21–37.
9. For Heidegger's initial treatment of this distinction, see Heidegger M, Manheim R, trans. *An Introduction to Metaphysics*. New Haven, Conn.: Yale University Press, 1959:15ff.
10. Glazebrook T. Heidegger on the experiment. *Philosophy Today* 1998:257.
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12. Heidegger M, Macquarrie J, Robinson E, trans. *Being and Time*. New York: Harper & Row, 1962:46.
13. See note 7, Heidegger 1977:3–182.
14. For an expanded discussion of these terms, see Harries K. Philosophy, politics, technology. In: Harries K, Jamme C, eds. *Politics, Art, and Technology*. New York: Holmes & Meier, 1994:225–45.
15. See note 14, Harries 1994:230.
16. See note 7, Heidegger 1977:16.
17. See note 7, Heidegger 1977:26–7.
18. Rabinowitz M. Medicine as trade. *Metamedicine* 1980:255–61.
19. See note 18, Rabinowitz 1980:256.
20. Kushner T. Doctor-patient relationships in general practice: a different model. *Journal of Medical Ethics* 1981:128.
21. See note 6, Pellegrino 1994:362.
22. See note 20, Kushner 1981:128–31.
23. See note 20, Kushner 1981:129.
24. Scott C. Heidegger, madness, and well-being. In: Shahan R, Mohanty J. eds. *Thinking About Being: Aspects of Heidegger's Thought*. Norman: University of Oklahoma Press, 1984:137–57.
25. See note 24, Scott 1984:137.
26. See note 24, Scott 1984:141.
27. See note 24, Scott 1984:141.
28. See note 24, Scott 1984:154.
29. See note 12, Heidegger 1962:15ff.
30. See note 7, Heidegger 1977:42.