The change of death from a moral to a technical matter has come about for many reasons based in social evolution and technical advance, and the effects on the dying have been profound.

When death is imminent, recognition, avoidance, denial, and readiness can all go hand in hand for the patient, family members and professional staff. Often, no one is ready and death still comes. This is why one faces death rather than masters it.

The surgical intensive care unit (SICU) is designed to save the lives of patients who are critically ill, but even in a tertiary care hospital a proportion of patients will not survive. Their deaths trouble the relationships among persons who are key actors: physicians (surgeons and intensivists); nurses; persons attached to the patient (family or significant others or both); and auxiliary staff (social workers, chaplains). Time pressures render the problems even more difficult as crises require quick judgments when the margins for error are narrow and the time to reflect is nonexistent.

For explicating and interpreting these problems, we will use the dichotomy of moral order and technical order, introduced into medical discourse by Eric Cassell in 1974. We will discuss the terms by briefly reviewing the origin of the dichotomy within the investigations of anthropologists and sociologists, as these were undertaken in the late 19th and 20th centuries. The value of the dichotomy will become evident with a presentation of an illustrative case.

In the discussion of the SICU and the presentation of the illustrative case, we will employ the dramaturgical vocabulary customary in sociology, and speak of the participants as actors and of their efforts as performances. In surgical discourse, this is not novel, as the operating room was originally labelled as the operating theater. A dramaturgical perspective is well-suited for conveying the critical interactions among a small team of actors struggling to hold death at bay.

The medical actors—intensivists, surgeons, and nurses—have been trained not only to perform technically but also—less deliberately, less consciously—to perform as social beings within the moral order in the SICU. When doctors and nurses confront a case of a terminal patient, they have the training and experience to facilitate their handling of the situation. Family members are far less experienced. They are shocked and dismayed by what is being asked of them, technically and morally, in end-of-life crises. Desperately needing direction, they are conflicted and bewildered by the choices they are asked to make. They are particularly troubled when those to whom they look for guidance are evasive or in disagreement. Much of the time, they draw guidance from the critical-care nurse.

In the handling of an SICU patient, the central actors include surgeons. In general, they have been trained and motivated toward preserving life. Their priority is to cure illness and prolong living, regardless of the cost in resources, or the suffering of the patient, or even subsequent well-being. Within that scenario, the loss of the patient’s life is a sign of defeat, and in some cases is experienced as shameful. They are neither trained nor prepared for the alternate scenario of palliative care.

Other major actors include the critical-care nurses, who spend long periods of time at the patient’s bedside assessing, diagnosing, and responding. Where doctors rely most heavily on technological cues such as electronic monitors, test results, and physical examination, the nurses supplement by focusing on intimate interactive cues, including the social. They are particularly knowledgeable about both the physiological and social aspects of the patient. As part of the investigative process of our research team, we conducted focus groups with families of former patients. When the participants were asked who was “in charge of the care of their loved one,” their response was nearly always “the nurse.”

A patient is identified as terminal, the major actors—physicians, nurses, family—find themselves be-
ing asked to play difficult roles within the unfolding drama. In the initial epigraph, E Cassell had indicated that we might acquire a deeper understanding of these dramas by way of the contrast between technical order and moral order. His essay has been influential and much cited. We will elaborate on the key concepts, starting with the original contrast as developed by the anthropologist Robert Redfield.

Contraries: Moral and technical order

The moral order develops in intimate groups where people can communicate most humanly with one another and come to shape each other through the establishment of common sentiments and attitudes. . . . The technical order is that order which results from mutual usefulness, from deliberate coercion, or from the mere utilization of the same means. In the technical order men are bound by things, or are themselves things.

Although the two contrastive notions were introduced to medical discourse in 1974, the terminology was advanced by Redfield a generation earlier. From the Hebrew prophets and the scholars of the Arabic Renaissance until the present day, thoughtful observers and critics have noted the differences between the small rural community—relatively isolated, compact, homogeneous—and the urban milieu. The small community was composed of persons who had known each other intimately since birth and was dominated by kinship relationships, by ritualized obligations, and by ceremony and piety. Urban life brought the mingling of people, it detached relationships by objectification, alienation, and far greater freedom. The German proverb is apt: “city air makes free;” but the freedom has a price.

The emergence of the social sciences during the 19th century initiated intensive studies of the urban milieu by sociologists and of the small exotic communities by cultural anthropologists. According to Redfield, theorists earlier in the 20th century identified that there was a corresponding conceptual opposition: on the one hand, small communities (folk societies), and on the other hand the great city (the metropolis). While that contrast is visibly present, the underlying processes are more complex. Within the urban milieu, people are continually attempting to recreate miniature versions of the small community. True, urban life has far more interactions among persons who are strangers, and this is an extreme contrast to the small community where people have known each other since birth and will continue to associate with each other until death. But if one looks closely at a well-functioning work site (including the SICU), one finds persons building intimate social relationships, miniature versions of the ties characteristic of the small community. Hence, one can describe and analyze these behaviors better by asking whether they are situated within the technical order or within the moral order. The contrast between the two is relative rather than absolute.

Moral and technical orders are thus not neatly separable, but are in a continual tension and adaptation. In any particular milieu, the actors might be guided by the spirit of one order or the other. Redfield summarizes the effect of civilization on the moral order by stating that the integrity and compelling force of the moral order in society are functions of isolation and a slow rate of development of the technical order. The moral order flourishes as the society is shut away from outside influences and as the technical order develops slowly or not at all. When new ideas are rapidly introduced and people of different traditions are moved around into new communications with one another, or when the technical order develops rapidly within an indigenous civilization, the moral order is thrown into confusion and its authority declines. The ethical convictions of man strengthen or weaken with the events of technological development and with increased or decreased communications. Reformers of differing perspectives urge that the actors (in this case, intensivist, surgeon, family, or nurse) be guided by technical excellence or by moral connections or some creative integration.

Views of the dying person

Viewed from the technical order, the person is an organism—distinct, individuated, basically physiological—composed of organ systems. The SICU performs miracles in maintaining troubled systems and restoring some toward functional adequacy. But, these medical efforts might be defeated, and as the systems unravel, and the patient becomes irrevocably terminal, dying becomes inevitable. Within the SICU, one speaks of multiple system organ failure: physiologically a zero state.

Viewed from the moral order, the person is a social being, raised by other human beings, with whom he or she is continuously enmeshed in a web of duties, con-
cerns, privileges, and responsibilities; thereby acquiring language and a self, including a narrative sense of conjoint activities and of who he or she is, a self image rooted in relationships. Viewed from this perspective, dying is the fracturing of these relationships, the organism so becoming decreasingly social and ultimately a mere symbol. Because the person is connected to other beings with selves, death is not a zero state—a vanishing—but rather a translation of being. Consequently, most of the peoples of the world think of the dead person as inhabiting a new social space: present perhaps as an ancestral spirit, or alternately reborn (or reincarnated) within the community. This view is tacitly acknowledged by surgeons through willingness to provide pastoral care and other forms of spiritual support.

So, moral and technical orders offer two different optics for understanding the dramas of the SICU. To demonstrate how this happens, we offer the case of Mrs B.

**SICU conflicts: The case of Mrs B**

Mrs B was admitted to the SICU after emergent repair of a ruptured abdominal aortic aneurysm. She had a history of chronic obstructive pulmonary disease requiring home oxygen, congestive heart failure, and hypertension.

The clinical course following abdominal aortic aneurysm repair included multiple complications. She required cardioversion for atrial fibrillation with a rapid rate and a continuous Amiodarone infusion. Serial chest x-rays showed development of pneumonia, which cultured positive for oxacillin-resistant *Staphylococcus aureus*. On postoperative day 8 she required pressure control inverse ratio ventilation to effectively oxygenate after an episode of ventricular fibrillation that converted to atrial fibrillation with an acute drop in her oxygen saturation. She was evaluated and treated at that time with heparin for a pulmonary embolism. This prompted a call to the family that night by the resident to notify them of the events. They were told Mrs B had “taken a turn for the worse” and that “some decisions would have to be made.”

Mrs B was active despite the home oxygen and enjoyed going out and having “lunch with the ladies.” Her daughter, Pam, was her Durable Power of Attorney. Mrs B also had executed a living will that stated: “if the therapy will have no reasonable benefit to return me to the quality of life I am accustomed, then I do not want it.” She had held discussions with her daughter and son regarding her wishes if she were ever on a ventilator for a prolonged period of time. In fact, months earlier, she had required intubation and mechanical ventilation for 4 days (pneumonia) and she told her daughter that that was “too long.”

Pam and her brother, Tom, talked about what their mother would have wanted. According to their mother’s standards, she was already on the ventilator too long. Pam and Tom were prepared to consent to remove her from the ventilator if the physicians felt that they had “done everything.”

**Comment.** The story thus far presents two views of Mrs B. The first paragraph describes the technical order; ie, the medical diagnosis, the tests, the treatments, and the patient’s physiologic response. Conversely, the following two paragraphs describe Mrs B in the moral order; ie, her life, her relationships, and her discussions with her daughter regarding how she wanted to live her life. During medical rounds, the technical order is presented, as in the first paragraph. When the critical care nurse gives a report, included are not only technical details, but the psychosocial aspects of the patient’s life, as described in the last two paragraphs.

Mrs B’s course became more complicated. In the first of a series of family conferences, the intensivist told the family that, yes, she had an acute event during the night that might have been a pulmonary embolism, but she had since stabilized. Her family questioned her deteriorating mental status. The intensivist noted that it was 48 hours since discontinuing all sedative drugs and she was responding with only a slight grimace to deep pain. Her renal status had improved, with her creatinine down to 1.3, after a high of 2.1 postoperatively.

The intensivist felt it was “too early” to consider withdrawal of treatment. Even though she had oxacillin-resistant *S aureus* pneumonia on top of chronic pulmonary disease, her creatinine had come back to normal range and was encouraging. The family responded that they had discussed the information about her condition with her family doctor “back home” and he had said, “she doesn’t stand a chance.” A close friend of Mrs B’s, who was also a physician, had stated “Oh, your mother would never have wanted any of this.” It bothered Pam and Tom each passing day that their mother was on the ventilator without signs of progress. The intensivist told her family that her oxacillin-resistant *S aureus* pneumonia was being treated. He recommended a tracheostomy to facilitate weaning. Pam stated that she did not think
her mother would want the tracheostomy. The intensiv-ist said “Fine, but we should wait a few more days to see how she does.”

The family wanted to then speak with the surgeon, but he was out of town. The surgery fellow happened to be available on the unit and was happy to speak with the family. He explained how he thought she was doing and even gave percentages: “20% chance of making it out of this unit given her age and rupture.” They told him their mother did not want to be on the ventilator for weeks and she really would not want a tracheostomy. He agreed that waiting a few days would be a good idea. Pam and Tom, on the other hand, were ready to make a decision that day.

After the meeting, Pam, Tom, and Pam’s adult daughter Katie sat and talked. A few minutes later, Pam came looking for the critical care nurses to speak with them again. They were all in tears. They requested another family conference for Friday (the following day) at 2:00 PM. They did not want to wait a “couple of days,” 24 hours was long enough. “We don’t want this to go on any longer than tomorrow. She would not want that.” Tom and Pam said the only reason they were waiting until tomorrow is so they could grieve. They requested a Catholic priest in order to administer the Sacrament of the Sick to their mother.

Comment. The story further illustrates the drama of the SICU and the embodied conflict among the actors situated at opposite poles within the moral and technical orders. On the one hand, the patient’s family (son, daughter, her daughter) present the wishes of the patient as these have been discussed prior to the rupture, namely a restricted range of treatments. On the other hand, the physicians were thinking that the patient’s medical problems could be reversible, and hence they should not abandon treatment (and hope) until proven otherwise. Almost stereotypically, the family is viewing the crisis from within the moral order, while the physicians are oriented toward the technical. The family and the physicians do not share a common basis for decision. And, the patient being in “the territory” of the intensivist, and within his care and subject to his orders, the family find themselves especially frustrated. The frustration is intensified when relevant physicians (notably, the surgical attending) are not available for discussion. The one person who might mediate between the two positions is the critical care nurse, who empathizes with the adult chil-

dren, while being keenly aware of the motivations of the intensivists and other physicians.

The nurse summed up the perplexities:

“What will we do? She has told her daughter she didn’t want to be on the ‘vent’ for a prolonged period of time and the docs think she’ll eventually get off. She’s still on 100% (fraction of inspired oxygen) after that episode last night. Her secretions are awful! . . .and I haven’t seen her respond for the last three days; maybe a grimace to deep pain.”

The story has a further and not untypical development.

Family disagreements
The following day, the story became more complicated by the appearance of another son, “Andy,” of whom neither Pam nor Tom had spoken. Andy was here to see Mrs B at approximately 12:00. He told the nurse, “My brother and sister are trying to kill her; please don’t let them. I’m trying to block this. My son is a senior law school student and we’re going to court to block Pam’s decision-making capability. She’s not smart enough to make such decisions. The whole town thinks they’re trying to kill her.”

At that point, Andy was referred to one of the physicians who gave him an update on his mother’s condition. Tom and Pam happened to request to visit shortly after this and saw Andy in the room. They asked to speak to the nurse in order to request that Andy be removed from Mrs B’s bedside. Tom said to the nurse: “Neither my mother nor my father would ever approve of Andy being here. He’s been out of the picture for 25 years and he decides to come by now. He’s from a religious community that thinks everyone can be saved. Well, he doesn’t know my mother’s wishes.” Further complicating matters, Tom and Pam would not visit their mother until Andy left. The nurse felt “caught in the middle,” while the intensivist remarked, “I wasn’t sure what we were going to do.”

Another family conference was held the following afternoon. The intensivist asked the family to give their mother “a few more days” and even offered to remove himself from the case if the family disagreed. Pam and Tom agreed to wait “a few more days.”

The nurse spoke with the residents on Monday concerning any weekend events. The “crazy” brother (as Tom deemed him) was in again on Sunday and wanted
to be sure that they were not “pulling the plug,” and reiterated to the residents that he was trying to get a court order to block the decision-making capability of Pam. This matter was discussed on rounds and all agreed that this son could not block the Durable Power of Attorney. The team notified hospital Risk Management of the situation.

The estranged son, Andy, has not been connected with the family for 25 years. He does not know the wishes expressed by his mother, nor does he wish to know, yet he feels that has the right to determine her treatment. One surmises a feeling of guilt in his demanding “full support” for his mother, while refusing to recognize that she has already died spiritually and mentally. He is thus unable to integrate the technical information with human needs, values, and desires, which emerge only with a more intimate level of interpersonal relationships, as is manifest in the vigilance and care of Pam, Tom, and Katie.

At this time, Mrs B’s condition had not improved. Although she was “off sedation” for 6 days, she exhibited no response to deep pain. Her creatinine was starting to rise again, and now she had another “difficult to treat” organism in her lungs for which she would need additional antibiotics. She was not coming off the ventilator any time soon.

At the family conference Monday afternoon, a new SICU attending physician was present, and the situation was again discussed with the family. Pam and Tom showed him the Living Will and Durable Power of Attorney. Pam stated, “My mother did not want to be on the ventilator any more than a few days. It says there that ‘if the therapy will have no reasonable benefit to return me to the quality of life I am accustomed, then I do not want it.’” Pam stated that she has been on the vent much longer than she had ever given approval for, and each doctor was, each day, asking for “a few more days.” The intensivist insisted that he could not guarantee she would get off the vent any time soon, but that she stands a reasonable chance of getting off “somewhere down the line.” Pam stated her mother would never have wanted that. Her mother’s friends verified this in Pam and Tom’s discussions with them. It sounded as if they had talked about this a great deal. The intensivist then stated, “Well, if those are her wishes, then we are ‘there!’” But then he suggested the group speak with the Attending Surgeon before care was withdrawn. The family agreed, but felt peace of mind when the intensivist agreed “we were there.”

The family waited until that evening for the discussion with the surgeon. In fact, the family did not want to wait any longer. The intensivist called the surgeon, who stated on the phone, “If they want to kill her, that’s fine.” The intensivist, along with the nurse, then spoke with Pam and Tom regarding the timeline and sequence of events in the withdrawal of care plan. At that time, Pam and Tom called their “crazy” brother to let him know they were removing her from the ventilator.

The contrast is vivid. At one extreme is the vascular surgeon, who having repaired Mrs B’s aneurysm, now saw his patient “being killed.” The other physicians tend to agree but are not as forceful in their statements. At the other extreme are the family cluster of Pam, Tom, and Pam’s daughter, who regard themselves as faithfully carrying out Mrs B’s expressed wishes. Also, from their viewpoint as pious Catholics, her death is a transfer to a different status where they will continue to venerate and address her. Between these two parties are the critical care nurses, who well understand both positions.

The therapies being directed at Mrs B were fairly routine for an SICU, and the physicians were not able to state that her situation was terminal. Generally, deeming a case “terminal” will spark a discussion with the physician and family regarding withdrawal of life support. Mrs B merely stated her desires to not receive ventilatory support for more than 4 days. How does it happen that it becomes so difficult for the medical professionals to accept this?

By entering the hospital, Mrs B was placing herself under the authority of its physicians. She was choosing to be “saved” (or her children were choosing to save her) by seeking care for her abdominal pain, which turned out to be a ruptured aneurysm. The vascular surgeon performed his heroics in life-saving surgery. He is willing to stand by Mrs B for the “long haul.” He was disappointed when her wishes were known and projects the statement, “If they want to kill her, go ahead.”

But the critical care nurse saw the perspective of the patient. “Why wouldn’t we comply with her wishes? She talked about it a lot with her son, daughter, and her friends. She would probably never be able to ‘have lunch with the ladies’ again, which was her idea of quality of life. She could have chosen not to come to the hospital for her abdominal pain and died at home.” The nurse
brings the humanistic perspective to caring for patients and families in the critical care environment.

Lessons from the case history

The Pygmies express various degrees of illness by saying that someone is hot, with fever, ill, dead, completely or absolutely dead, and, finally, dead forever. Although the events in the illustrative case will be familiar to most critical care personnel, the tensions underlying the events are useful to analyze and interpret.

In some cases, SICU patients follow an unambiguous trajectory culminating in life or in death. More often, the outcome remains uncertain. Also, even when physicians feel that they have arrived at a judgment that death is nigh, they might still temporize because outcomes are problematic. Of patients apparently terminal, perhaps some few among tens of thousands will miraculously recover. Whether or not to wait out the remaining patients, or for how long to sustain the total aggregate of the metaphoric thousands, is a question that can be perplexing, given the discomfort of the patients in question; the anguish of families; the rival claims upon limited resources; and the fact that the act of discontinuing care is frequently regarded as a statement of medical failure. In this case, an attending physician skillfully temporizes, and by so doing pressures the family to violate the family’s covenant with the patient. From the perspective of physicians, the choice to temporize cannot be faulted, for perhaps the patient might survive—although in what state or what quality of life is not expressly discussed. Nevertheless, the family could forcibly declare that their covenant with the patient must be honored, except that they are in the precincts of technology, and thus feeling subordinated to the judgment and authority of its experts. But yielding to that authority means that the family—and in particular the individual who bears medical power of attorney—is violating the covenant with a person to whom each is deeply attached.

Beyond the uncertainty of survival, equally uncertain and disturbing are the possible vital outcomes of the person and the body. The body might still function, but the social person ceases to exist forever; nursing homes have their complement of such beings. In some instances, the social person might be somewhat functional yet inhabiting a body that functions so poorly that it is a source of continual distress. It has always been the case that for a few persons there was some temporal uncertainty about the arrival of death. In 19th century EuroAmerica, there was a popular hysteria about being “buried alive,” which possibly fueled the more sensationalist writings of Edgar Allan Poe. The Pygmies of the Ituri Forest, when studied in mid-20th century by Colin Turnbull, spoke as noted above.

Within the technical order, death is an absolute nothingness. Living is conditional on the body, and if the body is gone, so too is the person. Within the moral order, death is a translation of state rather than an absolute terminus: the deceased will remain present in the hearts and minds of others, particularly those with whom he or she was intimately interconnected. This might be true to such an extent that the family will remark that they do not want to see the patient in a state of such misery or psychic incompetence. In many societies, the deceased is present as an “ancestral spirit” continuing to affect the daily lives of its offspring and relations. The judgment of the attending physician that physiological death constitutes a personal and medical failure might be rhetorically translated by a family member so as to brand the discontinuing of aggressive care as “killing” or “murdering” the patient. By that verbal tactic, that family member is removing the patient from the moral order and situating her within the technical order. This rhetorical tactic comes naturally to a son who has been alienated from his mother. Possibly this technological orientation is in consonance with the discomfort, even guilt, that might characterize the alienation. One might also note the likelihood that a prolonged detachment between persons formerly intimate (as mother and son) might conduct to a “frozen image” in which the real person—with real body, real feelings, real anguish—is displaced by imprinted memories. In the illustrative case in question, the remainder of the family views the patient as a social person who has voiced her decisions about potential care. In short, the role of the physician is akin to that of a chemical catalyst. If he (or she) accepts the extreme likelihood that the patient is terminal, this gives permission to the family to accept her stated wishes not to be subjected to aggressive treatment beyond a certain point. Consequently, when the physician evades that frank judgment, then the family is at the mercy of contrary sentiments: whether or not to honor the expressed and written desires of the patient (and her trusted relatives), that she not be subjected to further discomfort (and possibly propelled into an undesirable quality of life).
The foregoing configuration is recognized to occur within SICUs. The change of death from a moral to a technical order has been critically observed by some nurses and some intensivists, although these perceptive persons might find it difficult to intervene directly. Because it has been so perceived, reformers have hoped to institute changes, the most notable recent reformative proposal being the SUPPORT program, which proved ineffective.

The case presented in this article illustrates the tensions and dissatisfactions surrounding spiraling demise following major surgery. While the details vary from one case to the next, several features can be extracted that suggest different approaches. First, patients and their families need to be presented with realistic descriptions of options and estimates of outcomes, including the palliative care option. Accurate descriptions of risk, quality of life, and longevity are an ethical responsibility, and should reflect the unique circumstances of each patient as far as possible. Second, patients and families should be widely encouraged to complete advance directives that state, as explicitly as possible, descriptions of the care they wish to receive. Since many health-care personnel (including surgeons and intensivists) are uncomfortable with the legal jargon that frames ordinary advance directives, they might recommend that patients at risk for a poor outcome consider completing a "5 Wishes" document (http://www.agingwithdignity.org/5wishes.html) that includes the components of advance directives in a user-friendly format that acknowledges death as part of life’s cycle. Third, both surgeons and intensivists must respect the authority of the agent (attorney) appointed to make health-care decisions for the patient. The evasion illustrated in this case is, unfortunately, common as doctors try to reconcile personal beliefs about what is "right" for the patient with the directions of the agent. Duly empowered attorneys for health care have both the right and the responsibility for decisions when the patient cannot make decisions for themselves. Failure to respect those decisions is at best unethical. Fourth, the critical care nurse should be allowed considerable freedom to revisit the goals of care with the patient/agent, family, and doctors as required by the changing status of the patient. Such reviews of what is possible, what is probable, and what is desired maintain the difficult but essential balance between the moral and the technical order in the surgical ICU when doctors, family, and the patient together must confront spiraling decline despite intense care.

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