

Montclair State University

## Montclair State University Digital Commons

---

Department of Sociology Faculty Scholarship  
and Creative Works

Department of Sociology

---

Fall 9-23-2009

### Death comes alive; technology and the re-conception of death

Karen Cerulo

*Rutgers University - New Brunswick/Piscataway*, cerulo@rci.rutgers.edu

Janet M. Ruane

*Montclair State University*, ruanej@montclair.edu

Follow this and additional works at: <https://digitalcommons.montclair.edu/sociology-facpubs>



Part of the [Demography, Population, and Ecology Commons](#), [Educational Sociology Commons](#), [Folklore Commons](#), [Health Information Technology Commons](#), [History of Science, Technology, and Medicine Commons](#), [Mental and Social Health Commons](#), [Other Anthropology Commons](#), [Other Social and Behavioral Sciences Commons](#), [Science and Technology Studies Commons](#), [Social and Cultural Anthropology Commons](#), [Sociology of Religion Commons](#), [Theory, Knowledge and Science Commons](#), and the [Transpersonal Psychology Commons](#)

---

#### MSU Digital Commons Citation

Cerulo, Karen and Ruane, Janet M., "Death comes alive; technology and the re-conception of death" (2009). *Department of Sociology Faculty Scholarship and Creative Works*. 6.  
<https://digitalcommons.montclair.edu/sociology-facpubs/6>

This Article is brought to you for free and open access by the Department of Sociology at Montclair State University Digital Commons. It has been accepted for inclusion in Department of Sociology Faculty Scholarship and Creative Works by an authorized administrator of Montclair State University Digital Commons. For more information, please contact [digitalcommons@montclair.edu](mailto:digitalcommons@montclair.edu).

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/233478725>

# Death Comes Alive: Technology and the Reconceptation of Death

Article in *Science as Culture* · January 1997

DOI: 10.1080/09505439709526477

---

CITATIONS

17

---

READS

67

2 authors:



**Karen Cerulo**

Rutgers, The State University of New Jersey

64 PUBLICATIONS 2,050 CITATIONS

SEE PROFILE



**Jan Ruane**

Montclair State University

8 PUBLICATIONS 165 CITATIONS

SEE PROFILE

## DEATH COMES ALIVE; TECHNOLOGY AND THE RE-CONCEPTION OF DEATH

KAREN A. CERULO AND JANET M. RUANE

**B**rowse through your local bookstore, or glance at a nearby movie marquee. Skim the pages of your nightly newspaper or the listings in your television guide. American culture's current focus poses a surprise. The popular eye is centered on a topic more taboo than the steamiest sexual encounter, more solemn than the deepest economic depression, and more universal than the common cold. The current decade reveals a remarkable upsurge in our collective attention toward death. Indeed in the 1990s, Americans have become nearly obsessed with a world that lurks beyond life as we know it.

One need not look far to substantiate death's newfound popularity. *Ghost*, a silver screen tale of love beyond the grave, ranked as the third highest grossing movie of 1990, the top rented video of 1991, and the tenth best selling video of 1993. During the 1990s, other titles, too, transported our attentions to the great beyond: *A Guy Named Joe*; *Always*, *Brain Dead*; *Chances Are*; *Defending Your Life*; *Death Becomes Her*, *Dead Again*, *Dying Young*, *Eternity*, *Field of Dreams*; *Flatliners*, *Ghosts Can Do It Too*; *Ghost Dad*; *Little Buddha*; *My Life*; *Passed Away*; *Switch*; *Truly, Madly, Deeply*; and *White Light* represent just a few (Motion Picture Guide 1990-1994; Universal Almanac 1993, pp. 223-224; 245-246).<sup>1</sup> The 1991 multi-platinum Grammy winner for 'best song' displayed an 'unforgettable' quality—singer Natalie Cole was among the living while her singing partner and father, Nat, was

not. Similarly, the 1992 Grammy winner kept death in our midst as Eric Clapton sang to his deceased son in 'Tears in Heaven'. And a 1995 BBC documentary united the Beatles across the grave as Paul, George, and Ringo 'perform' with the prerecorded voice of John Lennon.

On the print scene, Derek Humphrey's suicide manual, *Final Exit*, made 1991's top ten list of bestsellers. In 1993, Betty J. Eadie's stories of encounters with death, *Embraced By the Light*, garnished similar honors (World Almanac, 1994, p. 303; 1993, 297).<sup>2</sup> Doctors of death have become regulars to our newspapers; during the 1990s, the *New York Times* alone printed over 200 stories devoted to Dr. Jack Kevorkian, while TV news shows aired over 125 such stories. (*The New York Times Index*, vols. 78-84; *The TV News Index*, 1990-1994) Our favorite television icons, including *Roseanne*, *Murphy Brown*, and the gang on *Friends* have placed death at the center of more than one weekly episode. Public television filmed the deaths of 'real life' terminal patients and invited us to watch and discuss.<sup>3</sup> And during the 1990s, Americans witnessed footage of corpse disposal and cremation on news magazines like *Dateline* and watched Somalian children die before the eyes of network news cameras:

To be sure, American culture and death have met before. Yet, these encounters were much less frequent and of a vastly different quality. Roger Rosenblatt characterizes the change:

... today, the element of fantasy is played down and we are meant to really believe that something like *Ghost* could really happen. The closeness to death is made tantalizing, the passage from life to death, a stroll in the park. (*MacNeil/Lehrer News-hour*: Nov. 12, 1991)<sup>4</sup>

Assuming Rosenblatt is right, we are left to ask why death has suddenly come alive. Why now, and why in this way?

Some suggest that the answer lies in the increased prevalence of AIDS. An epidemic that claims so many lives may also function to keep death at the forefront of social attention (see e.g., Walter

www.TheBones.com

Let me tell you what my philosophy of life is: Don't believe everything they tell you. I use salt. I smoke 15 cigars a day. I have three or four martinis a day. If I don't like the food, I send for ketchup. George Burns 3/9/96

Howdy! Saint Peter. I'm just so Proud to be here! Cousin Minnie Pearl 3/1/96

Beat everybody living on earth...now Saint Peter, rack 'em up. Minnesota Fats 1/18/96

More Whiskey!...More Women!...get lost doc!...with friends like The Bones, who needs a liver anyway? Mickey Mantle 8/13/95

HOWWWLL!...this is the biggest hit on the net! Wolfman Jack 7/1/95

No Fear!...page down! for the coolest comic strip on the WWW!



Start audio intro to The Bones. If you have RealAudio listen to this as you page down (click start)

The Bones takes full advantage of Netscape and RealAudio software. If you feel like a tooner because you need to download this software (click here)

The Bones displays best when your text is set at size 12. There are two versions of comic strips plus some other neat comedy features so page down. ... It's cheap, it's chat, it's chic, and it's cheesy!

The Bones top ten epitaphs offers a twisted version of the lamest trend in comedy - top ten lists...if you want to feel like an over paid writer for a variety show this chat script of the latest epitaph entries is for you!

The Bones graveyard offers a twisted version of the lamest trend on the internet - lists...if you want to look over an eclectic selection of web surfers, has beans (dead and alive), and ideas...check out the graveyard register for a neat list of tombstones with links to homepages and e-mail boxes!

The Fast(click here) comic strip version operates like the old elementary school slide shows (with audio), this version is for users with 28.8+ modems or high speed connections like ISDN, T-1, etc. \*Caution\* this version will make your computer turn flips right in front of you, honest...not recommended for children, pregnant women, people with heart problems, on medication or under 48 inches tall...

The Slow(click here) comic strip version is for people using modems purchased prior to the Summer of 1995 (14.4, 9600, 2400, etc.) have a slow connections, or for those who are just afraid of Free Falling in cyberspace.

choose a tombstone in order to be an official member of The Bones you must get your very own customized tombstone with your own epitaph, The Bones t-shirt, etc.

Death Comes Alive on the Internet.

1995). Others suggest that our newfound interest in death stems from a need to control our own destinies. In the face of modernization, control of the body in particular may offer a key to the maintenance of self-identity (see e.g., Callahan 1993, p. 67; Giddens, 1991, p. 162; Shilling, 1993, chap. 8)

In this essay, we propose an alternative to such theories, arguing that culture's current focus on death is tied to the current technological environment. Indeed, we argue that recent technological advancements have blurred the boundaries between life and death, allowing concerns with death to freely enter the realm of the living. Technology has facilitated this effect in two ways. At a structural level, technology has created a new arena of social action, a place we refer to as *technological lifespac*e. Technological lifespac e encompasses a form of existence that approximates neither life nor death as we currently define them. Rather, technological lifespac e represents a bridge between life and death states. As such, it becomes a safety zone—a new vantage point from which to examine the mysterious state of death. At the level of process, technology provides us with a new form of interaction—what we refer to as *techno-synchronicity*. Via this process, technology seemingly transports the dead to the empirical realm of the living. By allowing a pseudomerge between the living and those traditionally thought to be permanently out of reach, we argue that technology reconstructs death as a 'place to visit' rather than a final destination.

#### ■ TECHNOLOGICAL LIFE-SPACE:

Until the 1960s, Americans viewed life and death as two distinct and bipolar categories. Distinguishing between life and death, whether from a medical, legal, and even a philosophical standpoint, was not a problematic event. Indeed until this period, the termination of human life was defined on the basis of technologically unaided criteria: absence of pulse and heartbeat, absence of breathing, absence of reflexes, dilated pupils and glassy cornea, and patchy skin pallor (*Black's Law Dictionary*, 1968, p. 488; Gervais, 1986, pp. 1–17, 45–74; Walton 1979, pp. 6–7; chap. 2).

Rapid advances in medical technology brought the stability of life-and-death classifications into question. For example, resuscitation technology problematized the pronunciation of death, forcing added considerations for the irreversibility of heart, respiratory, and reflex patterns (Harvard Medical School, 1968; Hillman, 1972, p. 88; Veatch, 1988, pp 38–39). Later, technology afforded the ability to track finer and finer gradations of life, thus specifying various levels of death. One viewpoint, for example, argued for distinctions between 'clinical death'—a state bespeaking the cessation of organ function—and 'biological death'—a designation resulting from the degeneration of cells and tissue (Winter, 1969, p. 20). Others promoted the notion of 'brain death', a condition indicated by irreparable neural damage resulting in the loss of functions such as perception, mentation, and motor response. Brain death is generally indicated by a 'flat' electroencephalogram (Harvard Medical School, 1968). Other criteria include cerebral oxygen consumption, or levels of cerebral blood circulation, tested via a technique called angiography (Winter, 1969, pp 12–13; Walker, 1974). In addition, some have argued for distinctions between total loss and partial loss of brain function with regard to the brain death classification (Black, 1977; Haring, 1973, pp. 131–136; Veatch, 1975).

In addition to challenging the classifications of death, post-1960s technology made it possible for individuals to postpone death's onset. The past 30 years have brought new pharmaceutical responses to death—drugs possessing the ability to prolong life, even for short periods of time, as well as advances in organ transplant procedures. Via such innovations, technology carries patients to the arena of 'borrowed time', that special condition under which life had never been known to exist before (Gorovitz, 1991). Recent examples include AZT in the case of AIDS, various chemotherapies and radiation responses to certain cancers, the increased incidence of liver, heart, and lung transplants, or the widespread use of dialysis.

By the 1980s, the SR technological strides effectively relocated or blurred the boundary between life and death. They forced us to think of death in terms of stages or degrees rather than as an

absolute category. So, for example, the AZT patient is alive, but within the confines of a narrowed spectrum: his/her life span faces strict temporal limits; his/her quality of life is impaired. In another arena, the Amyotrophic Lateral Sclerosis (ALS) patient demonstrates impressive mental capacity but little or no control over bodily functions. Similarly, certain patients on 'life-support' breathe, circulate blood, and demonstrate brain activity, yet they remain unconscious to external stimuli. And an extreme case presents the 'brain dead' patient, one with aided heart beat and respiratory capacity, but no meaningful mental capacity. None of these examples depict absolute death. Rather, they represent increasing degrees of death; each category of patient can be ranked as more or less dead than another.

If we view life and death along a continuum, with various points on that continuum representing more or less death, it becomes clear that technology has dissolved the critical marker of death, indicating a challenge to traditionally held beliefs regarding the point at which life ceases to exist. This challenge has resulted in a new arena of social action—a new transitional category which bridges the harsh shift between absolute life and absolute death. We refer to this new arena as technological lifespace, which can encompass various levels of existence. It can encompass inevitable death or partial death; it can bespeak conditions of impending death or impending recovery; it can be inhabited by the conscious, semi-conscious, or the unconscious. But what is clear about technological lifespace is that the social encounters it promotes focus on neither life nor death. Rather, the states common to technological lifespace—brain death, pharmaceutically sustained life, life-support—occupy an intermediate position in our two-level scheme of life and death.

#### ■ THE CULTURE OF TECHNOLOGICAL LIFESPACE

Technological lifespace has spun its own cultural structure. The location is marked, for example, by unique rules of exchange—rules of obligation different from those honored in the world of the living or the world of the dead.

Consider the role of caretakers. Technology has greatly increased the complexity of caretaking services. According to Benoleil:

The specialized skills required of nurses have been expanded under the influence of science, technology, and changing social conditions. . . . And in a very real sense, the increased use of medical technology in patient care fosters a depersonalization of experience for the deliverer as well as the recipient of that care. (1977, pp. 124–125)

Consequently, the rules of exchange between caretakers and patients differ significantly as one moves from traditional to technological lifespace. Hospital caretakers in the latter location exhibit greater detachment toward their patients, higher levels of sheer activity, or a more frequent use of humor than caretakers tending to traditional patients. High levels of vigilance accompanied by low levels of contact represent the norm of technological lifespace care (Gorovitz, 1991, chap. 7; Kastenbaum & Aisenberg, 1972; Moller, 1995; Swanson & Swanson, 1977, pp. 174–177).

The rules of family exchange also differ when comparing traditional and technological lifespace. Research reveals, for example, that social visits from family members are less frequent and shorter in length when a patient inhabits technological lifespace as opposed to traditional lifespace (Bauman, 1992, p. 130; Elias, 1985; Kalish, 1977, p. 230; Kayser-Jones, 1981). Similarly, levels of deception that would be viewed as unacceptable between patient and relative in traditional lifespace are often sanctioned in technological lifespace. Withholding of prognostic information from the patient is often justified by the patient's family members as a form of protection or a means of retaining the patient's hope or morale.

The culture of technological lifespace has also stimulated new regulations of exchange. Witness the living will. Different from the postmortem will in its guidelines, the living will governs movement from dying to absolute death. As such, it establishes new norms of interaction acceptable only in technological lifespace. For example, the living will authorizes spouses, parents,

siblings, and medical professionals—individuals whose roles typically carry expectations of sustaining our lives—to take the steps necessary to insure our deaths. In a similar reversal of interaction patterns, the living will removes post-death authority from the traditionally mandated hands of family and friends, placing the jurisdiction for funeral, burial, and the like in the hands of the patient.

While technological lifespace exhibits an accompanying culture, the formation of that culture is far from complete. In this way, technological lifespace represents what Berger (1990, p. 23) referred to as a marginal situation—an environment that finds both meaning systems and normal operating procedures 'under construction'. Such gaps in the new site's cultural system help to explain the frequent confusion displayed by those interacting in technological lifespace. Consider the following example:

At 5:41 AM on Sunday November 10, 1985, Philadelphia Flyer's hockey star, Pelle Lindbergh, slammed his 1985 Porsche into a cement wall at a Somerdale, New Jersey elementary school. The headline on the story in the newspaper the next day read 'Flyers' Goalie is Declared Brain Dead'. In spite of the claim that he was 'brain dead', the story went on to say that Lindbergh was listed in 'critical condition' in the intensive care unit of John F. Kennedy Hospital in Stratford, NJ. (Veatch, 1988, p. 29, emphasis added).

The Lindbergh case is not unique. Indeed, the nightly news carries numerous reports of cases in which inhabitants of technological lifespace are 'mistakenly' categorized among the dead by the emergency service workers who first encounter them. Such cases suggest that faced with gaps in the meaning system, inhabitants of technological lifespace are forced to frame experience via the language of more traditional interaction sites—those of absolute life and death. Clearly, such terminology fails to capture the experienced reality at hand. But until the cultural structure of the new social arena is complete, participants in technological

lifespace will be compelled to revert to familiar or established categories.

### ■ TECHNOLOGICAL LIFESPACE: FOCUS ON DEATH

The links between the emergence of technological lifespace and increased interest in death are not difficult to see. At one level, technological lifespace encourages an increased interest in death because it provides a secure arena from which to make the inquiry. In a sense, technological lifespace can be considered a 'user-friendly' environment. It affords a sense of control to the living (Benoiel, 1988, p. 176). Relatives and friends of a dying patient often report that the experience of life support serves to soften the blow of death. Life support provides individuals with a warm, supple body, one with which they can talk and touch even though the personality inhabiting that body may be unable to respond to them via conventional techniques of communication. To be sure, extended life support experiences can spell agony for a patient's loved ones. Yet, during the initial stages of the life support experience, friends and family who experience the phenomenon testify to its bridging capabilities. In discussing reactions of family members, for instance, Kübler-Ross writes:

it is more meaningful for the patient and family to see the (extremes of) illness and allow for a gradual adjustment and change toward the kind of home it is going to be when the patient is no longer around. (1969, p. 159)

Experiences of the first author confirmed this sentiment. She recalls her own father's time on life support, a time in which he was in a coma and utterly unresponsive. Yet, the warm breathing body with which *she* could talk, made her feel that ultimate death would not come until *she* allowed it, giving her some feeling of control over an otherwise uncontrollable phenomenon. Indeed, the language surrounding life support underscores the generalizability of these reports. We speak of keeping support machines in action until family members are prepared or ready to 'let the patient go'.<sup>5</sup>

Technological lifespace also offers security to the dying. For example, those enjoying life-extending pharmaceuticals report that these drugs provide a 'borrowed time', a space in which to plan for that which is usually unplanned. Assets can be purposefully distributed, funerals arranged, and good-byes orchestrated, so that the living may leave one world for the next with a sense of closure. Boston and Trezise report the words of one patient: '... making these simple decisions gives me a firm sense of directing parts of my own dying—for I may not have control over the rest' (1987, p. 80). In all of these ways, technological lifespace restructures the way in which we approach death at a cognitive level. It provides a transitional category, one that makes the barrier between life and death less overbearing, and hence, more tempting to approach.

The creation of technological lifespace tells only part of the story with regard to our collective obsession with death. For in addition to this new social stage comes a new mode of interaction—a technologically stimulated mode that makes it possible to bring the world of the dead into the space of the living. This new form of interaction—a phenomenon we refer to as techno-synchronicity—results from recent advances in communication technology. Such advances enable us to take 'scenes' once confined to the private world of an individual's stream of consciousness and relocate those scenes to the empirical world of shared, sensory experience. In the next section, we discuss the rise of techno-synchronicity and the special role the phenomenon plays in explaining heightened attention toward death.

### ■ TECHNO-SYNCHRONICITY: FUSING THE DEAD WITH THE LIVING

Traditionally, social scientists have defined human cognition as an internal, and thus, a private process. At the same time, each actor's stream of consciousness is held to be socially motivated. In referencing the social sources of cognition, the literature identifies a variety of stimuli believed capable of fusing or merging the private intuitions of two or more individuals. Schutz (1951, p. 96) referred

to this "fusion" phenomenon as synchronicity, 'a mutual tuning in relationships by which the "I" and the "Thou" are experienced by both participants as a "We" in vivid presence' (1951, p. 79). Via synchronicity, internal intuitions take on a collective character. A cognitive simultaneity is formed as actors' streams of consciousness are temporarily magnetized toward a single focal point. Via synchronicity, actors momentarily experience cognitive cohesion or a 'meeting of the minds', as they become attuned to a collectively experienced wavelength.

Symbols and rituals serve as vehicles of synchronicity. Cerulo's work illustrates the way in which national anthems, flags, or monuments can temporarily join citizens' individual cognitions under the rubric of their national identity Cerulo, (1989, 1993, 1995). Similarly, Zerubavel (1985, pp 64–65) discusses the value of schedules and calendars in this regard. By positioning individuals with reference to the same focal point, schedules and calendars create a form of mechanical solidarity based on temporal symmetry.<sup>6</sup> Mass media frequently are hailed as another vehicle of synchronicity. By drawing a population to a TV broadcast or riveting their eyes on a newspaper headline, individual streams of consciousness become focused on a single event.<sup>7</sup> The media's role in the O. J. Simpson trial offers a stark illustration of this phenomenon. Recall that on October 3, 1995, the day on which the Simpson verdict was announced, the mass media served as an invisible current that synchronized the attentions of the U.S. population as they awaited the jury's word.

We argue that recently developed communication technologies have broadened the scope of the synchronicity experience. Advances in computer capabilities now afford something more than a shared focus or a merging of the minds. Rather, new technologies make it possible to take an internal intuition and reproduce it in the empirical world of shared, sensory experience. Persons, objects, and events once confined to the life of a particular actor's mental 'eye' can now be projected to others in a way that surpasses mere description. Via a process we label techno-synchronicity, personal cognitions can be re-created in a publicly accessible space. Simi-

*Lights/Healing/Out Of Body/Reincarnation: Near Death Experience*

## Near-Death-Exp

### Near Death Experiences and Its Meaning To Spirituality

The biggest surprise for for most people in dying is to realize that dying does not end life. It's definitely a gift to look beyond the veil for a moment, and realize the opportunity of physical life, which many, also spiritual interested people, deny. About those people who came back ...



#### • Thoughts on Near-Death Experiences (Steve Tomljenovic)

#### • Personal Experiences:

- NDE ONE - My Story (Mark Jacoby)
- NDE - Some Experiences (Marc)
- NDE of RaNella Wallace (Lori Tostado)
- NDE of Children (Article excerpt)
- Divine Intoxication (Greg Burkart)
- ...

#### • A Review of Near-Death Experiences (div. Authors)

Diverse scientific perceptions

#### • NDE of Er (Excerpt of *The Republic*) (Plato)

A famous and classical passage of a NDE story.

#### • Near-Death Experience Text Collection (Scott Roberts)

Near-Death Experience (Diane Goble)

#### • Newsgroups:

- news:alt.consciousness.near-death-exp
- gateway:alt.consciousness.near-death-exp
- news:alt.life.afterlife
- gateway:alt.life.afterlife

news:gone.yes.your.local.internet.provider.gateways.gone.yes.spiritweb.newsgroups

Maybe to add, those who experienced NDE perceive the Life as great opportunity to grow, and even do not long to leave but try to give their life a greater meaning than before. Some people mean, that human has in care of life not of death or near-death-experiences or other "other side" things. That's right, but many people do not realize the importance of physical life and its preserve, then such experiences may give signals for those who experienced NDE, and you who are reading these experiences.



I add here some parts of *The Complete Ascension Manual* by Joshua David Kings (available in bookstores or from the author himself) for some further explanation of the death or bardo experience:

**The First Phase of the Bardo** -- In the first phase of the bardo just prior to the moment of death, the soul attention will see before himself or herself the dazzling, blinding, clear Light of God. The soul extension will see it regardless of its level of spiritual evolution. It is of the utmost importance in this moment to allow oneself to merge with this Light. To merge with this Light is to allow oneself to merge with God. The merging with this Light is very similar to that of ascension, at the sixth initiation, the only difference being that during ascension one merges with this Light while still in the physical body. During the bardo one merges without the physical body. Remember what I said earlier about the famous statement of Krishna in the *Bhagavad Gita*: where we go when we die is determined by the last thought in the mind before we die. We must let the last thought in our minds be only to merge with the Light, to merge with God. For some, this can be a death-bed salvation and liberation.

[...] The moment just prior to death is the ultimate moment of the soul extension's entire incarnation. Now here comes the problem. The problem is that most people in the world are not educated about the art and science of death and dying and do not know about the clear Light of God, hence they miss this momentous opportunity. Why do they miss this opportunity? For many reasons. The first is that they don't know they are supposed to merge with the Light, so they don't do it. The second reason is preconceived religious notions or fear of the Light. Third, many people, when they die, are too drugged by medical doctors. Other people are so materialistically identified that God is the furthest thing from their minds. Other people are too preoccupied with their families or matters of estate and other secular worries and concerns. They are probably infinite numbers of reasons, but the biggest one is lack of education about this most important science. [...] The merging with the Light can possibly mean liberation from the wheel of birth (reincarnation). [...]

**The Mechanics of Death** -- As the death process begins, a number of things take place, not necessarily in this exact order:

1. The removal of the life thread, or silver cord.
2. The removal of the consciousness thread.

Spirit Web is one of more than 200 Internet sites and discussion groups on death-related themes.



larly, elements of memory of future imagining can enter human experience as tangible empirical observations existing in the current, public domain. Via techno-synchronicity, 'data' formerly defined as unique to a single actor's cognitions now becomes the accessible property of a collective.

Several examples of techno-synchronicity help to clarify the mechanics of the process. Consider, for instance, some of the current research on dinosaurs. Extinct for centuries, dinosaurs have, to date, been a figment of the contemporary mind. No human of the current age can lay claim to their observation for the dinosaur's empirical existence is confined to another place and time. Yet, with the help of signifiers and remnants of these creatures (footprints or bone fragments found in various locations around the globe), dinosaurs have been technologically reconstructed, providing tangible models and images that claim to mirror the actual beasts! Such images, particularly those with a mechanical or computerized life, project a species of the past into the material world of the present. Via technology, entities previously visible only through the contemporary mind's eye take on the guise of a concrete and current observation. Further, research in the fields of biotechnology and genetics suggests that the actual reproduction of such extinct creatures is a feasible possibility. (Begley et al., 1993) Successful efforts on the part of biologists to clone tadpoles and mice contributes additional credence to technology's ability to recreate past life in the current world of shared sensory experience.

In yet another arena, techno-synchronicity allows crime-fighters to bring the dated images of kidnapped children or crime fugitives into contemporary interaction sites. By technologically altering the past appearance of these individuals—i.e., aging or developing their appearance, technology reconstructs images confined to the world of memory and refits them to current circumstance. Such technological processes make it possible to 'see' these individuals from the past as they should look today. In this way, technology resurrects an image lost to the past and synchronizes it with the present sphere of action.

Techno-synchronicity also can merge intuitions of the future with present experience. Via virtual reality technology, for example, we 'experience' an architect's ideas before her/his plans are actually executed. Using special apparatus, we can walk through a design for a new kitchen, a new office, or a new home and actually sense the location before it achieves a 'material' existence. In this way, the imaginings of the producer are made available to the consumer in a jointly accessible plane. Similarly, 'body beautifiers' from hairdressers to plastic surgeons have incorporated the fusion of future and present into the selling of their services. Via computer technology, such professionals have gained the ability to share their creative vision, showing their customers the product of their labors before the work is actually performed. As such, customers can evaluate a new haircut or facial tuck before actually contracting the work. For the first time, services can be procured on the knowledge of outcome.

In a more extreme example, technology provides the ability to synchronize one body's future with another body's present. The transplant of fetal tissue, for example, transports 'young' cells to an already aged body, where they will live out their existence within the confines of another body's time frame. Similarly, organ transplants seemingly allow the body of one individual to live on through another individual's system. Such present/future 'mergers' may seem surreal at first glance. Yet, the heated moral debate that surrounds such phenomena signals their growing reality. Consider, for example, the controversy surrounding Dr. Jack Kevorkian's plan to obtain organ donations from death row prisoners. Kevorkian's proposals have been met with passionate objections. Opponents of the plan, particularly some family members of the death row prisoners' victims, feel such donations would allow the killers to live on after their execution within the protection of another's body. As such, the plan's opponents vigorously seek legal prohibition of this particular organ transplant program.

All of these examples illustrate that techno-synchronicity is a process that moves beyond the cognitive simultaneity described in the works of Schultz and others. The phenomenon not only syn-

chronizes minds on a common point. Techno-synchronicity blurs the boundaries that distinguish private thought from shared experience, and it reconfigures the lines that separate past, present, and future. In so doing, techno-synchronicity expands the confines of what we call reality. The process refocuses the sociological eye as we embrace formerly inaccessible persons and sites as the substance of social interaction.

#### ■ FOCUS ON DEATH

The interaction capabilities afforded by techno-synchronicity are especially important to our consideration of death. Techno-synchronicity allows social actors to perceive interactions with actors or objects to which they have no direct, physical access. Thus, the process allows those who have 'passed on' to the world of private memory and imagination to seemingly reenter the material world of the living. As such, techno-synchronicity naturally heightens our interest in the world beyond. The phenomenon affords entry to a world previously defined as beyond reach—a place where the dead can seemingly come alive.

Techno-synchronicity brought such feelings of resurrection to the Cole duet, 'Unforgettable'. Because we experience the two voices as a tangible aspects of the present, we are left with a sense that both the deceased and the living soloists are actually reunited, if only for the duration of the song. Similarly, techno-synchronicity made it possible for us to watch as our contemporary Tom Hanks (as Forest Gump) spoke with and shook the hand of deceased President John F. Kennedy. (A similar process, as executed in Florida's MGM them park, allows any one of us to appear with our favorite TV legend, merging our present day performance with the past work of our deceased idol.) For those of us who view such video 'duets', the merging of dead and living is experienced as a present reality.<sup>8</sup>

The depictions we have just described, those that seemingly transport the dead from the mental to the material world, are becoming more and more common. As such, techno-synchronicity's ability to breathe life into the dead is becoming an increas-

ingly normative event. Consequently, we are not shocked by statements that equate technological re-creations of the dead with resurrections of the dead. In a recent tribute to Lucille Ball, for example, one commentator noted that 'somewhere, every day of the year, Lucy and Desi skirt the airways, living and reliving their zany lives'. Such characterizations simply underscore the ways in which devoted fans have come to imagine that the much beloved couple are really alive somewhere and can be visited regularly in an audiovisual location. Similarly, we are not insulted by insinuations that encounters with the dead can really occur. Indeed, recent ad campaigns, such as the one for Post Great Grains, trade on our acceptance of such an occurrence. In the Post commercial, a man from the nineteenth century emerges in a twentieth-century kitchen to discuss breakfast nutrition with the present-day occupant. While at one level we can surely concede that such an event—were it to really occur—would probably frighten most individuals immeasurably, at another level the Post approach also captures our newfound comfort with the potential reality of such an interaction.

The experience of techno-synchronicity in relation to death is not confined to Hollywood 'trickery'. 'Common' women and men frequently partake in this new form of interaction. More and more, individuals report the desire to videotape themselves so that their survivors can access them beyond their empirical life. Similarly, videotaped wills are becoming increasingly popular, allowing the deceased to 'share' the bereavement experience with their survivors. In these instances, technology makes it possible for individuals to seemingly step back from the grave.

Once it becomes normative to interact with those we cannot see and may not know, the boundaries of social space greatly widen. Interaction transcends the observable, the tangible, and perhaps, the here and now. Indeed, by merging past and future with the present, the dead can come alive. Via techno-synchronicity, the walls separating the living from the dead become permeable. As such, the criteria of existence shifts from an individual's empirical presence to an individual's cerebral reincarnation—i.e., the ability

to be materialized via another's thoughts. By giving the dead such a reality, technology strips the phenomenon of death of its finality, serving to heighten our curiosity and lessen our fear.

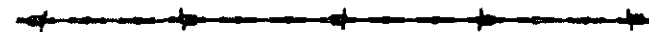
### ■ DEATH COMES ALIVE: DREAM OR NIGHTMARE?

Technology has brought us to death's door and opened that door wide. While the barrier between life and death still exists, technology has rendered it more translucent. As such, technology becomes an accomplice, of sorts, to death—one that takes much of the grimness out of the reaping. Such an approach to death may represent a replay of pre-modern attitudes. For in many ways, our recent fascination with death mirrors concerns of the primitives. Some primitive tribes, for example, beckoned the dead, as they were thought to be protectors of the living, and thus, vital to a tribe's sustenance. Others welcomed death as an entree to the supernatural world, a place providing increased power and information (see e.g., Montagu, 1971; Tyler, 1920). Consequently, just as McLuhan (1965) credited television with returning modern individuals to the sensate world of the primitives, so too has technology returned us to pre-modern visions of the connections between the living and the dead. Technology has brought us full circle.

The emergence of technological lifespace and techno-synchronicity increases our attentions not only toward death, but also toward the relationship between the body and the self.<sup>9</sup> Specifically, these two developments cast the integrity of and the relationship between the body and the self in a new light. As we have shown, in technological lifespan the self can expire while the body lives on. Similarly, via techno-synchronicity, the self can transcend the body. Consequently, rather than viewing the body as an entity controlling the self (e.g., Nietzsche 1968), or as a mere manipulative tool of the self or of others (e.g., Butler, 1993; 1990, Descartes, 1960; Foucault 1977; 1980; Giddens 1991), we are encouraged to view both body and self as symbiotic entities, each with compatible but independent power and purpose.<sup>10</sup>

These new conceptions of body and self, of life and death

## All Things Dark and Gruesome



Who among us can deny a fascination with death? It is, after all, the Ultimate Mystery that we all must face in The End. The knowledge of our own mortality invests our every instant with an added urgency - a necessary urgency. After all, if we were immortal most of us would doubtlessly watch T.V. and eat ice cream all day. The quality of life would definitely collapse and art would suffer greatly, for what is the ultimate driving force for art? The Quest for Immortality, of course! That desperate desire to create something that will leave a lasting legacy for your beautiful soul. The burning passion to prove that you weren't just metabolic processes and cellular structures: there was something beautiful and meaningful deep within you. That is what drives us to create... or not...

This room of the Asylum, however, does not look at the beautiful and romantic side of death. This is brutal reality. As you peek inside hesitantly, you are immediately overcome by the ever-present stench of decay. Blood stains the carpet. Various bodily tissues lie splattered on the windowless walls. Flies buzz about over the mutilated remains of the newly departed. A single dim bulb hangs from a cobweb covered cord in the center of the room, casting a grim, hollow light over the gruesome surroundings. You glance away, part of you wanting to run from this display of carnage, but another deep and primal part of you is filled with the adrenaline rush of curiosity.



Choke back the fear, push open the door, and illuminate the truth of your own mortality.

### **WARNING!**

Individuals of high sensitivity are advised to refrain from entering this room for their stomachs may heave, their eyes may be singed, and their hearts may break. And please - keep the children away. Don't burden their innocent minds with the Ultimate Truths. There is plenty of time yet for corruption.

[Return to the Land of the Living](#)

'Choke back the fear, open the door, and illuminate the truth of your own morality; invites this 'Shocking' Web Site.

represent drastic changes to an established cultural stance. By transporting our memories and fantasies to the living and breathing world, technology provides a temporary connection to people and places that previously seemed out of our reach. In this way, technology recasts the once terrifying arena of death and the unknown with an added sense of reassurance and familiarity. Indeed, the new cultural norms of technological lifespace and the interactions made possible by techno-synchronicity make each step toward the unknown conform to identifiable routines.

Thus, by succumbing to these new spaces and new modes of interaction, we find a haven of sorts. Technology builds a more comfortable, predictable setting around the experience of death and loss: It offers a new site and mode of interaction, where it suddenly becomes possible again to sing songs with our fathers long gone, speak with idols never met, and visit a place where 'Lucy and Ricky' can still be together.

#### ■ NOTES

- 1 Of course, this list does not begin to tap 'slasher' films and the like, a genre heavily focused on violent death.
- 2 Indeed, the current focus on death within the bestselling book market prompted columnist R. E. Neu (1994) to offer a tongue-in-cheek guide entitled, "What To Read Until The Undertaker Comes."
3. Seen on 'The Health Quarterly' produced in conjunction with *Frontline* and aired on WNET Tuesday, March 23, 1993.
- 4 Aired on WNET, show #4202.
- 5 In many ways, the rituals of which we speak create a sense of what Giddens refers to as 'ontological security' for both the dying and their friends and relatives. See Giddens (1984, p. 123; 1991, p. 47).
- 6 These works follow a tradition established by Durkheim (1915), and further exemplified by scholars such as Bergesen (1979), Schwartz (1987), Swanson (1960), and Wagner-Pacifi & Schwartz (1991).
- 7 This position is supported by a large literature; see e.g., Beniger (1987); Cerulo (1997); Cerulo, Ruane, & Chayko (1992), Horton & Wohl (1956); McLuhan (1965); Merton (1946); Meyrowitz (1989, 1994); Schlesinger (1993); Steuer (1993).
- 8 Unlike language, complete with tenses, and hence, temporal location, the projection of video images always conveys the present tense. As such, video recreations, despite the level of manipulation, project a sense of present

reality. (For similar points, see e.g., Berger & Luckmann 1966, pp 19–67; Giddens 1991, pp. 23–27; Levi-Strauss, 1968; McLuhan 1965.)

- 9 Indeed, the recent resurgence of scholarly research on the body coincides with the heightened popular focus on death.
- 10 Traditional models of communication provide a helpful metaphor in understanding these new body/self roles, e.g., understanding the self as a 'transmitter', and the body as a 'channel'. Such an approach encompasses the new life states explored in this paper. For like other mechanized channels, bodies can remain activated, even in lieu of transmissions from the sender, provided they are linked to an external energy source. The body on life support approximates the working television when it is not turned on; while it does not convey a message, it stands in ready to do so. Similarly, the body 'breaks down', yet the self continues to thrive—e.g., organ transplants. Under such conditions, the self retains its integrity by transmitting via a new channel. Yet, the manifestation of the self, while sustained, is necessarily different (Cerulo, 1994).

#### ■ BIBLIOGRAPHY

- Bauman, Z. (1992). *Mortality, Immortality, and Other Life Strategies*. Cambridge: Polity Press.
- Begley, S., Duignan-Cabrera, A., Rama, J. C., Foote, D., & Friday, C. (1993). 'Here come the DNAsaurs.' *Newsweek* (June 14): 56–61.
- Beniger, J. R. (1987). 'Personalization of mass media and the growth of pseudo community', *Communication Research*, 14(3):352–371.
- Benoliel, J. Q. (1977). 'Nurses and the human experience of dying', in H. Feifel, ed. *New Meanings of Death*. New York: McGraw Hill.
- (1988). 'Institutional dying: A convergence of cultural values, technology, and social organization', in H. Wass, F. M. Berardo, & R. A. Neimeyer, eds. *Dying: Facing the Facts*. New York: Hemisphere Publishing Co.
- Berger, P. (1990). *The Sacred Canopy: Elements of a Sociological Theory of Religion*. New York: Anchor.
- Berger, P. & Luckman, T. (1966). *The Social Construction of Reality*. New York: Anchor Books.
- Bergesen, A. (1979). 'Spirituals, blues, jazz, and folk music', in R. Wuthnow, ed. *The Religious Dimension*. New York: Academia Press.
- Black, P. M. (1977). 'Three definitions of death', *The Monist*, 60(1):136–146.
- Black's Law Dictionary* (1968). 4th edit, revised. St. Paul: West Publishing Co.
- Boston, S. & Trezise, R. (1987). *Merely Mortal: Coping With Dying, Death, and Bereavement*. London: Methuen.
- Butler, J. (1990). *Feminism and the Subversion of Identity*. New York: Routledge.
- (1993). *Bodies That Matter*. New York: Routledge.

- Callahan, D. (1993). 'Our fear of dying', *Newsweek* (October 4): 67.
- Cerulo, K. (1989). 'Sociopolitical control and the structure of national symbols', *Social Forces*, 68(1):76-99.
- (1992). 'Symbols and the world-system: National anthems and flags', *Sociological Forum*, 8(2):243-272.
- (1994). 'Out of "site," out of mind: The body as channel to place and self.' Unpublished manuscript.
- (1995). *Identity Designs: The Sights and Sound of a Nation*. Rose Monograph Series. New Brunswick, NJ: Rutgers University Press.
- (1997) 'Reframing sociological concepts for a brave new (virtual?) world', *Sociological Inquiry*, 67(1):48-58.
- Cerulo, K. A., Ruane, J. M., & Chayko, M. (1992). 'Technological ties that bind: Media-generated primary groups', *Communication Research*, 19(1):109-129.
- Descartes, R. (1960). *The Meditations Concerning First Philosophy*. L. J. LaFleur trans. Indianapolis: Bobbs-Merrill.
- Durkheim, E. (1915). *The Elementary Forms of Religious Life*. J. W. Swain, trans. New York: Free Press
- Elias, N. (1985). *The Loneliness of the Dying*. Oxford: Basil Blackwell.
- Foucault, M. (1977). *Discipline and Punish*. Harmondsworth: Penguin
- (1980). *The History of Sexuality*, vol. 1. New York: Penguin.
- Gervaise, K. G. (1986). *Redefining Death*. New Haven: Yale University Press.
- Giddens, A. (1984). *The Constitution of Society*. Cambridge: Polity Press.
- (1991). *Modernity and Self Identity*. Stanford: Stanford Univ. Press.
- Gorovitz, S. (1991). *Drawing the Line*. Philadelphia: Temple University Press.
- Haring, B. (1973). *Medical Ethics*. Notre Dame, IN.: Fides Press.
- Harvard Medical School (1968). 'A definition of irreversible coma: Report of the ad hoc committee of the Harvard medical school to examine the definition of brain death', *Journal of the American Medical Association*, 205:337-340.
- Hillman, H. (1972). 'Dying and Death', *Resuscitation*, 1:85-90.
- Hoffman, MS. (ed.) (1993). *The World Almanac and Book of Facts*. New York: Pharos.
- Horton, D. & Wohl, R. R. (1956). 'Mass communication and para-social interaction: Observations on intimacy at a distance', *Psychiatry*, 19:215-229.
- Kalish, R. A. (1977). 'Dying and preparing for death: A view of families.', in H. Feifel, ed. *New Meanings of Death*. New York: McGraw Hill.
- Kastenbaum, R. & Aisenberg, R. (1972). *The Psychology of Death*. New York: Springer Verlag.
- Kayser-Jones, J. S. (1981). *Old, Alone, and Neglected*. Berkeley: University of California Press.
- Kübler-Ross, E. (1969). *On Death and Dying*. New York: Macmillan.
- Levi-Strauss, C. (1968). *Structural Anthropology*. London: Allen Lane.

- Merton, R. K. (1946). *Mass Persuasion: The Social Psychology of the War Bond Drive*. New York: Harper.
- Meyrowitz, J. (1989). 'The generalized elsewhere', *Critical Studies In Mass Communication*, 6(3):326-334.
- (1994). 'The life and death of media friends: New genres of intimacy and mourning', in R. Cathcart S. Drucker, eds. *American Heroes in a Media Age*. London: Hampton Press.
- Moller, D. W. (1995). *On Death Without Dignity: The Human Impact of Technological Dying*. Amityville, NY: Baywood Publishing.
- Montagu, A. (1971). *Immortality, Religion, and Morals*. New York: Hawthorne.
- McLuhan, M. (1965). *Understanding Media: The Extensions of Man*. New York: McGraw Hill.
- Motion Picture Guide* (1990-1994). New York: Baseline.
- New York Times Index* (1990-1993) vols. 78-81. New York: New York Times.
- Neu, R. E. (1994). 'What to read until the undertaker comes', *New York Times* (July 17):E 20-21.
- Nietzsche, F. (1968). *The Will To Power*. New York: Vintage.
- Schutz, A. (1951). 'Making music together: A study in social relationship', *Social Research*, 18: 76-97.
- Schwartz, B. (1987). *George Washington: The Making of An American Symbol*. Ithaca, NY: Cornell Univ. Press.
- Schlesinger, P. (1993). 'Wishful thinking: Culture, politics, media, and collective identities in Europe', *Journal of Communication*, 43(2):6-17.
- Shilling, C. (1993). *The Body and Social Theory*. London: Sage.
- Steuer, J. (1993). 'Telecommunities and social responses to communication technologies', Paper Presented at the Annual Meetings of the International Communication Association, Washington, DC.
- Swanson, G. (1960). *The Birth of the Gods*. Ann Arbor, MI: University of Michigan Press.
- Swanson, T. R. & Swanson, M. J. (1977). 'Acute uncertainty: The intensive care unit', in E. M. Pattison, ed. *The Experience of Dying*. Englewood Cliffs, NJ: Prentice-Hall.
- T. V. News Index and Abstracts*. (1990-1993). Nashville: Vanderbilt Television News Archives.
- Tyler, E. B. (1920 [1871]). *Primitive Culture*, 6th edit. New York: Putnam and Sons.
- The Universal Almanac* (1993). Kansas City: Andrews and McMeel.
- Veatch, R. M. (1975). 'The whole-brain concept of death: An outmoded philosophical formulation', *Journal of Thanatology*, 3: 13-30.
- (1988). 'The definition of death: Problems for public policy'. H. Wass, F. M. Berardo, & R. A. Neimeyer, eds. *Dying: Facing the Facts*. New York: Hemisphere Publishing Co.

- Wagner-Paci, R. & Schwartz, B. (1991). 'The Vietnam veteran's memorial: Commemorating a difficult past', *American Journal of Sociology*, 97(2):376-420.
- Walker, A. E. (1974). 'The death of a brain', *Johns Hopkins Medical Journal*, 124: 190-201.
- Walter, T. (1995). *The Revival of Death*. London: Routledge.
- Walton, D. N. (1979). *On Defining Death*. Montreal: McGill-Queens University Press.
- Winter, A. ed. (1969). *The Moment of Death: A Symposium*. Springfield, Ill.: Charles C. Thomas.
- The World Almanac and Book of Facts* (1993). New York: World Almanac.
- Wright, J. W. (ed.) (1993). *Universal Almanac*. Kansas City: Andrews and McMeel.
- Zerubavel, E. (1985). *The Seven Day Circle*. New York: Free Press.

## JUDGING THE SAFETY OF SAFETY JUDGMENTS

ALISON J. HILL

*Coping With Deliberate Release: The Limits of Risk Assessment*, edited by Ad van Dommelen, Tilburg: International Centre for Human and Public Affairs, 1996, 256 pages. Dfl 69 pb. ISBN 90-802139-4-2. Publisher's address: ICHPA, Pastoor Smitsstraat 25, 5014 RH Tilburg, The Netherlands.

The cover illustration shows Pandora kneeling before the box she has partially opened. Has she released evils upon the world, or should we welcome her beneficence in sharing her gifts? How should we judge the effects of these 'gifts' on nature and society? She has turned the world into a laboratory and, as the title of this volume suggests, we must find a way of coping with the consequences.

This collection of papers, drawn from sessions on the quality of risk assessment at the biennial meeting of the International Society for the History, Philosophy and Social Studies of Biology, 1995, in Leuven, Belgium, considers the limits of risk assessment for the deliberate release of genetically engineered (or modified) organisms (GMOs). The fifteen chapters are divided into sections on scientific backgrounds, regulatory practice, and political conditions.

Philip Regal sets the tone of the book by asking a series of questions:

'What can the history of the development of biotechnology reveal about the ways in which firm scientific knowledge and

Address correspondence to A. J. Hill, Centre for Science Studies and Science Policy, Lonsdale College, Lancaster University, Lancaster LA1 4YN, UK, e-mail "A.J. Hill@lancaster.ac.uk".