Editorial: Vibrant Awareness

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Grounded theory go beyond time, place, and people. Thus, even in times of rapid change, we should expect that good grounded theories are relevant and applicable in their field for many decades. Perhaps the real test of grounded theory is that of its temporal endurance? This year, at the end of 2015, fifty years have passed since Glaser and Strauss' first study where grounded theory principles were applied. Their seminal book *Awareness of Dying* (1965) is thus a messenger of the long-term usability and influence of a rock solid grounded theory.

In the age of big data I just couldn't help checking out the statistics: Fifty years after its publishing, the first seminal work still ranks high on Google Scholar's list of most cited grounded theory books. It appears that *Awareness of Dying* is the fourth most cited book by Barney G. Glaser, next to *The Discovery of Grounded Theory* (1967), *Theoretical Sensitivity* (1978), and *Emergence versus Forcing* (1992).

In celebration of *Awareness of Dying*, this issue of the Grounded Theory Review is devoted to a bundle of awareness themes. In the special section, we are happy to present three articles that deal directly with applications of the awareness concept. In the first article, the experienced grounded theorists **Tom Andrews** and **Alvita Nathaniel** look back at the origin of the grounded theory approach and re-examine awareness of dying in light of more recent research. They find that the theory is as "fresh and relevant" as it was when it was first published. The authors predict that the awareness of dying theory will continue to serve as a guide to nurses and physicians by identifying predictable processes that can help to alter actions to improve the care of dying patients.

In her article on awareness contexts and disasters, another experienced grounded theorist, **Vivian B. Martin**, extends awareness contexts beyond the medical field by examining the role of awareness in several high-profile disasters, including the 9/11 attacks and Hurricane Katrina. Martin discusses in what ways discounting awareness helps explain the poor communication flow before and during disasters. Her essay also illuminates pre-crisis patterns that could have reduced the impact of the disasters if awareness processes had been attended. Martin's ongoing theorizing on discounting awareness contexts was originally prompted by *Awareness of Dying*, and further explored in her own studies of news-attending.

The third article in the Special Section is a reprint of chapter 14 in *Awareness of Dying* from 1965. The chapter was selected by Dr. **Barney G. Glaser** when asked whether he wanted to contribute a paper on awareness. The chapter is entitled "Practical Use of Grounded Theory" and provides an interesting explanation on the usefulness of writing up a grounded theory as a running text. Glaser and Strauss point out that in the book they have "indicated many strategic places, points and problems in dying that we feel would profit from the application of our theory." They argue for leaving such short discourses in context, instead of gathering them into one chapter. It is interesting to note that the focus on practical uses of grounded theories was there initially, and the key was providing awareness through conceptualization. Moreover, in connection with the reprint of chapter 14, we also provide a reprint of the preface of *Awareness of Dying*.

In the general section, author **Brett B. Chulu** argues that Clayton Christensen's famous theory of disruptive innovation is anchored in grounded theory ideas of inductive theory-building, categorization, formal theory, and modifiability. Based on grounded analyses of disruptive innovation theory, Chulu has generated the theory of perpetual betterising, which recurrently resolves co-dependent main concerns in a firm held by "a firm's dominant coalition and the recipients of organization-created value." The awareness of this new theoretical perspective enables Chulu to investigate in depth the long-standing and current debates on disruptive innovation.

Vera Barton-Caro presents a grounded theory on embodied revelation. Her study focuses on explaining the decision-making process that heart failure patients go through to avoid potentially sudden cardiac death. Even though lives are saved by implanting a cardioverter defibrillator, many patients decline such therapy. Barton-Caro's theory of embodied revelation identifies a process of four stages, and explains why many patients hesitate to use the life saving device. It turns out that one of the stages in Barton-Caro's theory is heightening awareness. Her grounded theory holds implications on several levels—for research, for nursing and medical practice, and for bioethical considerations.

Another grounded theory that illuminates the effects of increased awareness is provided by authors **Ulrika Sanden, Lars Harrysson, and Hans Thulesius**. Based on longitudinal data from everyday life in a Northern Norway village, Sanden has developed a substantive theory of momentary contentment that explains how the locals resolve their main concern of enjoying life. Momentary contentment has three dimensions: doing safety during which common and individual acts create stability, destiny readiness that illuminates a discourse of acceptance, and middle consciousness, which demonstrates mental storage capacity in handling difficulties without losing balance. The authors suggest that the momentary contentment approach springs out of old survival strategies in a challenging environment.

The only short paper this time is **J. Christopher Hall**'s piece on utilizing grounded theory to enhance the education of graduate clinical social work field students. Hall's study focuses on learning and interpersonal awareness through extended use of students' field journals. His paper provides inspiring insight into the opportunities for extended learning through the writing, reading, coding, and shared analysis of students' field journals.

Have a good read!

Awareness of Dying Remains Relevant after Fifty Years

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Abstract

This year is the fiftieth anniversary of the publication of *Awareness of Dying*, one of four monographs that culminated from a six-year funded research program titled Hospital Personnel, Nursing Care and Dying Patients (Glaser, 1968). Written by Barney Glaser and Anselm Strauss, *Awareness of Dying* (1965) was the first published study utilizing a new, groundbreaking research method. Glaser and Strauss termed this new method grounded theory because it was based upon data that was grounded in the real-live experiences of people. In this paper, we will look back at the origin of the grounded theory method and reexamine Awareness of Dying in light of more recent research in the area.

Keywords: awareness of dying, dying process, end-of-life care, grounded theory.

Introduction

Following publication Awareness of Dying, Glaser and Strauss published a detailed description of the new method that they used to discover the theory. The grounded theory method was derived from a melding of the authors' backgrounds: Glaser's study of quantitative and qualitative math at Columbia University under Lazarfeld, his study of explication de texte at the University of Paris, his study of theory construction under Merton, and Strauss's study of symbolic interactionism under Blumer at the University of Chicago (Glaser, 1998; Glaser & Strauss, 1967). Their meticulous description of the method in a subsequent publication, The Discovery of Grounded Theory (1967), provided the structure for others who would subsequently use the method. It also garnered respect because it took advantage of reputable mathematic quantitative and qualitative ideas.

Some would say that theory that is grounded in the experiences of people is the most important and distinctive scientific activity for human beings because theories depict a meaningful pattern. Because of this real-world orientation, grounded theories offer clear understandings of predictable processes and patterns of behavior. Grounded theories help us to understand that when certain patterns emerge, particular people respond in predictable ways and their actions produce predictable results (Nathaniel, 2007). When we understand patterns that affect people, we can work towards altering them. Thus, theories have the potential to give us more insight and control in predictable situations.

Awareness of Dying 1965

Awareness of Dying is historically important because it was the first grounded theory ever published. For six years, Glaser and Strauss conducted intensive fieldwork involving a combination of observations and interviews at six hospitals. The purpose of their research was to contribute toward creating end-of-life care that was more rational and compassionate. The investigators were allowed to observe different aspects of dying within these six hospitals; death at these locations was "sometimes speedy, sometimes slow; sometimes expected, sometimes unexpected; sometimes anticipated by the patients, sometimes unanticipated" (Glaser, 1968). The researchers observed nurses and physicians at work. They sat at the nurses' stations, attended staff meetings, and talked with patients. They also asked questions and interviewed staff. The theory that emerged from this intense investigation presented an eye-opening view of how patient care was affected by the awareness level of the dying process by nurses, physicians, and patients.

Today, most people choose to die in hospitals, hospices, and nursing homes. The situation was much the same in the 1960s. When people die in institutions, nurses and physicians, who are virtual strangers, are responsible for care during the last days of life. During the course of their observations, Glaser and Strauss found that Americans hesitated to talk openly about dying and were prone to avoid telling a person that he or she was dying. We know now that grounded theories uncover previously unknown processes. So, it is not surprising that Glaser and Strauss were able to identify previously unknown levels of awareness of impending death and the affects these levels have on patients, relatives, nurses, and physicians. What emerged during their investigation was four distinctly different awareness contexts: closed awareness, suspected awareness, mutual pretense awareness, and open awareness. The following section encapsulates the major concepts of the theory of Awareness of Dying as described by Glaser and Strauss (1965).

During their investigation, Glaser and Strauss found that U.S. physicians were reluctant to disclose impending death to their patients, and nurses were not allowed to disclose information without the consent of physicians. Nursing and medical education were focused on the technical aspects of dealing with patients, with little exposure to psychological aspects of care. This limitation led to what Glaser and Strauss termed closed awareness of dying.

Closed awareness denotes a context in which patients are not aware of their own impending death. Staff members understand that the patient is dying, but cooperate with each other to maintain the fiction that the dying patient might recover. They carefully avoid arousing the patient's suspicions. Tactics nurses and physicians use to maintain closed awareness include giving patients an incorrect or partial diagnosis, manipulating the conversation so that patients will make inaccurately optimistic interpretations of their situation, and spending little time with patients to minimise possibly revealing cues. They avoid doing anything that might arouse patients' suspicion. Having the false belief that they will recover, patients are not allowed the benefit of closing their lives with proper rituals. Friends and relatives are also affected because they cannot openly express their grief in the presence of their loved one. Even so, there comes a time when patients become suspicious that they may be dying.

In suspicion awareness patients do not know for certain that they are dying but they suspect, by varying degrees, that the physicians and nurses believe them to be dying. When they become suspicious, patients engage in strategies that might confirm their suspicious, even though they have they have few resources with which to find out the truth. Strategies might include announcing their impending death for the purpose of checking the reaction of staff members, asking about symptoms while listening intensely for clues that they are dying, or attaching significance to every word and gesture of staff members. Even though they are seeking to confirm their suspicion, patients likely do not have sufficient medical knowledge to interpret the cues. As time passes, staff members gauge patients' level of awareness. Once physicians or nurses perceive that patients suspect terminal illness, they use strategies similar to those employed in maintaining closed awareness to counter patients' suspicions. At this level of awareness, Glaser and Strauss found that staff members act as if patients are merely ill, but not dying, by conveying impatience with patients' suspicions and acting in a dispassionate, cheerful, or abrupt manner. Nurses and physicians may send a clear message that they are too busy to talk or tell patients to direct their questions to someone else. Essentially, nurses and physicians deny patients' claims by refusing invitations to talk. The state of suspicious awareness places patients, relatives, and staff under considerable strain and creates an atmosphere of tension. This type of context tends to evolve into other types such as mutual pretence.

Mutual pretence occurs when everyone involved knows the patient is dying, but all pretend otherwise. There may be some comfort in mutual pretence and all people involved must be careful to maintain this fragile illusion. Strategies employed to maintain the illusion include conversations that focus on safe topics and avoid dangerous ones. If something threatens the fiction, everyone pretend that it did not happen. One-by-one, pretence is added to pretence in order to conceal unintentional slips. Mutual pretence may ensure privacy and dignity for patients and minimize embarrassment for relatives. Staff members might feel relief, but mutual pretence has the potential to cause considerable stress for both relatives and staff. However, the atmosphere created during mutual pretence is generally one of serenity. As the situation progresses, this pretence is challenged by obvious physical deterioration or when patients feel they cannot face death alone. At this point patients make the transition to open awareness.

In the open awareness context, staff and patients acknowledge that the patient's condition is terminal. Open awareness is often a stable context. Patients understand that they are dying, but often remain in closed awareness about other aspects of death such as mode and time. Staff reveal these details only if they believe that they will not to be upsetting or unpleasant for patients. Even within the larger context of open awareness, holding back unsettling details creates a strategy of mutual pretence around particularly difficult issues.

Staff have certain expectations of patients. As patients become more aware of and take more responsibility for the dying trajectory, nurses and physicians expect them to behave with dignity and refrain from displaying their emotions. For example, patients are expected to continue the fight to stay alive unless suffering is intense or death is quickly forthcoming. Glaser and Strauss found that nurses and physicians appreciate patients who

die with dignity and grace. When patients are not perceived to be dying properly, staff might admonish, coax, or appeal to higher authority (a priest for example) to help control them. Within the context of open awareness, patients and staff negotiate to relax the usual hospital routine. Glaser and Strauss found that an attempt to relax hospital rules is more likely to be successful if staff consider patients to be dying in an "acceptable" way.

Many staff members, especially nurses, prefer open awareness since they get satisfaction from being able to comfort patients. Open awareness gives patients the opportunity to close their lives usefully, according to their personal thoughts about proper dying, and allows them to talk openly with relatives. Open awareness, however, has some disadvantages for patients. They may not be able to bring closure to their lives and may die with more psychological anguish and less dignity than those who die in closed awareness.

After Glaser and Strauss published *Awareness of Dying*, they wrote their ground-breaking textbook, The Discovery of Grounded Theory (1967), describing the new research method. Certain inferences can be made from a close examination of the tenets of the method as described in Discovery. Assumptions inherent in the classic method, are as follows: 1) There are happenings that can be objectively observed. 2) These happenings occur in predictable patterns that can be conceptualized. 3) Grounded theory seeks to understand processes from participants' perspectives—from their words and behavior. 4) Grounded theories are dynamic in that they consist of a set of interrelated tentative hypotheses that are modified as new facts emerge. Thus, a grounded theory that is built upon these underlying assumptions should endure over time since subsequent research serves to enrich rather than refute classic theories.

Awareness of Dying Today

Compared to 1965 when *Awareness of Dying* was first published, recent trends show a slight decline in the percent of people who die in institutional settings. Nearly 65% of people in the U.S. spend their last hours in hospitals and nursing homes surrounded by physicians, nurses, and other hospital staff (Centers for Disease Control, 2010). Since the publication of *Awareness of Dying*, much research has focused on end-of-life processes. In everyday practice today, nurses and physicians continue to control information and thus control the awareness context, either by delaying, modifying or tempering full disclosure, despite apparent commitment to open awareness (Field & Copp, 1999). However, awareness of dying remains desirable since it enables life planning to proceed and offers some control over the manner and timing of death (Seale, Addington-Hall, & McCarthy, 1997). It also enables individuals to exercise some control over their last months and days of life (Field et al., 1999).

There has been an increase in those dying in open awareness among people with cancer (83.9%), yet despite the influence of Glaser and Strauss's theory, this increase has not been reflected in other conditions such as end-stage cardiovascular (51.6%) and respiratory (71.4%) disease (Seale et al., 1997). Seale, et al. (1997) concluded that while open awareness is the most prevalent context, medico-biological factors, such as cause of

death, and socio-cultural factors, such as social class, contribute to variation in awareness contexts. Patients dying of cancer are more likely to receive a terminal prognosis in an explicit way compared to those with end-stage cardiorespiratory disease. This practice leaves patients to surmise that they are dying on the basis of their own knowledge (Exley, Field, Jones, & Stokes, 2005). However this finding is not universal. In a study of patient awareness of imminent death, nurses and caregivers said that 51% to 62% of patients had been aware of the imminence of death in the last days of life, despite 71% of patients dying from cancer (Lokker, van Zuylen, Veerbeek, van der Rijt, & van der Heide, 2012). This statistic still leaves a significant number of patients dying in closed awareness. Since the majority of patients who were unaware died in hospital, communication around dying and death still needs to be significantly improved.

Patients and physicians still engage in what is labelled "pretence awareness," in which both know the prognosis, but tell each other "recovery stories" (The, Hak, Koeter, & van Der Wal, 2000). Corresponding with Glaser and Strauss's concept of mutual awareness, pretence awareness leads to false optimism. Applying awareness theory, this is likely to lead to maintaining closed awareness. These recent findings demonstrate that there is still much room for improvement, particularly in relation to people dying with a diagnosis other than cancer. Patients need information to make treatment choices and take leave of loved ones (Francke & Willems, 2005). Research suggests that this can only be achieved in the context of openness.

Consistent with Glaser and Strauss's 1965 theory, poor communication between the terminally ill, their relatives, and hospital staff continues to be problematic (Yabroff, Mandelblatt, & Ingham, 2004). Many physicians feel unprepared to provide information about poor prognosis (Lamont & Christakis, 2001). There are also gaps in the training of other members of end-of-life health care teams (Rabow, Hardie, Fair, & McPhee, 2000). Against today's background of increased capacity for technological interventions, clear decisions about the right time to die may be more difficult than in the past, making it even more important for patients and their relatives to be involved in decisions about end-of-life care (DelVecchio et al., 2004).

Awareness of Dying has the potential to provide a very effective basis for dealing with these continuing problems since it can be used to guide communication between everyone involved in terminal care. For example, Glaser and Strauss discussed explicitly how to change awareness context and offered guidance on how to deal with potential problems as a consequence of changed awareness. Effective communication is powerful and a necessary condition for facilitating open awareness. It confirms humanity, instils a sense of security, and is essential to meaningful care (Ryan, 2005). Its importance was confirmed in a recent systematic review. The review noted that patients and their families consistently identify effective communication, together with shared decision making and expert care at the end-of-life, as the most important areas that need to be addressed (Virdun, Luckett, Davidson, & Philips, 2015). Despite the fact that these domains of care have been consistent for over two decades, they are often poorly addressed within the hospital setting. Communication especially continues to be inadequately addressed (Burg, Lawson, Johnson, Asada, McIntyre, Grunfeld, & Flowerdew, 2014). Health carers tend to

engage in mechanistic communication, which impedes discussion and fails to take into account relatives' understanding or prior experiences and is given a low priority (Caswell, Pollock, Harwood, & Porock, 2015). Uncertainty as to when death will occur further complicates communication. Glaser and Strauss (1965) identified and outlined a typology of death expectation as follows:

- Certain death at a known time.
- Certain death at an unknown time.
- Uncertain death but a known time when the question will be resolved.
- Uncertain death and unknown time when the question will be resolved.

The level of certainty has profound implications as to how the patients and their loved ones will be treated. It may, in part, explain difficulties around communication at this time, particularly when death and its timing is uncertain. This knowledge is particularly applicable to patients with a chronic illness, since it is very difficult to predict when they will enter the terminal stages of their disease. Some critically ill patients and those requiring intensive care are also in this category (Andrews, 2015).

Studies in the 50 years since *Awareness of Dying* was published have shown that awareness context has continued to shape discussions in relation to disclosure (Field & Copp, 1999) and has been instrumental in focusing care on the individual who is dying, rather than being primarily concerned with the protection of others through non-disclosure (Field, 1996). However, there is still much to be gained by applying Glaser and Strauss's awareness contexts to current health care practices, remembering that patients who are aware of the imminence of death are more often at peace with dying (Lokker et al., 2012).

Conclusion

Glaser and Strauss's grounded theory, awareness of dying, is as fresh and relevant as it was 50 years ago. This seminal theory offers a true-to-life conceptual picture that can be modified as newer research emerges. Our research has shown that the theory has endured for a half century and that contemporary studies complement, rather than refute it. Emerging research findings can modify the theory through enhancement and contemporaneous illustration. On a practical note, the theory will continue to serve as a guide to nurses and physicians. It will help them to think about predictable processes and to alter their actions in order to improve care of dying patients. At a basic level, the theory sensitizes health care professionals to universal problems that surround end-of-life care and provides them with a means of making things better. By applying elements of the theory, physicians and nurses are better able to deal with patients and families during the sudden transition from one type of awareness to another. The theory reveals how the context of patients,' physicians,' and nurses' awareness can determine how patients experience their last days. It teaches us that staff who are honest and sensitive to dying patients and communicate well may be able to better assist the dying to conclude their lives with proper

rituals. Thus, 50 years after it was first published, *Awareness of Dying* continues to reflect an important process within the health care system and to offer relevant implications for improving the quality of end-of-life care.

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The System was Blinking Red: Awareness Contexts and Disasters

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Abstract

The awareness context has been a source of inspiration for grounded theories for more than 50 years; yet little has been done to extend the theory beyond nursing and the medical field, and a few works on identity. This paper extends the awareness context by examining its role in several high-profile disasters, natural and man-made, where gaining a clear sense of what was going on was often blocked by poor information flow and general communication failures, interpersonal and technological. Selective coding and the introduction of new concepts after analyzing hundreds of pages of documents issued by special commissions in the aftermath of the 9/11 attacks, Hurricane Katrina, the Deepwater Horizon oil spill in the Gulf, and the Sago Mine Disaster not only explain various processes around awareness in the midst of crisis, but also illuminate pre-crisis patterns that, if attended, could have mitigated the impact of the disasters.

Keywords: Awareness context, crisis communication, sociology of disaster, situational awareness, 9/11 attacks, Hurricane Katrina, Deepwater Horizon explosion, Sago Mine Disaster.

Introduction

Whether it is in personal interactions, professional life, or community activities, we are always communicating and processing information. Some of this information is innocuous and of no immediate consequence, while other information may have direct bearing on our wellbeing, that of our families, or colleagues. In such high stakes situations, it is important to have immediate access to information that is complete and credible. Seen from this perspective, Glaser and Strauss's awareness context (1964, 1965) addresses a fundamental communication process of everyday life. We move in and out of awareness contexts throughout daily life. The identification of a typology of awareness in which interactions among health professionals and patients are shaped by whether a patient is aware of a terminal diagnosis was a critical intervention in nursing and medical studies, and continues to be a starting point for much research (Andrews & Nathaniel, 2010).

The subject—dying—and discipline in which this theory has been embedded and extended across numerous illnesses and concerns may mask the essential work of the awareness context as a theory about the managing and sharing of information, a concern throughout organizations and institutions. Of course, the awareness context has not been limited to health issues. The role of identity and the interactions that occur when people are uncertain of the identify of another is highlighted in the *American Sociological Review* article

Glaser and Strauss (1964) published prior to the release of Awareness of Dying; Ekins's (1997) work on cross-dressing is a successful extension of the awareness context into this realm. But awareness as a concept offers many more possibilities for explaining phenomena that impede the distribution of critical communication across many spheres.

This paper extends the awareness context by examining its role in several highprofile disasters, natural and man-made, where gaining a clear sense of what was going on was often blocked by poor information flow and general communication failures, interpersonal and technological. Selective coding and the introduction of new concepts from analyzing hundreds of pages of documents issued by special commissions in the aftermath of the 9/11 attacks, Hurricane Katrina, the Deepwater Horizon oil spill in the Gulf, and the Sago Mine Disaster not only explain various processes around awareness in the midst of crisis, but also illuminate pre-crisis patterns which, if attended, could have mitigated the crises. The awareness context becomes an important contribution to crisis communication and organizational communication. Concepts such as abridging awareness, discounting awareness, situational awareness, and information gaps and information rationing help tease out the ways awareness is undermined in and across agencies assigned to work together. This paper is a methodological essay and brief discussion of ongoing theory development on awareness processes. It is also a challenge to grounded theorists to identify areas in their fields where the awareness context might have greater explanatory power than current theories allow.

Extending the Concept

The awareness context offers a typology explaining a mix of interactions determined by whether patients were aware they had a terminal diagnosis. In other words, whether they knew they were dying. In closed awareness situations where the patient was not aware of the diagnosis, health professionals worked to avoid disclosures, blocking and reframing information that might make its way to the patient:

To prevent the patient's comprehension of the truth, the personnel utilize a number of "situation as normal" interaction tactics. They seek to act in his presence as if he were not dying but only ill. They talk to him as if he were going to live. They converse about his future, thus enhancing his belief that he will regain his health. They tell him stories about others (including themselves) who have recovered from similar or worse illnesses. By such indirect signaling they offer him a false biography. Of course, they may directly assure him that he will live, lying with a clear purpose. (Glaser and Strauss, 1964, p. 672)

The staff cannot control the flow of information fully, thus the typology explains other types of awareness and the interactions that flow out of them. The other types—suspicious, pretense, open—have attendant behaviors, all of which require ways of managing information and interactions. The power of the concept lies in its processual nature, as it captures the transition from various types of awareness and the interplay of interactions and structures indicative of different awareness contexts. The particulars of the typology have been discussed throughout the grounded theory literature over the decades, so it is not necessary to give an extensive account; however, it is important to reiterate what Glaser and Strauss (1964) meant by awareness and how it differs from concepts such as consciousness and attention, which have become more active areas of scholarships since

the introduction of awareness. The concept of awareness itself has competing definitions, including some conflation with consciousness and attention in some disciplines. A footnote from their 1964 article provides a definition and potential broad applicability of the awareness context:

A more general definition of awareness context is the total combination of what specific people in groups, organizations, communities or nations know what about a specific issue. Thus, this structural concept can be used for the study of virtually any problem entailing awareness at any structural level of analysis. (p. 670)

I proceed with this definition, making a distinction between awareness and the more intentional behavior of attention. Awareness can lead to attention, but not necessarily. My original exploration of the awareness context revolved around news-attending as it became evident that news attending occurs in an awareness context (Martin, 2008). This context became important for understanding my theory of purpose attending, which describes a loop in which awareness triggers some initial attention, though relevance is needed to sustain it and make news-attending more purposeful. Increasing awareness based on relevance and attending recalibrates what is deemed worth attending in the next cycle. However, the wrench here is the limits to emergent awareness, which is often disrupted. Much news or information does not make it through everyday filters: people have limited interest or context and are often embedded in social networks that enable the filters.

Discounting Awareness

My work subsequently led to my interest in developing the concept of discounting awareness to better understand how people avoid information they tag as uncomfortable.

Discounting awareness is evident in everyday communication "from the most innocuous decision-making, such as how much credence one should give a weather forecast of rain, to behaviors that marginalize others and poison public discourse" (Martin, 2011, p. 300). It is the triage that sorts memoranda as important and less important or lends credibility to some testimony and discredits others. The image of a child with his hands over his ears to avoid hearing his parents order him to bed or deliver news he does not care to hear visually captures the concept in its more comic form. Some discounting awareness is childish and may just create annoyance for others, but as I address here, discounting awareness, in the form of dismissing, ignoring, or shrouding information in secrecy has also resulted in the loss of lives.

The concept is not fully my discovery. In Awareness of Dying, Glaser and Strauss (1965) devote a chapter to discounting awareness, a process in which researchers observed medical professionals engaging when they spoke openly in the presence of premature babies, comatose patients, and the senile and dying, whom they assumed to have no awareness of what was being said. In situations where professionals discounted awareness of patients, they made no effort to hide information and maintain a sense of everything as routine—the ritual they enacted in closed awareness. I embraced these conceptions but

expanded discounting awareness as a broader behavior working on intrapersonal, interpersonal and macro communicative levels.

I initially tried out the concept with some selective coding using news reports and observations on a number of different phenomena. I also became intrigued with the many questions raised by the 9/11 attacks and subsequent claims that the signs of an impending terrorist attack had been evident but ignored. As it became public that the national security team in the Bush administration had not given adequate attention to a series of memos and communications that were indicating there was a strong threat of an imminent attack in 2001—"the system was blinking red" during the summer prior to the attacks CIA Director George Tenet told the commission (9/11 report, 2004, p. 277)—I decided to do selective coding for such incidents in the 9/11 Commission Report. Discounting awareness was evident across the Clinton and Bush administrations, but more important for my analysis, the blocks to the circulation of information across agencies seemed to be a complicated phenomenon that spoke to the awareness context more broadly (Martin, 2011). Incidents across the commission report revealed missed signals, failure to share information, lack of trust across agencies, weak distribution channels, and generally what has been described as a "failure of imagination" to connect the dots between available information.

My next question was whether the incidents in the 9/11-commission report were anomalies or whether there was a pattern of discounting awareness regularly enacted across other institutions leading up to and during various disasters. This pattern led me to sample other commission reports created in the aftermath of large-scale tragedies to map discounting and other awareness processes based on questions raised during memo-writing. The reports were created in response to Hurricane Katrina (2005), where the bursting of the levee system and flooding following a near-category-four hurricane led to the deaths of 1,100 people and destroyed sections of the city and revealed government unprepared to respond; the Sago Mine Collapse (2006), where 12 miners died and others injured during a mine explosion in West Virgina; and the BP Deepwater Horizon oil rig explosion (2010) that killed 11, injured 16, and dumped four million gallons of oil in the Golf of Mexico.

Commission reports are useful for researchers, including grounded theorists. Typically launched with bipartisan cooperation, these government-empowered inquiries have access to most leading participants in agencies and others with special knowledge about the disasters and aftermath. For some events there are series of reports or different parties with reports—for example, the miners' union after Sago—and numerous supplements; reports are available. In some cases, such as the panel charged with investigating the problems during and leading up to Katrina that contributed to the death of approximately 1,100 people in New Orleans, including many who were trapped in their homes after failing to evacuate, the interviews include ordinary citizens alongside government officials and first responders in the community.

The data, like any, come with imperfections but provide an opportunity to examine patterns after the initial media interest and conventional wisdom have moved on to other topics. As observed by Vaughan (1997), who studied hundreds of pages of official reports and conducted interviews following the explosion of the Challenger on January 28, 1986, which was launched despite engineers' reservation about the impact of the cold on the O-

ring that held together sections of the shuttle, the public narrative that emerges is often simplistic or incorrect. After the blowup of the Challenger, the general view was that concerns with costs and politics of sending a teacher into space with the astronauts put extra pressure on NASA to push forward with the launch and ignore any cautions. What Vaughan discovered instead was that the organizational cultures could not easily accommodate the reservations that had been expressed. The engineers had reservations about how low temperatures might impact the O-rings but could not quantify their objections; they could not make a definitive case for not going forward, which was the best way to be heard within the paradigm in which they worked. A successful argument for aborting the launch would have had to break through various structures with long established paths to decision-making. The decrease in technical expertise as information traveled closer to the top of the pyramid was also part of the abridgement of awareness that occurs along information chains.

Vaughan (1997) provided a typology of signals (routine, weak, strong) and argued that verbal complaints and memos in organizations are weak signals due to their informality. Her concept of "structural secrecy" (p. 238), meanwhile, is also an indicator of an awareness context. Certainly, there are other dynamics involved, but disclosure and information flow in NASA and the contractors working with it have many similarities to patterns in the data from the crises I studied. The BP well explosion and Sago Mine are shaped in some ways by profiteering and regulation issues. But the abridgements of awareness were evident in those tragedies as they were in the lead-up to the 9/11 attacks and prior to and in the aftermath of Hurricane Katrina. The awareness context is the landscape actors must navigate. This analysis moves it from the hospital ward to a web of institutions in which networks of information and actors operate. During certain types of crises and disasters the context moves further out into the world, affecting communities and individuals, and necessitating different levels of analyses.

A Methodological Note

The brief research report in this paper is part of a larger project on awareness processes; therefore, it would take the discussion off track to address the various methodological issues inherent in building formal theory. One observation worth sharing, however, is that the notion that one can move from a substantive theory into a formal theory without new data, thereby relying on extant literature in other areas; such a notion is problematic. Awareness, a concept that continues to elude social scientists, needs more fleshing out and discovery of its contours, making data such as the commission reports especially welcome. Extant literature requires unpacking based on the methods used and the nature of the data. The data underlying some of the literature is not often clear or represented well enough to evaluate prior to its integration in theory.

I also incorporated strategies that are out of the comfort zone of many classic grounded theorists but must be considered when databases become large. Although my initial coding was on paper copies of the reports, I utilized NVivo10, not just for retrieval, but for its matrices, word trees, cluster analysis with quantitative measures; other tools also

helped me look at my data across the large documents and better account for coding patterns. An example of something that could not be done by hand was the ability to run a Jaccard's coefficient, an index that reveals where coding intersects. The tool also allowed me to determine that certain words across the documents were often in the same places; for example, awareness, communication, or failure are tightly connected with an index number of 1 (tight correspondence). Typically, these sections contain references to incidents of communication failures, giving strength to the conceptualization I was doing. While this extra level of accountability is not necessary for all classic grounded theorists, especially those without access to or training on NVivo, having both I chose to use this extra bit of auditing given the high-profile nature of the reports, the volume of the data and as a source of reassurance for different audiences.

Abridging Awareness

The typology of an awareness context in which critical information is managed across different people, departments and organizations is relevant in all four of the circumstances studied in this paper. The emphasis differs across sites. The Sago Mine explosion had the earmarks of the crisis in which quick orientation was needed, but its pre-crisis culture was less an area of focus in the report, though some of these issues were implied in the history of citations and other problems. The pre-crisis awareness contexts are addressed more explicitly in the other three reports and contain elements of closed awareness that might have contributed to the tragedies or impacted the aftermath negatively. I use abridging awareness or the abridgement of awareness to conceptualize the mix of practices that block the flow of information and decrease awareness in the agencies and organizations under study, particularly prior to the crises.

The pre-crisis and crisis contexts bring different properties to the forefront. The pre-crisis context is the norm under which organizations and institutions operate and include all of the communication and information practices. For example, the following two brief descriptions are full of implications for understanding the routine awareness context prior to 9/11 as a willful disattending, a vacating of accountability found throughout the crises studied. The following incidents are reported in the 9/11 Commission report:

President Clinton appointed George Tenet as DCI in 1997, and by all accounts terrorism was a priority for him. But Tenet's own assessment, when questioned by the Commission, was that in 2004, the CIA's clandestine service was still at least five years away from being fully ready to play its counterterrorism role. And while Tenet was clearly the leader of the CIA, the intelligence community's confederated structure left open the question of who really was in charge of the entire U.S. intelligence effort. (p. 93)

Moreover, the FAA's intelligence unit did not receive much attention from the agency's leadership. Neither Administrator Jane Garvey nor her deputy routinely reviewed daily intelligence, and what they did see was screened for them. She was unaware of a great amount of hijacking threat information from her own intelligence unit, which, in turn, was not deeply involved in the agency's policymaking process. Historically, decisive security action took place only after a disaster had occurred or a specific plot had been discovered. (p. 83)

In the pre-crisis "normal," people operate under a type of awareness that is often closed, but the rituals of organizational are such that there is much pretense around knowledge in

some strata. The structures in which the people in the aforementioned examples worked enabled their ability to push away responsibility and accountability with impunity. The abridgement of awareness comes to light when crisis hits as communities are left with the fallout as they try to achieve awareness, sometimes to save their lives.

When disaster strikes, awareness becomes foreground and is the main concern before action is taken, rather than a tacit aspect of routine organizational life where people are often unaware of what they do not know. Temporality becomes a critical property of the awareness context as the emergency quickens. The passengers on hijacked planes during 9/11 had minutes to ascertain their situation, and had few options once they achieved some awareness. The circumstances surrounding Hurricane Katrina, however, had a longer trajectory of struggle for awareness. Warnings about the severity of the imminent hurricane, as well as knowledge about the vulnerability of the levees in New Orleans were well known—National Hurricane Center, which perfectly predicted landfall days in advance, was one of the few agencies credited with doing its job well—yet local leaders failed to force evacuations until it was too late for many. Of the four crises examined, Katrina is the one most vividly illustrative of an awareness context with many broken nodes. It is the one case where it is not overreaching to say that a healthier structure of awareness could have resulted in a far less tragic situation. As the authors of "A Failure of Initiative" (2006), the commission report on Katrina, wrote:

Many of the problems we have identified can be categorized as 'information gaps'—or at least problems with information-related implications, or failures to act decisively because information was sketchy at best. Better information would have been an optimal weapon against Katrina. Information sent to the right people at the right place at the right time. Information moved within agencies, across departments, and between jurisdictions of government as well. Seamlessly. Securely. Efficiently. (p. 1)

Information gaps, an in vivo code I've adapted to my work, are components in awareness contexts. Information is the currency that spurs action, or causes impasses if it is not credible. Information that is rationed and only shared among a few, or not delivered with appropriate context, can derail plans and put lives in peril, as we see happening in the data. A seamless, secure, efficient network of information flowing back and forth is an ideal expressed in the excerpt from the Katrina report, but awareness contexts have many actors with different agendas, degrees of flexibility, and competence. In reviewing the explosion of the Deepwater oil rig, which resulted in the death of 11 men, injured 16, and caused the release of four million gallons of oil in the Golf of Mexico, the special commission found:

BP, Transocean, and Halliburton failed to communicate adequately. Information appears to have been excessively compartmentalized at Macondo as a result of poor communication. BP did not share important information with its contractors, or sometimes internally even with members of its own team. Contractors did not share important information with BP or each other. As a result, individuals often found themselves making critical decisions without a full appreciation for the context in which they were being made (or even without recognition that the decisions were critical). (p. 123)

A particularly illustrative indicator of pre-crisis information rationing with tragic consequences in the Deepwater Horizon oilrig explosion was an advisory Transocean, the company drilling for BP, failed to share with the Deepwater team. Four months prior to the Deepwater explosion in 2010 at Maconda, there was a near-miss on one of its rigs in the North Sea in December 2009. Gas entered a riser while the crew was conducting an

operation in a manner similar to the crew in Louisiana. A crew had declared a previous test a success—which also occurred at Maconda—but a barrier failed and hydrocarbon rushed in, according to the commission report. The crew in the North Sea was able to shut the well before a blowout erupted, but as the commission learned, "Nearly one metric ton of oilbased mud ended up in the ocean. The incident cost Transocean 11.2 days of additional work and more than 5 million British pounds in Expenses" (p. 124).

Transocean subsequently created an internal PowerPoint presentation warning that '[t]ested barriers can fail' and that 'risk perception of barrier failure was blinkered by the positive inflow test [negative test].' The presentation noted that '[f]luid displacements for inflow test [negative test] and well clean up operations are not adequately covered in our well control manual or adequately cover displacements in under balanced operations.' It concluded with a slide titled 'Are we ready?' and 'WHAT IF?' containing the bullet points: '[h]igh vigilance when reduced to one barrier underbalanced,' '[r]ecognise when going underbalanced—heightened vigilance,' and '[h]ighlight what the kick indicators are when not drilling.' (p. 124)

Transocean sent out an "operations advisory" using what the commission described as "less pointed and vivid" language than in the PowerPoint to its fleet in the North Sea. However, the commission quotes Transocean as conceding that neither the advisory or PowerPoint made it to Deepwater Horizon. In a fairly bold act of discounting awareness, Transocean took issue with suggestions that informing the Deepwater crew might have made people more cautious about the test barriers, possibly averting the disaster. Transocean argued that a different test barrier was involved in the North Sea, but the commission found that the differences are "cosmetic" and wrote, "The basic facts of both incidents are the same. Had the rig crew been adequately informed of the prior event and trained on its lessons, events at Macondo may have unfolded very differently" (p. 125). The heavy editing of the advisories and restricted flow suggests the circulation of these types of alerts within a company would be useful for further development of closed awareness as a spectrum when applied to organization culture.

Achieving Situational Awareness

Situational awareness is a term most immediately associated with military operations but has spread to aeronautics and other fields. In essence, it is knowledge of what is going on in a given situation and what some of the moving issues might be. Former Secretary of Defense Donald Rumsfeld, in speaking to the presidential commission on 9/11, described himself as eager to establish "situational awareness" upon learning of the attacks on 9/11. The term is used frequently in the reports to describe the challenges of orienting to the fast-changing crises of 9/11 and Katrina. The word is probably used in these documents and not the other two because of the immense difficulties gaining situational awareness in the midst of the attacks and hurricane and the subsequent chaos in which thousands of people were thrown and lost lives. In the case of Katrina, there is a direct link between the everyday pre-crisis practices abridging awareness across the agencies involved and what happened when the hurricane struck. Failed infrastructure, including massive power outages, dwindling supplies, uncertainty about chains of command, equipment that did not work and paralyzed leadership all contributed to the delays understanding what was going on, sometimes for days. The report observes:

Without sufficient working communications capability to get better situational awareness, the local, state, and federal officials directing the response in New Orleans had too little factual information to address—and, if need be, rebut—what the media were reporting. This allowed terrible situations—the evacuees' fear and anxiety in the Superdome and Convention Center—to continue longer than they should have and, as noted, delayed response efforts by, for example, causing the National Guard to wait to assemble enough force to deal with security problems at the Convention Center that turned out to be overstated. (p. 171)

As a concept, situational awareness helps switch the context from everyday routines to the live event, where the context now expands to multitudinous actors and scenarios; beating the clock also becomes a factor. Situational awareness can be conceptualized as having two distinct phases: the initial jolt of disruption and immediate need for information triage in which people must obtain, verify, and evaluate information they must accept or discount; and action thresholds—the point at which people, their awareness limited, may need to take a leap of faith or risk death. These phases can cycle out within minutes. Tentatively I have conceptualized a third phase, opening awareness, which would encompass the continual response to the crisis and aftermath. It might be that the commissions assembled to create reports are part of the opening of awareness longterm. The proposition here is not that all would be transparent. Awareness is recalibrated to move to a new level of response, though there is no guarantee the pre-crisis awareness context would change much. In fact, the commission reports contain a lot of material suggesting that the agencies involved had failed to learn from past lessons or were slow to implement them. However, conceiving of situational awareness as a cyclical subcore helps link the pre-crisis context, the immediate crisis and aftermath.

A few examples from the crises provide indicators to explore situational awareness unfolding. The Sago Mine disaster was especially painful for the country to witness. At one point after families had waited anxiously to hear whether the miners had been rescued, the governor and media reported that all but one of the 13 miners, who had been trapped, had survived. But the celebrations were short-lived. There had been a communication mix up: only one of the 13 miners survived. The so-called "fog" associated with war impedes awareness in these early moments. Stories from 9/11 of people attempting to evacuate the towers but being told to remain in place are indicators of the confusion and misdirection that makes verification so difficult.

The 911 system remained plagued by the operators' lack of awareness of what was occurring. Just as in the North Tower, callers from below and above the impact zone were advised to remain where they were and wait for help. The operators were not given any information about the inability to conduct rooftop rescues and therefore could not advise callers that they had essentially been ruled out. This lack of information, combined with the general advice to remain where they were, may have caused civilians above the impact not to attempt to descend, although Stairwell A may have been passable. (National Commission on Terrorist . . . , 2004, p. 295)

Escalating contingency explains the ways in which the limited amount of awareness is outstripped by the fast pace of events. Those people in the midst of disaster often found themselves replacing one unworkable plan with another that was too little too late. Yet also in need of better understanding are the action thresholds that cause some people to move forward. Some of the risk—running in the same direction of the rest of the crowd as people did during the 9/11 attacks, going back into the mines to save brother miners—are instinctual and hence easier to explain. But situations where people are paralyzed by

inaction for stretches of time need closer examination. From Katrina, we know that there was much procrastination and desperation as people realized they were on their own as the floodwaters rose. At hospitals where the elderly and informed had limited mobility, hospital staff had to make the difficult decision to simply leave the sickest to die. The commission reports include examples of heroism and personal initiative such as the doctor who, with help from police, broke into a pharmacy to get medicine to help victims. But, much of the Katrina story is one of tragedy that many people in government let happen due to the closed awareness context they built.

Awareness Context as Culture

Awareness contexts make up the culture of organizations, revealing how such entities communicate within and outside of their walls. The communication patterns are deeply embedded and difficult to steer in counter directions. Unlike the medical professionals in the hospital observed by Glaser and Strauss, knowledge blackouts, or the process of often do not know what they do not know or need to know. Many are also incompetent, vacating accountability with the assistance of the organizational structure. Rather than a strictly closed system, the pretense type of awareness identified by Glaser and Strauss (1964, 1965) is worth exploring to capture the ways in which people perpetuate knowledge gaps willingly. These steps are among my next course of action. Any organization would have a business-as-usual awareness context that could be mapped, particularly around crisis or less threatening disruptions. Yet, its history aside, the awareness context would need to earn its way anew.

This article is an attempt to share some ongoing work on awareness processes, and more immediately an effort to suggest that the awareness context is underutilized and rich for development. Grounded theorists and researchers in general often delay projects for want of data. Increasingly, government websites make available reports and inquiries of high-profile disasters and other crises; these reports could be useful for any number of projects. The large numbers of documents that exist on various topics lend themselves to solo or group projects. Imagine an international team of grounded theorists taking on a topic and coming up with a theory with grab that sets the world straight on a public problem. That is a flight of fantasy to some degree, but I use it to suggest that our toolbox can bring a lot of light, awareness, out there.

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The Practical Use of Awareness Theory (A reprint of Chapter 14 in Awareness of Dying, first published 1965)

Barney G. Glaser and Anselm L. Strauss

In this chapter we shall discuss how our substantive sociological theory has been developed in order to facilitate applying it in daily situations of terminal care by sociologists, by doctors and nurses, and by family members and dying patients. The application of substantive sociological theory to practice requires developing a theory with (at least) four highly interrelated properties. (As we have demonstrated in this book and will discuss explicitly in the next chapter, a theory with these properties is also very likely to contribute to formal—i.e., general—sociological theory.) The first requisite property is that the theory must closely fit the substantive area in which it will be used. Second, it must be readily understandable by laymen concerned with this area. Third, it must be sufficiently general to be applicable to a multitude of diverse, daily situations within the substantive area, not just to a specific type of situation. Fourth, it must allow the user partial control over the structure and process of the substantive area as it changes through time. We shall discuss each of these closely related properties and briefly illustrate them from our book to show how our theory incorporates them, and therefore why and how our theory can be applied in terminal care situations.'

Fitness

That the theory must fit the substantive area to which it will be applied is the underlying basis of the theory's four requisite properties. It may seem obvious to require that substantive theory must correspond closely to the data, but actually in the current ways of developing sociological theory there are many pitfalls that may preclude good fitness.² Sociologists often develop a substantive theory—theory for substantive areas such as patient care, delinquency, graduate education—that embodies, without his realization, the sociologist's ideals, the values of his occupation and social class, as well as popular views and myths, along with his deliberate efforts at making logical deductions from some formal theory to which he became committed as a graduate student (for example, a theory of organizations, stratification, communication, authority, learning, or deviant behavior). These witting and unwitting strategies typically result in theories too divorced from the everyday realities of the substantive area, so that one does not quite know how to apply them, or in what part of the social structure to begin applying them, or where they fit the data of the substantive area, or what the propositions mean in relation to the diverse problems of the area. The use of logical deduction rests on the assumption that the formal theory supplies all the necessary concepts and hypotheses; the consequences are a typical forcing and distorting of data to fit the categories of the deduced substantive theory, and the neglecting of relevant data which seem not to fit or cannot be forced into the pre-existing sociological categories.³ In light of the paucity of sociological theories that explicitly deal with change, 4 logical deduction usually is carried out upon static theories which tends to ensure neglect, distortion, and forcing when the deduced theory is applied to an ever-changing, everyday reality.

Clearly, a substantive theory that is faithful to the everyday realities of the substantive area is one that is carefully *induced* from diverse data gathered over a considerable period of time. This research, usually based primarily on qualitative data gathered through observations, interviews and documents and perhaps later supplemented by surveys, is directed in two ways —toward discovering new concepts and hypotheses, and then continually testing these emerging hypotheses under as many diverse conditions as possible. Only in this way will the theory be closely related to the daily realities (what is actually "going on") of the substantive area, and so be highly applicable to dealing with them. After the substantive theory is sufficiently formulated, formal theories can be scrutinized for such models, concepts and hypotheses as might lead to further formulation of the substantive theory. We have described in the appendix on method how we have proceeded in developing our theory to fit the realities of terminal care in hospitals. Readers who are familiar with this area will readily be able to judge our degree of success in that enterprise.

Understanding

A substantive theory that corresponds closely to the realities of an area will be understood and "make sense" to the people working in the substantive area. This understanding is very important since it is these people who will wish either to apply the theory themselves or employ a sociologist to apply it.⁶ Their understanding the theory tends to engender readiness to use it, for it sharpens their sensitivity to the problems that they face and gives them an image of how they can potentially make matters better, either through their own efforts or those of a sociologist. ⁷ If they wish to apply the theory themselves, they must perceive how it can be readily mastered and used.

In developing a substantive theory that fits the data, then, we have carefully developed concepts and hypotheses to facilitate the understanding of the theory by medical and nursing personnel. This, in turn, has ensured that our theory corresponds closely to the realities of terminal care. Our concepts have two essential features: they are both analytic and sensitizing. By *analytic* we mean that they are sufficiently generalized to designate the properties of concrete entities—not the entities themselves—and by *sensitizing* we mean that they yield a meaningful picture with apt illustrations that enable medical and nursing personnel to grasp the reference in terms of their own experiences. For example, our categories of "death expectations," "nothing more to do," "lingering," and "social loss" designate general properties of dying patients which unquestionably are vividly sensitizing or meaningful to hospital personnel.⁸

To develop concepts of this nature, which tap the best of two possible worlds—abstraction and reality—takes considerable study of one's data. Seldom can they be deduced from formal theory. Furthermore, these concepts provide a necessary bridge between the theoretical thinking of sociologists and the practical thinking of people

concerned with the substantive area, so that both parties may understand and apply the theory. The sociologist finds that he has "a feeling for" the everyday realities of the situation, while the person in the situation finds he can master and manage the theory. In particular, these concepts allow this person to pose and test his "favored hypotheses" in his initial applications of the theory.

Whether the hypotheses prove somewhat right or wrong, the answers still are related to the substantive theory; use of the theory helps both in the interpretation of hypotheses and in the development of new applications of the theory. For example, as physicans (and social scientists) test out whether or not disclosure of terminality is advisable under specified conditions, the answers will be interpretable in terms of awareness contexts (Chapters 3 and 6) and the general response process (Chapter 8). This, in turn, will direct these people to further useful questions as well as lead to suggestions for changing many situations of terminal care.

In utilizing these types of concepts in our book, we have anticipated that readers would almost literally be able to see and hear the people involved in terminal situations—but see and hear in relation to our theoretical framework. It is only a short step from this kind of understanding to applying our theory to the problems that both staff and patients encounter in the dying situation. For instance, a general understanding of what is entailed in the mutual pretense context, including consequences which may be judged negative to nursing and medical care, may lead the staff to abandon its otherwise unwitting imposition of mutual pretense upon a patient. Similarly, the understanding yielded by a close reading of our chapters on family reactions in closed and open contexts should greatly aid a staff member's future management of—not to say compassion for—those family reactions. A good grasp of our theory, also, will help hospital personnel to understand the characteristic problems faced on particular kinds of hospital services, including their own, as well as the typical kinds of solutions that personnel will try.

In deciding upon the analytic level of our concepts, we have been guided by the criteria that they should not be so abstract as to lose their sensitizing aspect, but yet must be abstract enough `to make our theory a general guide to the multi-conditional, everchanging daily situations of terminal care. Through the level of generality of our concepts we have tried to make the theory flexible enough to make a wide variety of changing situations understandable, and also flexible enough to be readily reformulated, virtually on the spot, when necessary, that is, when the theory does not work. The person who applies our theory will, we believe, be able to bend, adjust, or quickly reformulate awareness theory as he applies it in trying to keep up with and manage the situational realities that he wishes to improve. For example, nurses will be able better to cope with family and patients during sudden transitions from closed to pretense or open awareness if they try to apply elements of our theory (see Chapters 3, 8, 9), continually adjusting the theory in application.

We are concerned also with the theory's generality of scope. Because of the changing conditions of everyday terminal situations it is not necessary to use rigorous research to find precise, quantitatively validated, factual, knowledge upon which to base the theory. "Facts" change quickly, and precise quantitative approaches (even large-scale surveys) typically yield too few general concepts and relations between concepts to be of broad practical use in coping with the complex interplay of forces characteristic of the substantive area. A person who employs quantitatively derived theory "knows his few variables better than anyone, but these variables are only part of the picture." "Theory of this nature will also tend to give the user the idea that since the facts are "correct" so is the theory; this hinders the continual adjustment and reformulation of theory necessitated by the realities of practice. Because he is severely limited when facing the varied conditions and situations typical of the total picture, the person who applies a quantitatively derived theory frequently finds himself either guideless or applying the inapplicable—with (potentially) unfortunately human and organizational consequences. This kind of theory typically does not allow for enough variation in situations to take into account the institution and control of change in them. Also, it usually does not offer sufficient means for predicting the diverse consequences of any action, done with purpose, on those aspects of the substantive area which one does not wish to change but which will surely be affected by the action. Whoever applies this kind of theory is often just "another voice to be listened to before the decision is reached or announced" by those who do comprehend the total picture. 12

Accordingly, to achieve a theory general enough to be applicable to the total picture, we have found it more important to accumulate a vast number of *diverse* qualitative "facts" on dying situations (some of which may be slightly inaccurate). This diversity has facilitated the development of a theory that includes a sufficient number of general concepts relevant to most dying situations, with plausible relations among these categories that can account for much everyday behavior in dying situations. Though most of our report is based on field observations and interviews, we have used occasional data from any source (newspaper and magazine articles, biographies and novels, surveys and experiments), since the criterion for the credibility and potential use of this data is how they are integrated into the emergent substantive theory.¹³

The relations among categories are continually subject to qualification, and to change in direction and magnitude due to new conditions. The by-product of such changes is a correction of inaccuracies in observation and reintegration of the correction into the theory as it is applied. The application is thus, in one sense, the theory's further test and validation. Indeed, field workers use application as a prime strategy for testing emerging hypotheses, though they are not acting as practitioners in a substantive area. In the next section, by illustrating how our theory guides one through the multifaceted problem of disclosure of terminality, we indicate how one confronts the total picture with a theory that is general enough in scope to be applicable to it.

This method of discovering and developing a substantive theory based on a multitude of diverse facts tends to resolve two problems confronting the social scientist consultant, who, according to Zetterberg, is "dependent on what is found in the tradition of a science" and, when this fails, is apt to "proceed on guess work" so as not to "lose respect and future assignments." ¹⁴ Our method resolves these problems in large measure because it is not limited by the dictum that Zetterberg's consultant must follow: "Only those details were assembled by the consultant and his co-workers that could be fitted into the categories of sociology, *i.e.*, phrased in sociological terminology." ¹⁵ As stated earlier in the section on fitness, we do not believe that the categories of sociology can at the outset be directly applied to a substantive area without great neglect, forcing, and distortion of everyday realities. A substantive theory for the area must first be *induced*, with its own general concepts; and these concepts can later become a bridge to more formal sociological categories if the latter can be found. As Wilbert Moore has noted, however, we still lack the necessary formal categories to cope with change adequately.

Control

The substantive theory must enable the person who uses it to have enough control in everyday situations to make its application worth trying. The control we have in mind has various aspects. The person who applies the theory must be enabled to understand and analyze ongoing situational realities, to produce and predict change in them, and to predict and control consequences both for the object of change and for other parts of the total situation that will be affected. And as changes occur, he must be enabled to be flexible in revising his tactics of application and in revising the theory itself if necessary. To give this kind of control, the theory must provide a sufficient number of general concepts and their plausible interrelations; and these concepts must provide him with understanding, with situational controls, and with access to the situation in order to exert the controls. The crux of controllability is the production and control of change through "controllable" variables and "access" variables.

Controllable variables

Our concepts, their level of generality, their fit to the situation, and their understandability give whoever wishes to apply them, to bring about change, a *controllable theoretical foothold* in the realities of terminal situations. Thus, not only must the conceptual variables be controllable, but their controllability must be enhanced by their integration into a substantive theory which guides their use under most conditions that the user is likely to encounter. The use of our concepts may be contrasted with the unguided, *ad hoc* use of an isolated concept, or with the use of abstract formal categories that are too tenuously related to the actual situation.¹⁶

For example, the prime controllable variable of our study is the "awareness context." Doctors and nurses have much control over the creation, maintenance, and change of awareness contexts; thus they have much control over the resultant characteristic forms of interaction, and the consequences for all people involved in the dying situation. Also, the

interactional modes we have specified are highly controllable variables; doctors and nurses deliberately engage in many interactional tactics and strategies.

If a doctor contemplates disclosure of terminality to a patient, by using our theory he may anticipate a very wide range of plausibly expected changes and consequences for himself, patient, family members and nurses. By using the theory developed in Chapter 8, he may judge how far and in what direction the patient's responses may go and how to control these responses. By using the theory in Chapter 3, he may judge what consequences for himself, nurses and patients will occur when the context is kept closed; and by referring to Chapter 6, he may weigh these against the consequences that occur when the context is opened. Also, he may judge how advisable it is to allow the characteristic modes of interaction that result from each type of awareness context to continue or be changed. From these chapters he also may develop a wider variety of interactional tactics than ordinarily would be in his personal repertoire. If maintaining a closed context will result in too great a management of assessment (an interactional mode) by the nurse—which might decrease the patient's trust in the whole staff when he discovers his terminality—it may be better to change the context to allow the nurse to respond differently.

The doctor may also review Chapters 9 and 10 for judging to what degree opening the context by disclosure will lead to problems in controlling family members, and how the disclosure may affect their preparations for death. Resting this decision upon our theory allows him much flexibility and scope of action —precisely because we have provided many general concepts and their probable interrelations closely linked to the reality of disclosure, in order to guide the doctor in considering the many additional situations that will be affected by disclosure. Simply to disclose in the hope that the patient will be able to prepare himself for death is just as unguided and *ad hoc* as to not to disclose because he may commit suicide. To disclose because the patient must learn, according to formal theory, "to take the role of a terminal patient," is too abstract a notion for coping with the realities of the impact of disclosure for all people concerned.

This example brings out several other properties of controllable variables and, thus, of our substantive theory. First, the theory must provide controllable variables with *much explanatory power:* they must "make a big difference" in what is going on in the situation to be changed. We have discovered one such variable—awareness contexts. As we have reiterated many times, much of what happens in the dying situation is strongly determined by the type of awareness context within which the events are occurring.

Second, doctors and nurses, family and patients are already purposefully controlling' many variables delineated in our substantive theory. While the doctor exerts most control over the awareness context, all these people have tactics that they use to change or maintain a particular awareness context. The patient, for example, is often responsible for initiating the pretense context. However, all these people are, in our observation, controlling variables for very limited, *ad hoc* purposes. Our theory, therefore, can give staff, family and patients a broader guide to what they tend to do already and perhaps help them to be more effective.

Controllable variables sometimes entail controlling only one's own behavior and sometimes primarily others' behavior —the more difficult of the two. But, as we have tried to show, control usually involves the efforts of two parties; that is *control of the interaction* between two people by one or both. In the dying situation it is not uncommon to see patient, family, doctor, and nurse trying to control each other for their own purposes. Those who avail themselves of our theory may have a better chance in the tug-of-war over who shall best control the dying situation.

In the hospital, material props and physical spaces are of strategic importance as variables which help to control awareness contexts and people's behavior.'? We have noted how doctors and nurses use spatial arrangements of rooms, doors, glass walls, rooms and screens to achieve control over awareness contexts. By making such controllable variables part of our theory we have given a broader guide to the staff's purposeful use of them. Thus, to let a family through a door or behind a screen may be more advisable than yielding to the momentary urge of shutting out the family to prevent a scene. Letting in family members may aid their preparations for death, which in turn may result in a more composed family over the long run of the dying situation.

Access variables

The theory must also include access variables: social structural variables which allow, guide and give persons access either to the controllable variables or to the people who are in control of them. To use a controllable variable, one must have a means of access to it. For example, professional rules give principal control over awareness contexts to the doctor; therefore the nurse ordinarily has a great deal of control in dying situations because of her considerable access to the doctor, through or from whom she may try to exert control over the awareness context. Professional rules forbid her to change the context on her own initiative; they require her to maintain the current one. Thus the organizational structure of the hospital, the medical profession, and the ward provide degrees of access to control of awareness contexts by both doctor and nurses—and our theory delineates this matter. Family members have more access to a private physician than to a hospital physician; thus they may have more control over the former. Sometimes they can demand that their private physician keep a closed awareness context because of the control they exert over him through the lay referral system (upon which he may depend for much of his practice). 18 The patient has little access in the closed context to a doctor in order to control changes of context. However, like the nurse, he has much access to everyday cues concerning his condition —they exist all around him and he learns to read them better and better. Thus, his access to strategic cues gives him an opportunity to control his situation—and we have discussed at length how he can manage cues to gain controls. Access variables also indicate how best to enter a situation in order to manage a controllable variable while not otherwise unduly disrupting the situation. Thus, we have delineated the various alternatives that a nurse may use to gain control over the "nothing more to do" situation in order to let a patient die.

Conclusion

Throughout our monograph we have indicated many strategic places, points and problems in dying that we feel would profit from the application of our theory. By leaving these short discourses on application *in context* we trust they have had more meaning than if gathered into a single chapter.

We have made this effort to establish a "practical" theory also because we feel, as many sociologists do and as Elbridge Sibley has written: "The popular notion that any educated man is capable of being his own sociologist will not be exorcised by proclamation; it can only be gradually dispelled by the visible accomplishments of professionally competent sociologists." ¹⁹ By attempting to develop a theory that can also be applied, we hope to contribute to the accomplishments of sociology. Social theory, in turn, is thereby enriched and linked closely, as John Dewey remarked thirty years ago, with the pursuit and studied control of practical matters."

Two properties of our type of an applied theory must be clearly understood. First, the theory can only be developed by trained sociologists, but can be applied by either laymen or sociologists; Second, it is a type of theory which can be applied in a substantive area which entails interaction variables. Whether it would be a useful type of theory for areas where interaction is of no powerful consequence (that is, where large scale parameters are at issue, such as consumer purchase rates, birth control, the voting of a county, desegragation of a school system, and audiences for TV) remains unanswered.

Endnotes

Applied theory can be powerful for exactly the reasons set forth by John Dewey, some years ago: "What is sometimes termed 'applied' science . . . is directly concerned with . . . instrumentalities at work in effecting modifications of existence in behalf of conclusions that are reflectively preferred . . . 'Application' is a hard word for many to accept. It suggests some extraneous tool ready-made and complete which is then put to uses that are external to its nature. But . . . application of `science' means application in, not application to. Application in something signifies a more extensive interaction of natural events with one another, an elimination of distance and obstacles; provision of opportunities for interactions that reveal potentialities previously hidden and that bring into existence new histories with new initiations and endings. Engineering, medicine, social arts realize relationships that were unreal-, ized in actual existence. Surely in their new context the latter are understood or known as they are not in isolation." Experience and Nature (Chicago: Open Court Publishing Company, 1925), pp. 161-162.

² For many years, Herbert Blumer has remarked in his classes that sociologists perennially import theories from other disciplines that Aido not fit the data of sociology and inappropriately apply sociolordal theories developed from the study of data different than that under consideration. *Cf.* "The Problem of the Concept in Social Psychology," *American Journal of Sociology* (March, 1940), pp. 707-719. For an analysis of how current sociological methods by their very nature often result in data and theory that does not fit the realities of the situation see Aaron V. Cicourel, *Method and Measurement in Sociology* (New York: Free Press of Glencoe, 1964).

³ Our position may be contrasted with that of Hans L. Zetterberg who, after some exploratory research to determine problems, bypasses development of substantive theory and goes directly to formal theories for help. He says, "We must know the day-by-day issues facing the practitioner and then search the storehouse of academic knowledge to see whether it might aid him." *Social Theory and Social Practice* (New York: Bedminster Press, 1962), p. 41.

⁴ This is noted by Wilbert Moore in "Predicting Discontinuities in Social Change," *American Sociological Review* (June, 1964), p. 332, and in *Social Change* (Englewood Cliffs, N. J.: Prentice-Hall, 1963), preface and Chapter I.

Thus, in contrast to Zetterberg who renders his data directly with a formal theory, we first develop a substantive theory from the data which then becomes a bridge to the use of what formal theories may be helpful. By bridging the relation of data to formal theory with a carefully thought out substantive theory the forcing, distorting and neglecting of data by rendering it with a formal, usually "thought-up," theory is prevented in large measure. See Zetterberg, op. cit., Chapter 4, particularly pp. 166-178.

- ⁵ In contrast, both Zetterberg and Gouldner imply by their direct use of formal theory that the practical use of sociological theory is the *monopoly* of the sociologist as consultant, since, of course, these formal theories are difficult ehough to understand by sociologists. Zetterberg, *op cit.* and Alvin W. Gouldner, "Theoretical Requirements of the Applied Social Sciences," *American Sociological Review*, Vol. 22 (February, 1959). Applying substantive theory, which is easier to understand, means also that more sociologists can be applied social theorists than those few who have clearly mastered difficult formal theories to be "competent practitioners of them." Zetterberg, *op. cit.*, p. 18.
- ⁶ Another substantive theory dealing with juvenile delinquency, in David Matza, *Delinquency and Drift* (New York: Wiley, 1964), provides a good example of our point. This is a theory, that deals with "what is going on" in the situations of delinquency. It is *not* another renditiggp of the standard, formally derived, substantive theories on delinquentli which deal intensively with classic ideas on relations between culture and subculture, conformity, opportunity structures, and social stratification problems, such as provided in the formal theories of Merton and Parsons and as put out by Albert Cohen and Richard Cloward and Lloyd Ohlin. As a result two probation officers of Alameda County, California, have told us that at last they have read a sociological theory that deals with "what is going on" and "makes sense" and that will help them in their work. Thus, they can apply Matza's theory *in* their work!
- ⁷ See Rensis Likert and Ronald Lippitt, "The Utilization of Social Science," in Leon Festinger and Daniel Katz (eds.), *Research Methods in the Behavioral Sciences* (New York: Dryden Press, 1953), p. 583.
- ⁸ On sensitizing concepts see Herbert Blumer, "What is Wrong with Social Theory," *American Sociological Review*, 19 (February, 1954), pp. 3-10, quote on p. 9.
 - ⁹ Zetterberg has made this effort in choosing concepts with much success, op. cit., p. 49 and passim.
- ¹⁰ "Gouldner *(op. cit.,* pp. 94-95) considers in detail the importance of testing the favored hypotheses of men who are in the situation. However, we suggest that the person can test his own hypotheses too, whereas Gouldner wishes to have a sociologist do the testing.
 - ¹¹ " Zetterberg, op. cit., p. 187.
 - 12 Ibid.
- ¹³ This theme on integration into a theory as a source of confirming a fact or a proposition is extensively developed in Hans L. Zetterberg, *On Theory and Verification in Sociology* (New Jersey: Bedminster Press, 1963).
 - ¹⁴ Zetterberg, *Social Theory*, op. 'cit., pp. 188-189.
- ¹⁵ "Ibid., p. 139. This dictum is based on the idea: "The crucial act here is to deduce a solution to a problem from a set of theoretical principles." Theoretical principles refer to laws of formal theories.
- ¹⁶ " At a lower level of generality, in much consulting done by sociologists to industrial firms, hospitals, social agencies, and the like, what is usually offered by the sociologists is "understanding," based upon an amalgam of facts intuitively rendered by references to formal theory and some loosely integrated substantive theory developed through contact with a given substantive area over the years. (Sometimes this is abetted, as in consumer research, by relatively primitive but useful analyses of data gathered for specific purposes of consultation.) Providing that the amalgam makes "sense" to the client and that he can see how to use it, then the consultation is worthwhile. Conversely, no matter how useful the sociologist may think his offering is, if the client cannot "see" it then he will not find the consultation very useful. See also Zetterberg, *op. cit.*, Chapter 2.
- ¹⁷ " Elements of "material culture" should not be neglected in development of substantive theory. Gouldner suggests they are the "forgotten man of social research": *op. cit.*, p. 97.
- ¹⁸ " On the lay referral system see Eliot Freidson, *Patients' Views of Medical Practice* (New York: Russell Sage Foundation, 1961), Part Two.
 - ¹⁹ The Education of Sociologists in the United States (New York, Russell Sage Foundation, 1963), p. 19.
- See "Social Science and Social Control" in Joseph Ratner (ed.), *Intelligence in the Modern World, John Dewey's Philosophy* (New York: Modern Library, 1939), pp. 949-954.

This text is a reprint of the Preface of Awareness of Dying (1965)

by Barney G. Glaser and Anselm L. Strauss

PREFACE

Once upon a time a patient died and went to heaven, but was not certain where he was. Puzzled, he asked a nurse who was standing nearby: "Nurse, am I dead?" The answer she gave him was: "Have you asked your doctor?"

-Anonymous, circa 1964

Recently *The New York Times* reported: "VERY ILL CHILDREN TOLD OF DISEASE; Leukemia Patients at N.I.H. Not Shielded From Truth. . . . A child should always be told the truth, even when he has an incurable disease such as leukemia, according to two researchers who interviewed 51 children hospitalized at the National Cancer Institute, Bethesda, Maryland, for treatment of leukemia." This kind of news item reflects the growing concern among researchers and public about matters which touch on morality as much as on the technical aspects of medicine. The rapidly increasing proportion of elderly people in the American population presents a range of personal and social questions; not the least is how they view their newly won longevity (often including anticipated years of chronic disease) as well as their attitudes toward death. In consequence, many geriatric specialists are beginning to study American attitudes toward death, while others, spurred on by what seems a senseless prolonging of life within hospital walls by medical technology run wild, are raising questions about death and dying in American life.

Our book is no exception to this trend; indeed, we would further it. We wish to contribute toward making the management of dying—by patients, families and health professionals—more rational and compassionate (and the two are far from incompatible). The chief differences between our approach and others' can be quickly summarized. Recognizing that most Americans are now dying inside hospitals, we have focused upon what happens when people die there. We have focused on the interaction between hospital staffs and patients, rather than on the patients themselves. We have reported on contexts of action rather than merely on "attitudes toward death." And we have been less concerned with death itself than the process of dying—a process often of considerable duration.

This approach reflects our sociological perspective, for we have attempted to channel our reforming impulses into an inquiry not at all medical in character. If increasingly Americans are dying within medical establishments, surrounded more by nurses and physicians than by kinsmen, then how do these representatives of the wider society manage themselves and their patients while the latter are dying? How is the hospital's organization capitalized upon in this process? What forms of social action, transitory or more permanent, arise while handling the dying of people? What are the social consequences for the hospital and its staff, as well as for the patients and their families?

To answer these kinds of questions, we did intensive fieldwork (involving a combination of observation and interviewing) at six hospitals located in the Bay area of San Francisco. We chose a number of medical services at each hospital, selected, as we shall explain later, to give us maximum exposure to different aspects of dying-locales where death was sometimes speedy, sometimes slow; sometimes expected, sometimes unexpected; sometimes unanticipated by the patient, sometimes anticipated; and so on. The reader who is unacquainted with this style of field research need only imagine the sociologist moving rather freely within each medical service, having announced his intention of "studying terminal patients and what happens around them" to the personnel. The sociologist trails personnel around the service, watching them at work, sometimes questioning them about its details. He sits at the nursing station. He listens to conversations himself. Occasionally he queries the staff members, either about events he has seen or events someone has told him about. Sometimes he interviews personnel at considerable length, announcing "an interview," perhaps even using a tape recorder. He sits in on staff meetings. He follows, day by day, the progress of certain patients, observing staff interaction with those patients and conversation about the patients among the personnel. He talks with patients, telling them only that he is "studying the hospital." His fieldwork takes place during day, evening and night, and may last from ten minutes to many hours.

In presenting what we observed by such methods, we might have organized our analysis in this book to highlight differences and similarities among the various medical services. Instead, we chose to offer our readers a more abstract—and so more powerful—explanatory theoretical scheme. This scheme arose from scrutiny of the data and should illuminate the data far more than a comparative analysis of the medical services. Our analysis is based upon what we term "awareness context," which is discussed in Chapter I; here we need only note that this term refers to who, in the dying situation, knows what about the probabilities of death for the dying patient. It makes a great deal of difference who knows what, and the use of this scheme allows the organization of many events that otherwise might seem disconnected or paradoxical.

The efficiency of the scheme allows us to claim—we believe with some persuasiveness—that discernible patterns of interaction occur predictably, or at least nonfortuitously, during the process of hospitalized dying, and that explicit knowledge of these patterns would help the medical staff in its care of dying patients. Physicians and nurses tend to regard such events either in mythological terms (some mythologies are touched upon later) or to discount patterned events in favor of the uniqueness of events (everyone is "a different personality," so dies differently and must be handled differently). A group of eminent physicians hearing of our analysis before its actual publication, we were told, remarked flatly that sociologists have nothing useful to offer physicians. Theirs was a natural reaction to the invasion by outsiders of a delicate and somewhat mysterious realm. We have not meant to scientize this realm, nor to offer commentary that would freeze and prematurely professionalize care for the dying by hospital staffs. Our intent was, above all, to ask whether people can die socially before they die biologically, and what this means for human relationships. If our report makes matters easier for people who must live around the dying (and vice versa), it will only be because critical intelligence is brought to bear on

our findings and on common practices in American hospitals. Perhaps, then, hospital personnel will not laugh quite so wryly at the anonymous lines, quoted above, about the patient's puzzled query of a nurse.

Awareness of Dying was planned as the first of a series of four monographs resulting from a six-year research financed by the National Institutes of Health (grant number NU 00047). The second monograph will discuss the course, or trajectory, of dying; and the third, by Jeanne Quint, will be titled *The Nurse Student and the Dying Patient*. A fourth volume will deal with staff-family interaction in dying situations.

The authors of *Awareness of Dying* are indebted to a great many people. They wish especially to thank the third member of the project team, Miss Jeanne Quint, for her almost daily invaluable support; also Mrs. Elaine MacDonald and Miss Ruth Fleshman, who assisted in data collection during an early phase of the project. Howard Becker, editor of the "Observations" series in which this book appears, read our original manuscript with an appreciative but unusually critical eye, and we wish to thank him here. From a number of colleagues, we received general support and specific commentary: among them, Herbert Blumer, Fred Davis, and Louis Schaw. Strauss appreciates his conversations with Leonard Schatzman. We had a very useful early exchange with Dr. Melvin Sabshin and equally useful later conversations with several nurse educators, especially Miss Helen Nahm, Miss Jeanne Hallburg and Mrs. Mildred McIntyre.

Like all field researchers, we are especially indebted to many persons who worked at the field-work locales. They are far too many to cite by name, but we wish at least to express our gratitude to them and their institutions: especially Moffitt Hospital (University of California Medical Center, San Francisco); Providence Hospital, Oakland; the Veterans Administration Hospital at Oakland; the Napa State Mental Hospital; the San Francisco General Hospital; and Highland Hospital in Oakland.

Miss Karen Many edited and Mrs. Kathleen Williams helped to type first draft manuscript. Miss Bess Sonoda, our project secretary, is the hitherto "without whom" unsung heroine of our manuscript; we thank her, too.

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Perpetual Betterising: A Grounded Upgrading of Disruptive Innovation Theory Resolving Co-dependent Socio-economic Main Concerns

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Abstract

Clayton Christensen's theory of disruptive innovation has a partial ancestry in classic grounded theory (CGT), anchored in the original methodological ideas of inductive theory-building, categorisation, formal theory, and modifiability. The locus of disruptive innovation theory resides at the nexus of sociology and economics. The inescapable sociological pedigree of this theory naturally lends itself to CGT analysis. Christensen's theory cores out with a variable of perpetual betterising recurrently resolving co-dependent main concerns held by a firm's dominant coalition and the recipients of organisation-created value. Christensen's theory is upgraded by employing reconstructive processes to rid it of margins of error (conceptual-descriptive syncretism) and margins of terror (unintended imposition and pre-conceiving). Perpetual betterising is a multivariatised conceptual model. The categories comprising perpetual betterising lend themselves to threading together by a biological species evolution-invasion theoretical code. Through the lenses of perpetual betterising, this paper explores long-standing and current debates around disruptive innovation.

Keywords: co-dependent main concerns, perpetual betterising, socio-economic locus, CGT ancestry, biological species evolution-invasion, cycle of theory-building in management research.

Introduction

Danneels (2004) and Markides (2006) have lamented that, despite the widespread use of the term disruptive innovation, there seems to be ambiguity over the precise meaning of the phenomenon. Clayton Christensen, the progenitor of the theory of disruptive innovation is on record:

The theory explains the phenomenon by which an innovation transforms an existing market or sector by introducing simplicity, convenience, accessibility, and affordability where complication and high cost are the status quo. Initially, a disruptive innovation is formed in a niche market that may appear unattractive or inconsequential to industry incumbents, but eventually the new product or idea completely redefines the industry. (Christensen Institute, 2015, para. 1)

Christensen, Raynor, and McDonald (2015) pinpointed the brass tacks of disruption:

Disruption describes a process whereby a smaller company with fewer resources is able to successfully challenge established incumbent businesses. Specifically, as incumbents focus on improving their products

and services for their most demanding (and usually most profitable) customers, they exceed the needs of some segments and ignore the needs of others. ... When mainstream customers start adopting the entrants' offerings in volume, disruption has occurred. (para. 7, parentheses are theirs)

The term disruption has grown to mean two things as used by Christensen and Raynor (2003) and Christensen (2006). First, it can be used as shorthand for disruptive innovation. Second, when pre-fixed with "a", for example, "a disruption", it refers to a particular innovation.

Background to the Study

In my quest for a methodology to employ to try and solve the South African mobile money transfer non-adoption puzzle, I applied Carlile and Christensen's (2005) cycle of theorybuilding approach. From pursuing this approach, I realised that Clark Gilbert's theory of threat-opportunity framing, a variant of disruptive innovation, held the promise to unlock the non-adoption conundrum. I tested Gilbert's (2002, 2005, 2006) model using case data from South Africa and found instances anomalous to Gilbert's theory. Despite a careful study of Christensen's papers, I failed to locate in his treatises a systematic procedure to generate these categories. A closer study showed that Christensen's idea of categorisation had been directly inspired by Glaser and Strauss's (1967) discourse (Christensen & Carlile, 2009; Christensen & Sundahl, 2001). This discovery instigated an in-depth study of Glaser's works, thereby tracing the historical development of his ideas from 1964 to the present. Cycling back to Christensen's cycle of theory-building, I critically evaluated the model through the lenses of CGT. With the newly found methodological eyes of CGT, I began surfacing aspects of Christensen's theory-building cycle that were directly influenced by CGT. I discovered that Christensen's (2006) idea of prescriptive or normative theory was leased directly from CGT's formal theory:

Similarly, Glaser and Strauss's (1967) treatise on "grounded theory" actually is a book about categorization. Their term *substantive theory* corresponds to the attribute-bounded categories of descriptive theory. And their concept of *formal theory* matches our definition of normative theory, which employs categories of circumstance. (p.44, emphasis is his).

Immediately, it dawned that Christensen had misunderstood the fundaments of CGT. It was apparent that Christensen was not aware of the fact that CGT is non-descriptive through and through, whether at the substantive or formal stage. Another critical misconstruction in Christensen's understanding of CGT that surfaced is the explicit denial that CGT is a theory. Christensen and Sundahl (2001) are emphatic in this non-theory conviction in the sense of their definition that "A theory is a statement of what causes what, and why" (p. 2). They stated:

In fact, Glaser & Strauss' (1967) landmark work on the development of grounded theory is not about theory at all—it relates to classification. Their use of the term "grounded" reflects their insight that unless a statement of cause and effect is built upon the foundation of a robust classification system, it cannot be useful. (Christensen & Sundahl, 2001, pp. 6-7)

Evidently, Christensen seems to be unmindful of the importance of CGT's central ideas such as theoretical coding and that hypotheses can be postulated based on the apparent

relationships between and among conceptual categories. It became lucid that Christensen had ended his dalliance with CGT with the seminal work of 1967. Subsequent explications of CGT (Glaser, 1978, 1992, 1998, 2001, 2003, 2005) seemed to have escaped Christensen's attention. It also dawned that Christensen's phases of building and improving on disruptive innovation (Christensen, 2006) could be framed as CGT work-in-progress. This presented a very big challenge in that I realised that in my own research, while trying to explain the South African mobile phone money transfer non-adoption puzzle, I had imposed categories. I had yielded to the margin of terror (pre-conception and imposition)—a cardinal sin under the CGT methodology. I decided to place a moratorium on my research effort. However, at the back of mind I was troubled that I had to abandon all the hard work of several years I had put in.

An idea struck me: why not do a study that employs CGT methodology to improve Christensen's theory? I realised that by taking data employed by Christensen in his seminal study, I could subject these data to the full gamut of CGT procedures. It also became apparent that each subsequent study done by Christensen could be treated as a theoretical sample. Christensen's work since 1993 could be viewed as an evolving CGT study spanning several years of patient but rigorous research. It emerged that since "all is data" (Glaser, 2007, p. 1) in CGT, I had already amassed a huge cache of data I could code. Glaser and Strauss's (1967) insight that "When someone stands in the library stacks, he is, metaphorically, surrounded by voices begging to be heard" (p. 163) made me realise that I could profitably use secondary sources to amplify the voices locked up in published works and let the main concern surface. It was very gratifying and liberating to realise suddenly that observations I had made, papers I had read, articles I had penned, videos I had watched, and certain icons I had given passing notice were potential sources of data to be coded and constantly compared.

Methodological Steps

Glaser (2006) alluded to a technique of conceptualising descriptive data derived from case studies: "The latent patterns within the case, as revealed descriptively, are used as a basis for generalizing conceptually" (p. 20).

This technique supplied the impetus to turn the rich data descriptions embedded in text, quantitative figures, and visuals already presented by Christensen on his seminal study of the rigid disk drive industry into conceptual insights.

As a starting point, I revisited Christensen's (1993) paper, a descriptively rich historiography of the evolution of the world's rigid disk drive between 1976 and 1990. I subjected these data to open coding. Open coding is the process of analysing data line-by-line, comparing incident to incident, and incident to category. This is done continually guided by a quartet of questions to abstract above the descriptive level of data: "what category does this incident indicate?", "what property of what category does this incident indicate?", "what is the main concern faced by the participant?", and "what accounts for the continual resolving of this concern?" (Glaser, 1998, p. 140).

Memos were used to record thoughts on emerging codes, conceptual patterns (categories), emerging theoretical codes, and hypotheses.

A few examples of how data were subjected to incident-to-incident and incident-to-category categorisation will be sampled to illustrate how the process of CGT inductive theory-building evolved. The following extract from Christensen (1993) will be considered to illustrate the initial open coding:

Without exception, the start-ups that grew to dominate the world industry were focused exclusively on manufacturing rigid disk drives. . . start-ups that successfully entered in the later period were progressively less vertically integrated than those that had entered earlier" (p. 544).

Coding this block of data yielded the following initial codes: hegemoning and fragmenting (indicated by the phrase "grew to dominate the world industry"), and de-complexed (indicated by the phrase "were progressively less vertically integrated"). Comparing incident to incident, the phrase "were focused exclusively on manufacturing disk drives" was taken as an interchangeable indicator for the code "de-complexing". In Christensen's (1993) historical narrative, reference was made to the mainframe, mini and desktop computers. It was apparent that this was an incident. I coded this incident "compacting". Incident-to-incident and incident-to-category comparison placed this pattern under "de-complexing". An analysis of Christensen's (1993) narration showed a similar progressive miniaturisation of rigid disk drives. A picture of the first disk drive made by IBM in 1956, included in Christensen (1993), in which IBM's engineers are said to have given it the moniker "the baloney slicer" (p. 534), evoked a hidden incident. The sequence of baloney slicer (more than the size of a standard Zimbabwean executive desk); 14-inch disk drives; 8-inch drives; 5.25-inch drives, 3.5-inch drives and 2.5-inch drives confirmed "compacting".

Other patterns and sub-patterns were similarly surfaced.

From coding the qualitative and quantitative narratives from Christensen (1993), Glaser and Strauss' (1967) voices interned in these data were still unclear—the main concern was still elusive. I turned to Christensen and Bower's (1996) paper that dealt with the same rigid disk drive industry for more data to code and constantly compare. In Christensen and Bower, there were additional data comprising analyses that Christensen had made based on interviews which "came from over 70 personal, unstructured interviews conducted with executives who are or have been associated with 21 disk drive manufacturing companies)" (Christensen & Bower, 1996, p. 200). From this paper, I continued open coding of textual, pictorial, tabular and quantitative data.

Core Variable and Theoretical Code Emergence

The incident "forecast profit margins were also lower than established firms had come to require" was coded as "betterising profits". This block of data yielded the first clear indication what was the main concern: the managers were interested in incremental profits. The incident "These (sustaining projects) would give their customers what they wanted, could be targeted at large markets, and generate the sales and profits required to maintain

growth" (Christensen & Bower, 1996, p. 209, parentheses are mine) made it even clearer that incremental growth was the most problematic issue for managers. This indicator was interchangeable for "betterising profits". It also became apparent that existing and new markets embraced the architectural innovations (disrupting and sustaining) in that these improved their prior consumptive status. Incidents conceptually showing that recipients of firm-created value experienced improvement from a prior value experience ranging from a base of zero formed interchangeable indicators for the coded pattern labeled value-recipient betterisation. Incident-to-category comparison showed that betterisation seemed to relate to all the conceptual patterns that had already emerged. The core variable had emerged. Substantive coding ceased; I embarked on selective coding.

Next, I coded data from Christensen's subsequent papers and audio-visuals on the U.S.'s steel industry. The U.S.'s steel industry was treated as a site for theoretical samples. Granulated properties of fragmentation emerged from the selective coding and from comparing incidents based on the U.S.'s steel industry. The incidents from the U.S.'s steel industry gave a hint that a biological species-invasion theoretical code could be the unifying conceptual frame for all the categories. Treating the cases from Zimbabwe's mobile phone money transfer as theoretical samples resulted in further selective coding yielding further properties for the pattern of fragmentation. This pattern of fragmentation was arrived at through conducting six interviews in Zimbabwe, based on a focused question: what led you to open a mobile phone money transfer account? Field notes were taken and incidents were coded. Selective coding avoided data overwhelm since only those indicators that yielded new conceptual properties were subjected to coding and constant comparison. Selective coding continued until no conceptual properties emerged. Each category and sub-category had become theoretically saturated.

It should be noted that renaming conceptual patterns was an ongoing process that sought to capture the best appellation. Thus, some of the codes examined in this section may be different from the ones settled for in the final CGT.

Coding Literature as Data and Memo-Sorting

I proceeded to code literature that seemed to relate to the categories that had emerged. It was at this time when the literature review I had done in my initial, nearly abandoned study became handy. The relevant literature is addressed in detail in the next section where the full CGT of perpetual betterising is presented.

It was now time to sort the memos.

Memo-sorting presented no challenge: category–to-category comparison showed that the earlier indication that a biological species evolution-invasion model could be the integrative theoretical code was confirmed. Thus, this code provided the outline for writing the emergent CGT.

Perpetual Betterising and its Densified Conceptual Patterns

Perpetual betterising is bi-dimensional and resolves two compounded but co-dependent main concerns. The first main concern is business-framed and parallels Prahalad and Bettis's (1986) idea of dominant general management logic held by a firm's dominant coalition (Bettis & Prahalad, 1995). The second main concern focuses on the existing customers' most problematic issue: getting better and better value. Perpetual betterising is not the monopoly of sustaining—a disruptive and a sustaining innovation share a similarity—they each betterise the user and the supplier of the innovation. Betterising economic value is akin to Prahalad's (2004) blinders of general management dominant logic. Economic value is taken to mean a positive change from a prior identified economic position such as profit. At a higher conceptual level, betterising economic value is the quintessential obligatory ritual demanded by the church of capitalism.

Perpetual betterising is knitted together by the following substantive variables: disruptive innovation and sustaining innovation are its twin sub-core categories. Disruptive innovation comprises of the following variables: de-complexed architecture, cost recovery, and superiorising. Cost recovery is granulated into trial, shoehorned trial, blue ocean, terminal disruption, elasticisable disruption, and kindred intermediary. De-complexed architecture is undergirded by compacted architecture and micro-performanced architecture. Superiorisation is underpinned by fragmentation, insistent vertical fragmentation, and horizontal insistent fragmentation. The key driver variable of sustaining innovation is inter-dependenced architecture. Hegemoning is a lower-level theoretical code that links disruptive and sustaining innovation.

Every CGT has an implicit high-level integrative theoretical code (Glaser, 2005). The cored disruptive and sustaining innovation categories and their densified subcategories lend themselves to modeling by a biological species evolution-invasion theoretical code, which can be classed under Glaser's (1978) strategy family of theoretical codes. Four phases provide the superstructure of perpetual betterising: genesis, growth, invasion-displacement, and hegemoning-replacement.

De-complexed architecture and its sub-patterns and part of cost recovery, namely shoehorned trial and kindred intermediary connote the genesis phase of the evolution-invasion typology. Blue ocean makes up the growth phase. It needs to be noted that kindred intermediary overlaps into the growth phase. Superiorising and fragmentation represent the invasion-displacement phase. Insistent fragmentation corresponds to the hegemoning-replacement phase. Thus fragmentation bridges growth and invasion. Insistent fragmentation dismantles the meta-parts of a sustaining innovation, manifesting as serial disruptions capturing a bigger share of available value, which ranges from 50 to 100%. This range of usurped value is what is styled as hegemoning. One hundred per cent fragmentation denotes replacement or the extincting [sic] of a sustaining innovation.

A disruptive innovation is like a lower form of evolving life characterised by decomplexity. In sharp contradistinction, a sustaining innovation proxies a higher form of evolution marked by increasing survival knack (hypothesis). The potency of a disruption is

that it evolves from lower life forms to the higher life form and breaches into the typological adjacent colonies, displacing native species due to its genetic potency acquired in the lower life environment combined with its ability to mimic the best qualities of the species in the invaded territory (hypothesis).

The genetic peculiarities of the invading and invaded species are a typology that explains the logic that the management of a disruptive and a sustaining innovation within the same firm requires distinct managerial DNAs (hypothesis).

The apparent respect for territorial integrity of a new species growing in virgin territory is a typology that elucidates why a sustaining innovation initially appears to be immune from an emerging disruption. A disruption camouflages its intention to colonise and hegemonise, imbuing it with surprise-attack potency (hypothesis).

Perpetual betterising will be explained following the emergent sequences of the biological species evolution-invasion theoretical code.

Genesis Phase

De-complexed architecture is the primary pattern that defines disruptive innovation. It is the defining gene of disruptive innovation. Architecture is taken to mean Henderson and Clark's (1990) architecture. Therefore, architecture refers to the way the individual components making up an innovation relate. De-complexed architecture is the deliberate process of creating the basis for betterising by significantly lowering the cost structure of producing and using an innovation that produces the same functionality as a sustaining innovation through the application of technology. De-complexed architecture is directly responsible for enabling the substitution of experts by non-experts by a disruption without compromising minimum customer-expected performance standards. Here, we shall lease the concept of technology from Dosi (1982) to explain de-complexed architecture. Of technology, Dosi argued:

Let us define technology as a set of pieces of knowledge, both directly "practical" (related to concrete problems and devices) and "theoretical" (but practically applicable although not necessarily already applied), know-how, methods, procedures, experience of successes and failures and also, of course, physical devices and equipment. (1982, p.151-152, parentheses are his).

Clearly, Dosi (1982) does not restrict technology to the engineering and technical features of gadgets. Instead, he proposed a novel concept of technology-as-knowledge. Decomplexed architecture is instigated by application of technology to replicate the functionality of a forerunner innovation using a different architecture, which architecture dramatically reduces the cost of producing, distributing and consuming the innovation. The knowledge employed to de-complex can be either simple or complex. De-complexed architecture enables a disruptive innovation to mimic the function of a sustaining innovation, but not its architecture and componentry, allowing a comparable performance level to be produced at a relatively low cost. De-complexed architecture is engendered by a

compacted architecture which imbues a disruptive innovation with both low-cost leverage and potential novel utility that can be embraced by potential users.

Compacted architecture seeds a potential disruptive innovation with the capacity to betterise large populations of people who are currently excluded from accessing the core function provided by a sustaining innovation. This is achieved through the scaling down of the physical dimensions of the potential disruptive innovation. Compacted architecture enables a disruption to be geographically dispersed through decentralising to smaller and potentially low-cost centre locations. A compacted architecture imbues portability through enabling miniaturisation. Miniaturisation enables the geographical decentralisation of the compacted architecture, handing the adopters of the compacted architecture control of the locale from which to access a disruption. A compacted architecture brings convenience to the adopters of a disruption by offering the ability to manipulate the timing of access to the disruption.

De-complexed architecture initially results in a micro-performanced architecture (hypothesis).

Micro-performanced architecture is the enabling of a potential disruption to provide a functional performance level that is below the least possible performance level provided by a sustaining innovation. Micro-performanced architecture infuses a disruptive innovation with the ability to betterise users who may need a functional performance level below a sustaining innovation's performance floor. Performance floor is taken to mean the least possible core functional performance level that can be provided by a specific sustaining innovation.

For a micro-performanced architecture to be commercialisable, it needs to first recover the cost of producing that micro-performanced architecture (hypothesis).

Cost recovery is the process of betterising the disruptor by recouping the cost of producing the micro-performanced architecture. This is achieved through offering the micro-performanced architecture to a group of potential users with the economic wherewithal to betterise the introducer of the micro-performanced architecture who can, in turn, be betterised by it. The descriptive identity of who possesses these economic resources is irrelevant. That potential market can be any of the Kim and Mauborgne's (2005) triad of noncustomers or a combination thereof: "soon-to-be noncustomers (first-tier noncustomers) (2005, p.104, emphasis is theirs, parentheses are mine)," "refusing noncustomers (second-tier noncustomers). . . (Kim & Mauborgne, 2005, p.107, emphasis is theirs, parentheses are mine)," and the "unexplored noncustomers (third-tier noncustomers) have not been targeted or thought of as potential customers by any player in the industry (Kim & Mauborgne, 2005, p.109, emphasis is theirs, parentheses are mine)."

The pattern of disruptive innovation mostly taking root in new and peripheral markets is a consequence of the choice of the core functional performance ceiling the disruptor fixes. If the disruptive innovation's core functional performance ceiling is below the sustaining innovation's performance floor, it increases the probability of a disruptive

innovation being embraced by Kim and Mauborgne's (2005) first-tier, second-tier and third-tier noncustomers (hypothesis).

Every disruptive innovation attempts to recover the cost of producing the microperformanced architecture by the pattern of trial (hypothesis).

Trial is initially coded from a recurring incident in the disk drive industry in which frustrated engineers fissioned out (Zeigler, 1985) from incumbent firms and offered potential disruptive disk drives to incumbent markets (Christensen & Bower, 1996). Trial is the search for potential users who can betterise the disruptive innovator and, in turn, can be betterised by the disruptive innovation proposal. The disruptive innovation proposal potentially betterises Kim and Mauborgne's (2005) noncustomers by replicating the sustaining innovation's core functionality, micro-performanced architecture, and the addition of unique performance benefits wrought by a de-complexed architecture.

Cost recovery first proceeds through rigid behaviour in the form of the pattern of shoehorned trial (hypothesis).

Shoehorned trial is a search for adopters of a potential disruptive innovation driven by the desire to optimise a disruptive innovator's profit betterising at market entry. This optimisation is actuated by offering a disruptive innovation proposal to potential users with the highest perceived economic ability to optimise an entry-economic value betterising. Shoehorned trial is an attempt to optimise debut economic value.

Shoehorned trial has a nuance in the form of a sub-pattern called kindred intermediary.

Kindred intermediary is the adoption of an architectural innovation by the relatively well off, with this innovation being relatively sustaining. These first-adopters in turn influence Kim and Mauborgne's (2005) unexplored noncustomers with whom they have social ties to adopt the same architectural innovation. The same architectural innovation is relatively disruptive to the unexplored noncustomers, making the architectural innovation concurrently sustaining and disruptive. Kindred intermediary is a new property to disruptive innovation. Perpetual betterising reconciles the seeming paradox that an innovation can be simultaneously sustaining and disruptive. More critically, kindred intermediary brings into sharp focus the hypothesis that disruptive and sustaining innovations can be co-dependent.

Kindred intermediary overlaps into the growth phase.

Growth Phase

Every disruptive innovation is conceived in the womb of a blue ocean (hypothesis).

Blue ocean is a nuance of trial. Blue ocean is a search for the alternative users of a disruptive innovation proposal after shoehorned trial fails at cost recovery. Blue ocean occurs when potential users of a disruptive innovation proposal currently perceived to have

the highest economic ability to optimise a disruptive innovator's inaugural economic value reject the disruptive proposal. This rebuff can occur for two reasons. First, it can be actuated by a disruptive proposal's failure to betterise the user when the best performance level offered by a disruptive innovation proposal on the core functionality falls short of the expected performance requirements. Second, it can be instigated when a betterising disruption exceeds the affordability of the current users. Blue ocean, therefore, is a search for the next best economic value betteriser, which turn out to be Kim and Mauborgne's (2005) noncustomers. Blue ocean enables economic value to be betterised from a base of zilch. If blue ocean taps into Kim and Mauborgne's (2005) third-tier noncustomers, these noncustomers are betterised from zippo. Betterising first and second-tier noncustomers is achieved in that a disruptive innovation allows these noncustomers to shed excess core functional performance. This excess relates to the maximum core functional performance needs of noncustomers. These noncustomers have been historically forced to pay for this excess core utility performance offered by a sustaining innovation.

An unsuccessful shoehorned trial makes the refusing market a second-tier noncustomer (hypothesis). The essence of a disruptive innovation is that it always disrupts nonconsumption (hypothesis). If it is not disrupting nonconsumption, then it is not a disruptive innovation.

Shoehorned trial and blue ocean are conceptual patterns supported by extant literature. Kuhn (1970) asserted that researchers in a scientific community invariably assume that their paradigm is accurate, conditioning them to fit nature to their paradigm (nature-to-paradigm fit as opposed to paradigm-to-nature fit). Put differently, Kuhn's (1970) argument is that rigidity in the face of new data is the default response of a paradigm-bounded social group. The nomenclature of Christensen's trajectories is drawn from Dosi's (1982) technological paradigms and technological trajectories. In fact, Christensen's disruptive innovation theory provides empirical grounding for Dosi's conjectured technological paradigms and technological trajectories. Technological paradigm and technological trajectory are respectively paralleled by Dosi with Kuhn's (1970) twin concepts of paradigm and normal scientific research. Perpetual betterising is in essence a particular paradigm held by a firm's dominant coalition and the recipients of firm-created value, embodying the dominant logic of Prahalad and Bettis (1986). The logic is said to be dominant because it trumps all other competing logics (Blettner, 2007), hence flexibility must be preceded by rigidity. The theoretical perspective of situated social practice, commonly known as communities of practice (Lave & Wenger, 1991; Wenger, 1998, 2000, 2009) is similar to Kuhn's scientific communities. Its assertion that a situational practicebounded social group's main concern is to preserve and perpetuate what they call social competence implies that externally imposed agenda are first processed through the lenses of social competence. This is another way of asserting that regidity precedes flexibility.

A blue ocean may not have the inherent capacity to grow beyond its inaugural blue ocean cradle (first order blue ocean). Such a blue ocean is the pattern of terminal disruption.

Terminal disruption is a variant of trial. Terminal disruption is a disruptive innovation that fails to betterise users with higher betterising needs on core functionality. Terminal disruption occurs because a disruptive innovation lacks the ability to replicate its trademark de-complexity as it betterises on core utility to match the level of betterising expected by users. A terminal disruption has an inherent lack of ability to superiorise.

Invasion-Displacement Phase

This phase is a sub-stage of growth. Some disruptive innovations have the in-built ability to betterise second-tier or refusing noncustomers located upmarket. This pattern is elasticisable disruption. Elasticisable disruption is a disruptive innovation that can simultaneously replicate its de-complexity as it betterises core functionality. An elasticisable disruption possesses the ability to superiorise. Elasticisable disruption enables a disruption to invade a higher economic value margin blue ocean (hypothesis).

Superiorising is the extending of de-complexity to the current users of a sustaining innovation while replicating the core functionality of a sustaining innovation. Superiorising enables a disruption to out-betterise the current users of a sustaining innovation in that it makes the compacted architecture match the minimum customer-expected core-function performance level previously offered by a sustaining innovation and exceed it by introducing new performance criteria or utilities. At the descriptive level, dumping a sustaining innovation for a disruption might appear as de-betterising. Ironically, the acceptance of a seemingly downgraded performance optimises betterising in that a betterising disruption offers a new set of unique performance advantages in addition to core functionality. This acceptance represents a strategic trade-off of excess core utility performance for low-cost and additional utility. Superiorising gives the adopters of the superiorising architecture marginal cost savings by giving potential adopters the option to shed excess core-function performance.

A combination of superiorising and further compacting is possible and results in increasingly miniaturised, cheaper, and yet increasingly powerful (performance-wise) disruptions.

A disruption succeeds in fragmenting a sustaining innovation only because it superiorises and outperforms a sustaining innovation on an overall performance basis (hypothesis). Successful superiorising instigates the fragmenting of a sustaining innovation. It enables a betterising de-complexed architecture to disrupt what might be called second-order nonconsumption that is resident in refusing upmarket noncustomers.

Fragmentation is an attack on a sustaining innovation's complexity by lopping off parts of the sustaining innovation superiorised by a disruptive innovation. This is what many scholars have in mind when they think of the term disruption. However, disruption as defined in perpetual betterising precedes fragmentation when it establishes its genesis in a first-order blue ocean. The loped-off parts can be segments of a market tiered by economic ability, an integrated service offering (made up of a smorgasbord of services), for example.

Fragmentation occurs because a disruptive innovation is able to inferiorise a sustaining innovation or its meta-parts.

Fragmentation persists as long as opportunities for superiorising more meta-parts of a sustaining innovation are available (hypothesis). This is the onset of hegemoning.

Hegemoning-Replacement Phase

Hegemoning-replacement is a sub-phase of growth. It is the progressive usurpation and transfer of available market value to a disruptive innovation from a sustaining innovation. Hegemoning can reach 100% of usurped market value—this idea is referred to as replacement or extincting.

Insistent fragmentation is continued fragmenting driven by perpetual betterising, triggering a new but upgraded cycle, and setting up an upward spiral cycle of superiorising. It is bi-dimensional, with a horizontal and vertical component.

Horizontal insistent fragmentation is a conceptual property that was surfaced by the selective coding of data from the Zimbabwean mobile phone money transfer phenomenon. Horizontal fragmentation is the fragmenting of successive low-end services in response to artificial constraints placed on the elasticisability of a disruptive innovation. These artificial constraints place a legal barrier on the ability of a disruptive innovation to betterise vertically. Perpetual betterising instigates navigating around an artificial performance ceiling by horizontalising fragmentation (hypothesis).

Vertical insistent fragmentation is granulated from the conceptual unbundling of insistent fragmenting and is the serial fragmenting of higher value economic segments. It represents the quintessential upmarket disruption, as articulated by Christensen to date, enabled by the absence of externally imposed core functional performance ceilings.

A victorious disruptive innovation can mutate into a sustaining innovation, raising the probability that a one-time victorious disruptive innovation can become a potential replacement-displacement victim of camouflaged disruptions emerging from first-order blue oceans (hypothesis). This makes perpetual betterising a cycle. In terms of management praxis, it serves well a firm's dominant coalition to be awake to the possibility that users of a hegemoning disruption are a second-order blue ocean relative to a de-complexed architecture being cradled in a first-order blue ocean.

The hallmark of a sustaining innovation is an inter-dependenced architecture. Inter-dependenced architecture is the betterising of a sustaining innovation by adding relatively numerous inter-reliant parts resulting in complexity and a ratcheting up of cost. Inter-dependenced architecture also betterises on core functionality as a springboard to launch perpetual betterising. Inter-dependenced architecture through the agency of complexing loads costs that have to be recovered. In a for-profit organisation, the cost is normally recovered from the users. In quasi-business, part of the cost is typically recovered from a

sponsor. In a not-for profit business, the greater portion of the cost is characteristically recovered from a sponsor.

The stage is now set to tease out the thoughts of disruptive innovation's critics and apologists.

Disruption-Related Polemics Evaluated

Viewed through the lenses of perpetual betterising, disruptive innovation theory carries margins of error and terror stemming from three sources: confusing descriptive categories with substantive categories (margin of error), amalgamating descriptive and conceptual categories (margin of error), and pre-conceiving and pre-framing (margin of terror). Perpetual betterising rids disruption and sustaining innovation of these margins of error and terror. These have already been alluded to in depth in the section on data and methodology as the principal motivations that instigated this study to upgrade disruptive innovation theory. It suffices to highlight that all the criticisms leveled at disruptive innovation have their etiology in these margins of error and terror. Before proceeding to give voice to disruptive innovation's critics and apologists, the role of imposition in the building of disruptive innovation needs to be expanded on. The research stream—namely Dosi (1982), Tushman and Anderson (1986), and Henderson and Clark (1990), in which Christensen located disruption theory—has a documented history of pursuing a research agenda ferreting out the reasons for the failure of incumbent firms in the face of emergent technologies. Evidently, Christensen inherited this research agenda and thus was theoretically conditioned to impose the descriptive categories of incumbents and start-ups on his theory. This unintended capitulation leads to the margin of terror. Multivariatising enables perpetual betterising to build hypotheses based on emergent and fully conceptual patterns and sub-patterns.

Enter the critics.

Disruption's Critics and their Critiques

In true CGT fashion, the sampled critiques and apologies are illustrative in essence since writing in CGT must be kept at a conceptual level. Three critics of disruptive innovation, Constantinos Markides, Charitou Constantinos and Jill Lepore will be treated as sources of a representative range of common polemics surrounding disruptive innovation. Other notable critic-apologists (Chesborough, 1992, 1992b; Danneels, 2004; Gilbert, 2002, 2005, 2006, 2014) simply profit from the flaws inherent in disruptive innovation occasioned by the margins of error and terror.

Charitou and Markides (2003) provided the opening polemic:

Strategic innovation means an innovation in one's business model that leads to a new way of playing the game. Disruptive strategic innovation is a specific type of strategic innovation —namely, a way of playing the game that is both different from and *in conflict with* the traditional way. (para. 4, emphasis is theirs)

Porter (1996) stated that, "The essence of strategy is choosing to perform activities differently than rivals do" (p.64). Disruptive and sustaining innovations, as originally conceived by Christensen (1993), are inherently strategic in the Porterian sense. A disruptive path is innately "in conflict with the traditional way" (Charitou & Markides, 2003, para. 4), a point that is embedded in the very appellations of the disruptive and sustaining categories. Since the work of Charitou and Markides (2003) emerged 12 years after Christensen published his disruptive innovation theory their embellishing disruptive innovation to disruptive strategic innovation is an oxymoron.

Charitou and Markides (2003) committed the error of stretching disruptive innovation beyond its theoretical carrying capacity. This confusion is apparent in the following lines:

As with every disruptive innovation, the innovators did not attack by trying to become better at providing the product attributes that the established competitors (the Swiss) were emphasizing (quality of the movement and accuracy). Instead, they focused on different product attributes — price, features and functionality. (para.28, parentheses are theirs).

What the authors mean by different product attributes is explicated:

The new watch did not pretend to be better than Seiko or Timex in price or performance. Instead, it emphasized a totally different product attribute—style. Instead of responding to the disruptive game by embracing it, the Swiss chose to disrupt it. (Charitou & Markides, 2003, para. 29)

Style is not a necessary attribute of any disruptive innovation. What Charitou and Markides completely missed is that a disruptive innovation has one unchanging feature—decomplexity which granulates into five attributes: low cost, simplicity, compactness, portability, and convenience. What Charitou and Markides (2003) described fits well with a specific blue ocean founded on a new value curve based on the utility lever of fun and image (Kim & Mauborgne, 2005). In the context of this Swiss example, Charitou and Markides exhibit a highly flawed understanding of disruption. To assert that the Swiss disrupted the Japanese watchmakers by focusing on style is faulty. It may be called disruption but it is not Christensen's disruption. Perpetual betterising provides a unique insight into this debate by asserting that disruption is not synonymous with fragmentation—disruption can occur without fragmentation—what is needed is to disrupt nonconsumption through the agency of a de-complexed architecture.

With a highly defective conception of disruption, Markides (2006) ironically prefaced his critique of disruptive innovation, fanned by Danneels's (2004) insinuation that disruptive innovation suffered from definitional ambiguity. Having pointed out that disruptive innovation is an imprecise concept, Markides (2006) proceeded to unbundle innovation into three categories: disruptive technological innovation, business-model innovation, and product innovation. Markides's intention in deconstructing innovation into disruptive technological innovation and business-model innovation appears to be an attempt to quarantine his concept of strategic innovation from Christensen's disruptive innovation.

Though Markides did not employ the term strategic innovation in his three-category granulation of innovation, his business-model innovation concept is precisely his strategic

innovation (Charitou & Markides, 2003). Perpetual betterising rescues the supposed definitional abstruseness raised by Markides and also dismantles his apparent treatment of business-model innovation (his strategic innovation) as being mutually exclusive from disruptive innovation. As per the perpetual betterising, the key distinguishing feature of a disruptive innovation is a de-complexed architecture relative to an existing innovation that offers the same core functionality. De-complexing to achieve low cost, compactness, portability, and convenience is the quintessence of disruptive innovation. De-complexing is precisely how a disruptive innovation manages to "change the rules of the game" (Markides, 1997, para. 11). A disruptive innovation is a game-changer and thus it qualifies as a strategic innovation or Markides's business-model innovation. Markides's unbundling of disruptive innovation from business-model innovation is not theoretically fruitful. Disruptive innovation is a highly focused pattern of business-model innovation. Ostracising Christensen's disruptive innovation from strategic innovation is denying its theoretical kith and kin.

Furthermore, Markides (2006) missed a crucial point that technology is the enabler of every disruption. This calls into question both the theoretic and praxis utility of proposing the category of disruptive technological innovation. De-complexing is invariably enabled by technology. A disruptive innovation that is not driven by technology is like a beautiful car without an engine. As defined by Dosi (1982), technology is simply knowledge sets, comprising embodied and disembodied components. The embodied component of technology is manifested as the physical gadgetry, while the disembodied component of technology comprises the store of such things as experience of past attempts and expertise. Markides (2006) may want to know that even his business-model innovation is enabled by technology too.

Markides seems to have equated disruption with the replacement or extinction of an industry's incumbent by a relatively newcomer to the industry. Disruption is very precise in terms of how it displaces an incumbent. A de-complexed architecture is the prerequisite to an innovation earning the right to be named a disruption. Perpetual betterising makes use of conceptual categories instead of the descriptive appellations of incumbents and newcomers. Under perpetual betterising, what is displaced is the sustaining innovation and not an incumbent to the existing industry. Perpetual betterising is apersonal. The identities of the disruptor and the disruptee are extraneous to perpetual betterising. Perpetual betterising makes the careful distinction between displacement and replacement through the process of hegemoning. A disruption hegemonises along a continuum straddling displacement and replacement. To the credit of Charitou and Markides (2003), they cited cases where their disruptive strategic innovation (an oxymoron for disruptive innovation) achieved what perpetual betterising styles as hegemoning, a continuum straddling the poles of displacement and replacement. Perpetual betterising, through hegemoning, reconciles Christensen's (2006) clarification that disruption is a process with Markides's (2006) criticism that disruption could end without achieving replacement of incumbents to an existing industry. Every disruptive innovation hegemonises—whether at the inception or superiorising stage. Perpetual betterising rises conceptually above both Christensen's (2006) and Markides's (2006) descriptive polemic.

Jill Lepore's Criticism

Lepore's (2014) withering criticism of disruptive innovation theory reflects both a limited understanding of the rudiments and nuances of disruption. Clayton Christensen, in an interview with Drake Bennett (2014) of Bloomberg, cited Lepore's alleged selective scholarship: "And then in a stunning reversal, she starts instead to try to discredit Clay Christensen, in a really mean way. And mean is fine, but in order to discredit me, Jill had to break all of the rules of scholarship that she accused me of breaking. . ." (para. 6).

Lepore (2014) debated: "Replacing 'progress' with 'innovation' skirts the question of whether a novelty is an improvement: the world may not be getting better and better but our devices are getting newer and newer." (para. 10, emphasis is hers). It is not the theoretical capitalist's main concern that rules in CGT (Glaser, 2013); the main concern of participants dictates the research agenda. Perpetual betterising, the core variable underpinning disrupting and sustaining is about improvement resolving an emergent as opposed to an imposed main concern. De-complexed architecture as the formative agent of disruption engenders affordability, compactness, portability and convenience, allowing services and products enjoyed by the skilled and/or the relatively wealthy to be accessed by masses of the unskilled and the less wealthy. Perpetual betterising's sub-pattern of kindred intermediary explains why 5,3 million Zimbabweans (Gambanga, 2015) outsize the count of bank accounts in Zimbabwe by a factor of at least 3 times (Chiutsi, 2014). The world of the unbanked in this part of the world has evidently been betterised. Innovation and progress need not be oil and water as intimated by Lepore (2014).

Perpetual betterising rescues disruptive innovation from two conceptually related diatribes levied by Lepore which neither Christensen in Bennett (2014) nor Gilbert (2014) addressed in their separate defenses. Lepore's (2014) charge list reads: disruptive innovation is derived from handpicked case studies and that the category of disruptive innovation is established from a mere five cases. Perpetual betterising is a CGT. As such, samples and sample sizes are not pre-specified; they emerge through the procedures of theoretical sampling and theoretical saturation. Theoretical significance as opposed to statistical significance is relevant to building a CGT. CGT, through the concepts of theoretical significance and theoretical saturation rescues it from what may be called the quantum-ofcases fallacy held by critics denoted by Lepore's (2014) misreading and hidebound grasp of scientific methodologies at the disposal of management researchers. Coding is not descriptive analysis; it is conceptual. Lepore's (2014) observation that cases from other business sectors from which Christensen drew are inadequate is irrelevant under conceptual analysis of data. Fresh cases from another business area are subjected to constant comparison and the outcome of that analysis is either a confirmation of existing categories or the generation of new categories and properties. Christensen and Carlile (2009) have eloquently argued that every piece of data is a case.

Lepore's grasp of the essence of what makes a management theory predictive seems to be limited to description-based theory-building. The role of conceptualisation of data to

render an emerging pattern atemporal, apersonal, and alocal seems to reside beyond her sentience. In her charge sheet of the perceived infractions committed in building disruptive innovation, she stated categorically: "It [disruptive innovation] does not explain change. It's not a law of nature. It's an artifact of history, an idea, forged in time. . . (Lepore, 2014, para. 36, parentheses are mine)." The clincher: "It [disruptive innovation] makes a poor prophet. (Lepore, 2014 ,para.36, parentheses and emphasis are mine)." Lepore (2014) pontificated: "People aren't disk drives (para. 29)." Through the lenses of perpetual betterising, insights beyond Lepore's cognition explain why disruptive and sustaining innovation are transferrable beyond the disk drive industry to other business areas and beyond to quasi-business and to not-for-profit substantive areas.

Disruptive and sustaining innovations are conceptual categories. This conceptualness is what gives disruptive innovation high external validity. A disruptive innovation does not disrupt people as insinuated by Lepore. Disruption de-complexes. Data is only available in the past (Christensen & Carlile, 2009). Ironically, all data are artifacts of history. Thus, every theory built from data is a relic of the past. Theory-building does not need to be cartelised by conjecture; theory can be grounded. What makes disruptive innovation a credible prophet is that it is one of the vehicles through which the main concern of some social groups to get better offerings is recurrently resolved. This resolution, in turn, becomes the basis for resolving the chief concern of a firm's dominant coalition to get better and better pre-specified goals such as profit, quantum of religious converts, for instance. Historical data can stale-date but concepts derived from them sail away from time, place and people. Lepore (2014) may be interested to know that the Early Christian Church experienced explosive growth through disruptive innovation. Disruption has past, present and future relevance beyond business. Though Christensen and Sundahl (2001) argued that external validity is established only through circumstance-based categories, perpetual betterising provides a deeper explication; it underlines the roles of constant comparison and conceptualisation as the bedrock on which external validity and predictability are founded.

Conclusion

Principally, this study, by partly employing Christensen's interpretations of data, could have possibly been contaminated by the very margin of terror (pre-conception) it sort to rid. Mobile phone money transfer has suffered from non-adoption in South Africa despite massive adoption in other African countries. Perpetual betterising and its sub-patterns such as de-complexed architecture and kindred intermediary could be tested in verificational quantitative studies based on data from countries where mobile phone money transfer has failed to gain traction. Alternatively, CGT studies targeted at improving perpetual betterising could be done based on data from diverse substantive areas. A formal theory of perpetual betterising can be crafted through constantly comparing substantive areas in which perpetual betterising is applicable, where growth is paramount such as macroeconomics, church growth, social services improvement, combating crime growth, for instance. The methodological novelty of compounded main concerns can be further developed through empirical studies that focus on different types of compounded main concerns.

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Embodied Revelation:

A Classic Grounded Theory of Heart Failure Patient Decision Making Surrounding Primary Prevention Implantable Cardioverter Defibrillator Therapy

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Abstract

The purpose of this classic grounded theory study was to explain the complex decision making process of heart failure (HF) patients considering primary prevention implantable cardioverter defibrillator (ICD) therapy. Sudden cardiac death (SCD) is the leading cause of death for people with HF as well as the primary cause of death in the United States (US). ICDs represent the standard of care as the only effective therapy for primary prevention of SCD. However, a significant proportion of qualifying HF patients declines this invasive, yet life-saving device. The grounded theory is of Embodied revelation. The threat of SCD for ICD candidates consists of four stages: living in conscious denial, heightening of awareness, sanctioning ICD therapy, and living in new assurance. The first stage ends abruptly with the critical juncture of grasping the threat of SCD. This grounded theory has implications for research, nursing and medical practice, as well as bioethical considerations.

Keywords: Heart failure, implantable cardioverter defibrillators, patient decision making.

Introduction

Heart failure (HF) is a severe, chronic condition characterized by high mortality and high morbidity (American Heart Association, 2010). Unlike many other cardiovascular conditions, the incidence of HF is increasing; approximately 5.8 million people in the United States (US) have HF (Mozaffarian et al., 2015). Sudden cardiac death (SCD), the result of a lethal arrhythmia, is the leading cause of death for people with HF as well as the primary cause of death in the US (Mozaffarian et al., 2015). The number of people who die each year from SCD approximates the deaths from Alzheimer's, firearm assaults, breast cancer, cervical cancer, colorectal cancer, diabetes, HIV, house fires, motor vehicle accidents, prostate cancer and suicides combined (Sudden Cardiac Arrest Foundation, 2015).

Primary prevention ICDs represents the standard of care as the only effective therapy to prevent SCD in people with HF (Bardy et al., 2005; Echt et al., 1991; Moss et al., 2002; Yancy et al., 2013). Contemporary ICDs, metallic devices similar to pacemakers, are surgically implanted underneath the skin usually in the chest area. These devices aim to detect lethal arrhythmias and emit an electrical shock that aborts the arrhythmia. Primary

prevention therapies are aimed at preventing a first occurrence. Secondary prevention refers to therapies that prevent a disease or event from recurring or exacerbating (van Welsenes et al., 2011). In the case of ICDs, secondary prevention devices are implanted in patients who have already demonstrated potentially lethal ventricular arrhythmias by surviving such an event or having had an inducible ventricular arrhythmia demonstrated by an electrophysiologic study. Those patients offered a secondary prevention ICD have already survived SCD. Prior to 2002, ICDs were implanted only for secondary prevention.

Based on landmark trials demonstrating significantly improved survival from SCD, ICDs now represent a class IA recommendation as primary prevention for all patients with systolic HF deemed high risk for lethal tachyarrhythmias defined as a left ventricular ejection fraction (LFEF) of 35% or less on optimal pharmacologic therapy (Bardy et al.; Duray, Israel, & Hohnloser, 2006; Moss et al., 2002). Factors influencing patient decision making about primary prevention ICDs could be significantly different than issues involving secondary devices. These patients are asked to consider a potentially burdensome, yet lifesaving therapy.

The problem that this investigation addresses is a significant proportion of qualifying HF patients who are at risk for life-threatening arrhythmias decline ICD therapy (Gravelin et al., 2011; Hernandez et al., 2007; Lakshmanadoss et al., 2011; LaPointe et al., 2011; Ruskin, Camm, Zipes, Hallstrom, & McCrory-Usset, 2002; Thomas et al., 2007). Understanding patient decision making surrounding ICDs and other burdensome life-sustaining treatments could hold social significance as policies and standards of care are adopted. Health care providers are obligated to promote evidence-based, life-saving therapies, but also respect and facilitate autonomous patient decisions. Patients must understand and be able to weigh the potential risk and benefit issues in order to make well-informed decisions. This new grounded theory explains patient decision making surrounding primary prevention devices that can avert the most common cause of death in the US. An understanding of the patient's perspective in such health care decisions could help clinicians and facilitate development of pre-implant assessment and patient education tools.

Method, Data Collection, Analysis

Classic grounded theory methodology is most useful when the phenomenon of inquiry is a complex social process thus holding great meaning to the subjects. The decision to accept or decline an ICD, a life-saving yet potentially burdensome, permanent therapy, emerges after a decision making process. Heart failure patients face a dilemma when considering prophylactic implantation of an ICD. They must weigh the potential risks and benefits. This dilemma is particularly suited to classic grounded theory because of the importance of meaning and context in the decision making process.

To ensure protection of human rights, this research was approved by the Institutional Review Board for the Protection of Human Subjects at West Virginia University. Sampling, data collection, data analysis and interpretation occurred iteratively. Sampling

for this study was purposive in that participants were referred to the investigator when identified as meeting study criteria. The sample came from four separate cardiology practices. Inclusion criteria consisted of English-speaking adults (age eighteen or older) who had systolic HF for whom a primary prevention ICD was indicated and had been offered. Cardiology providers identified potential participants who met the inclusion criteria and were given ample opportunity to review the study information. So as not to influence the decision, patients were interviewed after the decision to accept or decline ICD therapy had already been made. Sampling continued until saturation of the data had been reached and no new concepts were emerging. This investigation ended with a sample of 12 HF patients. Three of the 12 participants had declined ICD implantation. Females made up 25% of the sample. The challenge of recruiting females and ICD decliners was consistent with prior research. The youngest participant was 33 years old, and the oldest was 82 years of age. As a part of the demographic data, participants were asked what type of provider first recommended primary prevention ICD therapy. Half of the participants were first approached by a physician. The other 50% of the participants first received an ICD recommendation from an advanced practice or registered nurse.

The HF patients in this study who faced the decision to accept or decline primary prevention ICD therapy lived a unique experience. Initially, a single, loosely structured, indepth interview was completed. All device recipients were interviewed at least nine months after implant. Those who declined ICD therapy were interviewed at least one year after refusal.

Data were recorded in the form of field notes immediately following each interview. As advised by Glaser (1998), interviews were not tape-recorded. This practice allowed for more openness by the participant and more attentiveness by the researcher (Glaser). This method also followed Glaser's (1998) basic principle of delimiting data through constant comparison and subsequent theoretical sampling. Follow-up questions were based on what data had been discovered already, what appeared to hold importance to the participants, and what ideas required further description. Using constant comparison, data were analyzed, coded, and organized into concepts and categories. This researcher trusted the emerging theory and strove to formulate concepts that best described the main concerns of the participants. The concept of embodied revelation encompassed the core concept for both acceptors and decliners of primary prevention ICD therapy.

The Theory of Embodied Revelation

Four stages, conditions, properties, sub-properties, and a critical juncture emerged as a new substantive theory. Methods to assure rigor were ensured in terms of credibility, transferability, dependability, and confirmability. Those participants who ultimately accepted primary prevention ICD therapy moved through all stages of the theory. Those participants who ultimately declined ICD implantation did not experience the critical juncture and remained in the first stage of this grounded theory. The experience of these declining participants will be discussed separately.

Stage One: Living in Conscious Denial

The first stage of living in conscious denial describes patients as being aware on some level that they have HF and that they could die from the condition. This stage embodies a continuum of patient comprehension of what it means to have HF. Participants maintain a low level of realizing threat. This first stage includes three properties of repressing risk awareness, reciprocating nonchalance, and imposing normality.

Risk awareness

Participants enjoy a relative ease during this stage as they are repressing risk awareness with regard to SCD. Participants have some general knowledge of the risk for SCD while not completely appreciating or validating their own personal risk. The ICD is viewed by the participants as an option. They do not recall being given any compelling reason to proceed with the implantation procedure. Agreeing to an ICD requires awareness of personal risk of SCD AND the life-saving capability of an ICD. While repressing awareness, the patient does not believe he or she needs an ICD. One participant explained that he wanted to deny that there was a real problem. An elderly gentleman admitted that he did not want to believe how serious his condition was. In most cases the idea of an ICD had been broached by a health care provider more than once, but was perceived by the participant as a casual reference.

Reciprocating nonchalance

Conscious denial is partially maintained by the property of reciprocating nonchalance. Participants and their providers converse regarding serious issues such as SCD using a casual tone that perpetuates nonchalance. This casual attitude perpetuates the patient's conscious denial, which, in turn, facilitates further nonchalance on the part of the clinician. Participants implied during interviews that clinicians might have delivered the message casually in an effort not to alarm them and engender hope. Such casual discussions with health care providers actually reinforce the conscious denial for the patient by affirming the perception that the patient is not seriously ill and the ICD is not really needed; such verbal tone provides comfort for participants and providers. Participants seem to equate time and care taken with explanations with the amount of importance a provider attaches to a topic. One patient remarked, "they never took the time to really explain things". Participants said of physicians: "He said that we should probably do this at some point", "It didn't sound like a big deal", "They just sort of mentioned it in passing". In turn, the casual response by the patient appears to affirm the casual nature taken by the provider as if to say that the patient is not ready for such discussions.

Imposing normality

While in the stage of conscious denial, participants convince themselves and others that they are not the victims of a serious condition, as they concentrate on mundane issues and try to live like healthy people through imposing normality. Participants demonstrated the need to prove to themselves that their risk is not only low, but also that they were "normal" or "okay". This investigator would be remiss if she did not acknowledge that a nearly

identical concept was defined by Charmaz (1991) as supernormalizing. In her description of people attempting to return to routines following heart attacks, Charmaz described how a person, despite having a serious medical condition, attempted to withhold, recapture or achieve his or her identity as "normal."

One high school music teacher explained that he was commonly up all night worrying about music, but admitted to giving little thought to his serious medical condition. A few participants talked about how they kept from worrying about themselves by thinking about others with "worse EFs (ejection fractions)". In some cases imposing normality was manifested as participants felt the need to prove how well they were by testing their hearts with extreme physical activities. Upon being discharged after a silent myocardial infarction, one male participant decided to immediately walk five miles: "I just wanted to see if I could do it".

The stage of living in conscious denial may last days to years. Participants who declined a primary prevention ICD appear to share the first stage in common with those who accepted an ICD. The two groups diverge following the first stage. For those who ultimately accepted primary prevention ICD therapy, the first stage ends with the critical juncture of grasping the real threat of sudden cardiac death, which sends the participant into the second stage of heightening of awareness.

<u>Critical juncture: Grasping the real threat of sudden cardiac death</u>

Those who accepted ICD therapy experienced a revelation about their personal risk of SCD. This revelation was embodied in two ways. The revelation came from the body in that the realization was contextually rich, based on feelings, beliefs, and values. Secondly, the revelation was embodied in that the decision to accept or decline a life-sustaining device represented a tangible expression of the revelation of personal risk.

Stage Two: Heightening Awareness

For those people who ultimately accept primary prevention ICD therapy, the heightening awareness of mortality risk is dependent on the condition of valuing longevity. Properties of heightening awareness include experiencing a significant medical event, perceiving new candor, which contains the sub-property of engendering trust, and strongly recommending an ICD, with the condition of delivering the message.

Valuing longevity

The stage of heightening awareness crescendos with the critical juncture of grasping the threat of sudden cardiac death only if the condition of valuing longevity is present. Those patients who agree to a primary prevention ICD place a high value on living longer. Participants discussed the importance of sustaining life to them: "They told me it (ICD) saves lives, and I was interested in living", "I wanted to live longer", "I wanted to be around for my grandbabies".

Experiencing a significant medical event

As a property of heightening awareness, the HF patient experiences a significant medical event that serves as a trigger. The medical event frightens the patient and uncovers the reality of the severity of his or her condition as well as elicits sudden candor by the provider. The medical events that participants experienced were not arrhythmic in nature. In other words, they had not experienced a life-threatening arrhythmia that would have deemed ICD therapy a secondary prevention. Examples of significant medical events that triggered heightening awareness included hospitalizations for acute congestive HF and cardiac testing that reconfirmed the weak condition of their heart muscle. One participant described a hospitalization as a "wake-up call from God". Two patients talked about new and bothersome symptoms that confirmed their condition. "After being in the hospital, I could no longer make my bed without getting tired. I knew I wasn't getting any better".

Perceiving new candor

In all cases, heightening of awareness is precipitated by newly perceived candor displayed by the health care provider following a significant medical event. To the participants, discussions surrounding SCD and ICDs take on a much more serious tone. Participants described the property of perceiving new candor as "they were straight up with me", "I could die". This new candor served to engender trust in the HF patient.

Engendering trust

Engendering trust represented a sub-property of perceiving new candor. In some cases, the patient is experiencing a first encounter with this specific clinician. In other cases, their known health care provider displays a new frankness regarding SCD and an ICD engendering a heightened trust on the part of the HF patient. Almost all the participants discussed how much they trusted the provider who successfully recommended the ICD. Quality time spent between patient and provider took on a new significance. Patients described the clinician in the following ways: "He makes you feel like you're his only patient", "I trust the doctor and his staff to know what they're doing", "They were straight up with me so I trusted them". The enhanced trust in the candid provider further strengthened the grasp of SCD risk. The participants can no longer deny an understanding of the real chance of death as the risk has been carefully and clearly explained. The provider, in turn, continues to engender trust from the patient by strongly recommending an ICD.

Strongly recommending an ICD

As the HF patient gains heightening awareness grasping the threat of SCD, the clinician, who in many cases, formerly presented the device as an option, now strongly recommends an ICD. Participants explained the recommendation as "He just told me I needed to have this done", "Would I rather be working or be dead"? The stronger the awareness of SCD risk, the stronger the recommendation for an ICD is perceived. How the message recommending the ICD is delivered determines how strongly the recommendation is

perceived. The strong recommendation for an ICD is vital to the critical juncture of grasping the threat of sudden cardiac death.

Delivering the message

The HF patient perceives new candor as the clinician uses simple language in delivering the message. The provider is now frank with the HF patient about the significant risk of SCD and the life-saving capabilities of an ICD. One participant recalled being told that he would have an episode and either he would have the device that would likely save his life or he would not have the device and would die.

Stage Three: Sanctioning ICD Therapy

The third stage of sanctioning ICD therapy occurs quickly after heightening awareness and includes two properties of feeling unsettled and passive decision making; a sub-property of desiring implant as soon as possible exists. The HF patient experiences some degree of anxiety related to the unearthed understanding regarding the risk of SCD and the life-saving capabilities of an ICD. The patient takes a passive role and acquiesces to the provider's recommendation. Although numerous interviewees express their desire to be active participants in their health care decisions, they exhibit relative ease in agreeing to the device their trusted provider recommended. Participants described the decision to accept an ICD as "I didn't want it to be my decision", "The doctors know a lot more than I do", "When they tell me I need something for my heart, I listen". The participants not only promptly agreed to a primary prevention ICD, but they also requested the device to be implanted as soon as possible.

Feeling unsettled

This is a stage of increasing anxiety for the patient as he or she is feeling unsettled until the device is finally implanted. Participants feel vulnerable to SCD without the benefit of an ICD. The comfort of conscious denial is gone. The feeling of urgency remains until the device is implanted and a sense of reassurance ensues.

Desiring implant as soon as possible

A sub-property of feeling unsettled is the HF patient's desire to have the implant as soon as possible. Fueled by anxiety surrounding SCD, the life-saving capabilities of an ICD, the value of longevity, and the provider's strong recommendation for the device, the patient requests the ICD be implanted now. Participants described this property as "My only question was when", "It was now or never", "I just wanted to get it done". One patient explains how agonizing the eight-week waiting period of optimizing medical therapy prior to implant was for him.

Passive decision making

Participants who accept primary prevention ICD therapy were generally found to be passive decision makers. Those who accepted the device appeared to agree gladly to the device their provider had strongly recommended. Participants explained how they preferred not to be expected to make such an important decision. They preferred to leave the decision up to the provider and or family members: "They know what's best for me", "I liked when my family stepped in. I didn't want to be the one to make that decision". Accepting patients talk about their lack of qualifications to make such a big health care decision: "I'm not smart enough. They (the doctors) know a lot more than me". In fact, clinicians who promoted autonomous patient decision making regarding an ICD were not trusted as much. In describing one such provider an ICD-accepting patient remarked, "How could he expect me to make that decision? He's supposed to know a lot more than me. I want him to tell me what to do".

Stage Four: Living in New Assurance

The investigator includes a final theory stage of living in new assurance for acceptors of ICD therapy. The decision making process surrounding the ICD continues in that the HF patient considers, verbalizes, and supports the decision made. The fourth stage occurs after the condition of ICD implant. The HF patient continues to consider and support the decision made often displaying the property of downplaying the process. The patient enjoys a more blissful state of assurance fueled by a new sense of security with having an ICD. Living in new assurance continues indefinitely.

Downplaying the process

Now relaxing into a new reassurance, participants, downplay the implant procedure and, in some cases, the entire decision making process. The participants uniformly described the ICD procedure and recovery period including the present as something on the lines of "no big deal". This stage is embodied by a renewed sense of nonchalance and ease similar to what was expressed in the first stage of conscious denial. However, the new ease is fueled by a sense of reassurance that the patient is no longer vulnerable to SCD. One participant remarked that "I'd rather have this done than go to the dentist". Another gentleman downplayed the procedure by saying "I don't even remember the surgery. It was no big deal. They just put it in". Another participant diminished the decision by saying "I know I'll probably never even need it (the ICD)". As in the first stage, participants often "test" themselves in an attempt to return to normality. One female participant explained that she still had many things on her bucket list. Participants expressed no regret concerning their decision to accept a device; they were at peace with their decision. They often spoke of counseling others regarding the inconsequential ICD procedure.

During this final stage, acceptors have the need to reiterate their trust in the provider who recommended the ICD by detailing the provider's professional attributes. Heart failure patients, who almost unanimously made the abrupt decision to accept the ICD solely on the recommendation of their provider, now express the importance of considering loved ones when deciding to have the ICD implanted. They often speak of wanting to live

for specific family members and view the decision to have the ICD implanted as relatively selfless.

Declining Primary Prevention Implantable Cardioverter Defibrillator Therapy

The HF patients who declined a primary prevention ICD were forthcoming about their reasons for not accepting device therapy. The decliner participants share the first stage of living in conscious denial with those who accepted ICD therapy. There was no apparent epiphany as to personal risk of SCD, or validation that the risk was critical enough to accept an invasive prophylactic device implant. Therefore, decliners did not move on to the second stage of heightening awareness. They expressed no regrets about their decision to decline ICD therapy.

Repressing Risk Awareness

The decliner participants, remaining in conscious denial, maintain various degrees of understanding as to their personal risk of SCD. People in this group do not appear to grasp the fact that symptom level or how well one feels with HF has little or nothing to do with the risk of SCD. Declining participants downplayed their condition and the ICD issue. One patient preferred to talk about other people he knows with "much worse" medical problems as compared to his medical issues. He described his HF as a "silly problem" that "no one wanted to hear about." He also remarked "ICDs are for very sick people". Another decliner expressed pride in his decision to decline an ICD. He explained that he never felt his condition "warranted" such an invasive procedure.

Reciprocating nonchalance

The property of reciprocating nonchalance also emerged from the decliner data. One participant was approached only once about an ICD. The situation was presented to him as "a little heart problem". He was told that he "probably needs a defibrillator". Another participant explained that his doctor told him about SCD and the ICD, but when the patient was not interested, the subject was dropped so the participant did not perceive the issue as a vital one. Declining participants discussed ICDs and SCD in casual terms similar to how they described discussions with health care providers.

<u>Imposing normality</u>

There was evidence of the property of imposing normality among the declining group. These participants talk about treasuring their good quality of life. One gentleman explained how he made sure he was very physically active and remained able to "everything" he wanted to do. Another participant actually described ICD therapy as "stepping out of normality," something he never wished to do.

Missing the critical juncture and heightening awareness

Participants in the declining group did not experience the critical juncture of grasping the threat of sudden cardiac death. They never entered into the second stage of heightening awareness and the condition of valuing longevity; properties of that stage were not observed in the decliner group.

Not valuing longevity

Not valuing longevity describes the decliners' somewhat deterministic view of life and death. They do not describe a high personal value for sustaining life. Rather, they speak in terms of the course of one's life and timing of death being predetermined. In speaking of his heart attack 10 years ago, one gentleman said, "Maybe I should have died back then". In talking about death, another declining patient explained, "I'm not big on insurance policies. What happens happens. You can't fight it". Another decliner described living "day by day" and "not worrying about tomorrow". What is not clear is whether the decliners who lacked high esteem for longevity would have considered primary prevention ICD therapy if they were to have experienced a significant medical event, perceived new candor, and/or perceived a strong ICD recommendation. One participant appeared to try and answer that question with the remark "I don't think anyone could have ever talked me into it (the ICD)."

Not experiencing a significant medical event

None of the three patients who declined primary prevention ICD therapy had experienced what they considered to be a significant medical event. One participant explained that he "felt fine", "It (HF) doesn't affect me". He was not "convinced" that his condition warrants such an invasive procedure. Another patient explained that he has not had any hospitalizations in years. He commented "If it ain't broke . . . ". The third decliner remarked that he felt "the same as when my EF was 45%".

Not perceiving new candor

These participants did not feel they were ever given a good enough reason to accept the device. None of the decliners described any kind of candor expressed by providers regarding the risk of SCD or ICD therapy. Those in the decliner group did not express engendered trust in their health care providers. On the contrary, the decliners recounted stories expressing lack of trust in providers. One decliner, in reference to the clinician who presented the ICD, remarked, "I just don't trust people. I question everything". The two other decliners recounted stories about how they had been wrongly advised by a medical professional in the past and were relieved they had not followed the advice. One decliner described how he felt providers are "too eager" to recommend procedures "without looking at all the aspects". That participant felt that patients should better educate themselves to be prepared for difficult medical decisions. No one in the decliner group perceives new candor or received a strong recommendation for an ICD from a provider.

Active decision making

An unexpected divergent finding between the two groups of participants was that acceptors and decliners of ICD therapy exhibited differing decision making styles. As the acceptors of

primary prevention ICDs displayed a preference for passive decision making, the decliners all expressed qualities of active decision making. To clarify, acceptors of ICDs generally desired not to make the decision alone. But, they actively expressed a preference to have the decision made for them by their trusted provider. On the other hand, decliners of ICDs preferred more autonomy in their resolution. One decliner explained medical decision making: "It's a very personal decision. Everyone needs to make his or her own". Another decliner spoke about a friend of his who received an ICD saying: "They talked him into it". Another decliner remarked that he "would never blindly follow orders".

Discussion

The new theory, embodied revelation: the threat of sudden cardiac death for ICD candidates, grounded in participant interview data, explains the decision making process HF patients face when presented with ICD therapy. Stages, conditions, properties, subproperties, and a critical juncture emerged and were detailed. The same theory was discussed in terms of those participants who declined ICD therapy. Although the first stage of the theory was shared between the accepting and declining groups, the divergence of the declining group was described.

The threat of SCD was realized on some level by all participants. For some, the risk was always understood to varying degrees. For others, the enlightenment regarding personal risk was exposed suddenly following a significant medical event and/or a strong recommendation from a provider. Embodied, as used in the title of this study, is defined as made concrete or perceptible (Merriam-Webster, 2015). The decision to accept or decline a life-sustaining device is an embodiment or a tangible expression of what SCD, the ICD, and desire for longevity mean to a particular HF patient. In this way, meaning is a revelation that comes as a result of the individual's interpretation of thoughts and feelings about issues surrounding ICD therapy.

Critique of the Theory

The new grounded theory embodied revelation: the threat of sudden cardiac death for ICD candidates will be evaluated in terms of Lincoln and Guba's (1985) criteria to assure qualitative research rigor followed by a discussion of the limitations of the study. Validity, reliability, and objectivity will be addressed as credibility, transferability, dependability, and confirmability.

Credibility was achieved by the constant comparative method as new data were compared to previously discovered data. This theory emerged directly from participant data. The study began without hypotheses or any preconceived ideas that the researcher hoped to support. The investigator began with one open-ended question similar to "Tell me about what was going on as you came to the decision to accept (or decline) an implantable defibrillator." The participants started talking from that point. Any follow-up questions from the investigator were derived from data already shared for purposes of clarification or

expansion of concepts. The categories, properties and stages resulted from analyzing and conceptualizing the stories patients told about the decision to accept or decline a primary prevention ICD. All concepts included in the theory can be traced back to participant data. Therefore, the theory meets the criteria for credibility.

This theory fits the criteria of transferability in that it can be modified beyond the scope of the present study. Grounded theory studies do not rely on description of participant experiences, but rather conceptualization by the researcher (Glaser, 2002). This conceptualization transcends specific experiences. Concepts were constantly modified as new data emerged. The findings of this study are viewed as groundwork for future investigations that will add to the data and knowledge. The stages of this theory should be able to be transferred to explain other decision making processes involving complex and/or troubling issues.

The theory was found to be dependable based on auditing of the data, findings, interpretations, and concepts. Audit techniques are advised to examine all processes of the study (Lincoln & Guba, 1985) and ensure that the concepts represent appropriate and accurate labels for the data (Martin & Gynnild, 2011). Although interviews were not audio recorded as per classic grounded theory methodology, direct quotes from participants were jotted down throughout the interviews to enrich the data. Field notes were transcribed immediately following each interview, and numbered and dated according to participant. All concepts, properties, and stages can be traced back to the data.

Once again, an audit trail confirmed the findings of this theory. As new data and concepts emerged, findings were constantly crosschecked with recorded data and memos. After constantly comparing new with existing data and analyzing and reanalyzing, this theory truly does explain what was going on during the decision making process to accept or decline a primary prevention ICD.

The findings of this study provide the framework for further research. A goal of a classic grounded theory study is to present a set of tentative theoretical hypothesis that invites *limitations of the theory*. This investigator recognizes several limitations to this study. The sample size was small at 12 participants. Data saturation was met rather early in data collection despite including only three ICD decliners. Consistent with extant data, patients who declined primary prevention ICDs were difficult to recruit. This researcher cannot say with certainty that decliner data were saturated. The three decliners interviewed were volunteer participants. Unheard data from ICD decliners who are unwilling to be interviewed could modify the theory.

Many participants discussed the first and subsequent times primary prevention ICDs were recommended to them. Participants did not offer specific knowledge nor did they likely know exactly how long they had qualified for a primary prevention device. The knowledge of how long a patient had a very low ejection fraction and thus was at significant risk for SCD could have framed the provider's recommendation message.

Finally, the classic grounded theory demand for the researcher to collect, analyze, and conceptualize the data can pose challenges with regards to subjectivity. Glaser (2002)

described grounded theory as a "perspective-based" methodology. Despite the investigator's best efforts to remain objective, what stood out in the data to the researcher could have reflected, partially, the researcher's own understandings and perceptions. This researcher is also a clinician and in a few cases, participants were former patients of the Participants were given clear explanations as to the unique role of the researcher as opposed to that of a clinician. However, the possibility of bias must be acknowledged. Separating research and clinical ethical standards was, in some cases, challenging when participants clearly expressed misinformation or misunderstanding of issues surrounding SCD and ICDs. This researcher did her best not to intercede with corrective explanations. Additionally, for the participants who had been former patients of the researcher, the potential for a Hawthorne-like effect bias existed (Gillespie, 1991). These participants had enjoyed a positive and trusting relationship with a clinician who was now interviewing them about a health care decision. The participants could have downplayed any negative aspects regarding specific providers and information received.

Implications for Research, Nursing Science, Clinical Practice, and Bioethical Considerations

The new grounded theory of embodied revelation: the threat of sudden cardiac death for ICD candidates has potential implications for nursing research, nursing and medical clinical practice, and bioethical considerations. The preponderance of data surrounding ICD decision making remains on secondary devices. Studies including more participants who declined primary prevention devices are needed. Decliners are more difficult to recruit, but data from decliner volunteers may not represent decliners who are not willing to be Additionally, further study on provider perspectives surrounding primary prevention devices would be helpful. This data show that providers who are in a position to discuss and recommend ICDs hold enormous power with regard to the decision making process of the patient. How the primary prevention ICD issue is discussed and how the message and/or recommendation are delivered to the patient has significant ramifications as to whether the patient accepts or declines the device. How this discussion is framed could be at least partially dependent on the provider's personal views and values surrounding device therapy. A better understanding of the provider perspective could facilitate tools to help providers evaluate themselves and facilitate informed patient decisions.

This new grounded theory contributes to the discipline of nursing. Margaret Newman and colleagues (1991) submitted caring in the human health experience as a focus for the study of nursing. Embodied revelation is a human health experience. In this unitary-transformative paradigm, objects of inquiry are recognized as contextually dynamic involving high levels of mutuality. The knowledge gained from this theory resulted from high levels of trust between the nurse researcher and participant. The interviews changed and grew in response to gathered data. The theory that emerged was grounded in patient orientation and highly contextual in its embrace of values, meanings, roles of others, choices, and purpose as they applied to the patient's decision.

Similarly, Reed (1995) suggested that new nursing knowledge be patient oriented, context sensitive, pattern focused and participatory. A meta-narrative of human developmental potential and transcendent capacity for health and healing was proposed as a framework for nursing research. The merit of nursing research is examined in terms of its relevance to nursing practice. The research problem of HF patient decision making surrounding primary prevention ICDs was born from a caring nurse's practice story. The theory that emerged explains a contextually dynamic decision making process that, for acceptors of ICD therapy, involves stages involving powerful circumstances. The knowledge gained from this theory will help nurses foster and respect well-informed patient decisions at various levels of autonomy as prescribed by the patient. A classic grounded theory demands a level of transcendence as data are conceptualized rather than reported as experiences. This new theory has potential nursing science implications beyond the scope of HF patients and ICDs. The findings should be studied as they relate to other complex decision making processes involving burdensome therapeutic options.

Nursing and medical practice

This grounded theory holds implications for clinical practice. For half of the participants in this study, nurses or advanced practice nurses first discussed the ICD topic with patients. Even if not in a position to recommend life-sustaining therapies, nurses have an inherent obligation to facilitate well-informed patient decisions. Understanding the issues involved in the decision making process of patients considering primary prevention ICD therapy is important to all nurses caring for people with HF.

Clinicians need to examine their own perceptions surrounding primary prevention ICD therapy prior to discussing or recommending the device to patients. Care needs to be taken in how the message is delivered in order for the true intent of the clinician to be perceived by the patient. This study revealed that patients respond best to providers who have engendered trust. Frank discussions containing expert information are expected and admired by patients. Clinicians need to ensure that they are imparting accurate information and check that the patient has received the intended message.

The study implies the potential for decision making instruments throughout the process. Decision aides could be helpful during all stages of the theory. Ensuring accurate and frank information is vital during the first stage of conscious denial. In their attempts to define "good" decisions, Elwynn and Miron-Shatz (2009) emphasize that information does not equate to understanding. This study highlighted the need for improved discourse between patients and providers. Patients must be made aware that options exist, and all aspects of these options need to be discussed, understood, and considered.

Participants described the anxiety they experienced during the second stage of heightening awareness. Patients, at this stage, had experienced an epiphany with regard to their personal risk of SCD. They were troubled and impatient until they had the ICD implanted. Clinician measures to ease the anxiety of patients during this stage would be beneficial.

Clinician interventions could be helpful after ICD implantation. Participants expressed a willingness to talk about their decision to accept an ICD and their experiences with the device during the last stage of new assurance. They did not discuss feelings of depression or anxiety. However, all these patients were interviewed at least one year after device implant. There are many support group options for patients with ICDs. Many hospitals, health plans, and heart failure clinics offer such programs. Online support groups and chat rooms are also available for patients that clinicians feel could benefit.

Bioethical implications

The new grounded theory harbors bioethical implications surrounding the decision making process of HF patients considering primary prevention ICD therapy. Ethical obligations are inherent to nursing. Decision making involving ICDs is a good example of how complex heath care decisions have become for patients. The choices are not always clear. Beauchamp and Childress (2012) provided ethical principles to serve as a moral compass in helping health care providers advocate for patient rights. Respect for patient autonomy is one of those principles that guides nursing analysis and resolution of health care decision dilemmas. Respect for autonomy recognizes the right of the individual to decide for him or herself based on personal values, beliefs, and projected lifespan stemming from the person's life experience (Ridley, 1998). The obligation to facilitate active patient participation in health care decisions presumes that autonomy is what the patient desires.

This researcher proposes that an implication of this study is the need for an expanded view of patient autonomy and further investigation regarding the measure of good decision making processes. Participants who accepted ICDs in this study generally preferred a more passive role in decision making. In fact, they preferred to be told what was best for them by their trusted provider. This decision presents a dilemma for providers. Patients count on their provider to share their expertise and knowledge to help the patient make a decision. Providers may be reluctant to engage in too much discussion surrounding proposed therapies for fear of unduly influencing the patient's decision. Patients in the first stage of the theory describe their providers as avoiding much serious discussion regarding risk of SCD and ICDs. Perhaps fear of perpetuating paternalistic attitudes in favor of facilitating patient autonomy contributed to lack of meaningful information provided. Facilitating autonomous patient choices must include respect for the option to include healthcare providers, family, and loved ones in the decision making process, and the realization that patient preferences may not always be clear, may fluctuate over time, and may include refusal of care or participation in healthcare decisions.

Nurses and all providers who are in a position to present major therapeutic decisions to patients ought to be mainly concerned with an informed, "good" decision by the patient rather than any "right" decision. Elwyn and Miron-Shatz (2009) proposed that decisions should not be evaluated by reference to their outcomes, but rather, they emphasized focus on the pre-decisional deliberation process, the act of determination, and post-decisional outcomes. These periods mirror the stages of embodied revelation. Bioethicists and clinicians often refer to patient preferences as a criterion for good decisions. Clinicians

ought to embrace the fact that the information imparted to and understood by the patient partially creates the patient preference for which respect for autonomy strives.

Facilitating informed, good decisions involves more than the informed consent procedure. Unfortunately, supporting patient autonomy for many providers basically consists of "you have the right to refuse." A patient who shows lack of enthusiasm for a therapeutic option is often described as refusing therapy. The assumption is that the decision has already been made and that there is little need for further explanation or discussion. Respect for patient autonomy in the course of decisions regarding life-sustaining therapies can be challenging. As such, clinicians need to give the time and effort required to fully explain options and promote useful dialogue with the patient regarding their main concerns. Contrary to the traditional interpretation of respect for patient autonomy, providers need to become more comfortable assuming a more active role in the actual health care decision if this is what the patient chooses.

Conclusion

Embodied revelation: the threat of sudden cardiac death for ICD candidates represents a new substantive theory that explains the decision making process of HF patients considering primary prevention ICD therapy. The decision is a result of the revelation of his or her personal risk of SCD and embodies what that risk means to him or her. This theory helps fill the existing gap in knowledge surrounding a patient's decision to accept or decline the only effective therapy to prevent the leading cause of mortality in the US. The theory holds implications for research, nursing science, practice, and bioethical considerations.

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Momentary Contentment A Modern Version of an Old Survival Culture

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Abstract

This is a classic grounded theory based in longitudinal data from everyday life in an environment in Northern Norway characterized by long distances, a harsh climate and people living close to nature and each other. The place has a history of poverty and isolation. Yet, old survival strategies prevail despite modernisation. The theory reveals a culture of momentary contentment with three dimensions: Doing safety, destiny readiness and middle consciousness. This momentary contentment culture explains how the participants resolve their main concern of enjoying life. Doing safety means that common and individual acts create stability. Destiny readiness illuminates a discourse of acceptance, a way of thinking that, with the aid of linguistic strategies, prepares for life changing events. Middle consciousness shows a way of handling difficulties by dividing and separating different phenomena.

Keywords: contentment, grounded theory, time, safety, happiness, altruism, hope.

Introduction

How is everyday life organized in an environment characterized by long distances, harsh climate and people being close to nature and each other? The first author had moved far away to such a place in Northern Norway and was struck by the special life approach of people living there. Before the Second World War this was an isolated place and the sea route was the only way to connect with other villages. Everyday life then included fishing boats perishing in the ocean storms as well as tuberculosis and other diseases on shore. This harsh environment called for different strategies for both physical and psychosocial survival. Isolation created a need for mutual help as well as functional relationships with both internal worries and external dangers. Eventually the fishing boats got safer, tuberculosis controlled and after the war a country road was built to connect with other villages (Bottolfsen, 1995; Rortveit, 2008). Accidents and deaths decreased significantly. Even so, our data suggests that to this day, much because of nature's capriciousness, life's natural course is seen as unpredictable. To find out what was going on in everyday life the authors chose to do a grounded theory based on years of observations—first unstructured and later more formalized. This article is based on a master thesis done by the first author.

Method and material

The data consists of interviews, conversations and notes from observations of everyday life

from 2010 to 2014. Before the study began, in December 2012, the notes were written in the form of diary entries and journalistic notes. The first author conducted a total of six focus groups and eight individual unstructured and semi-structured interviews that lasted between 2-6 hours each. In order to capture views of their everyday lives the informants were asked to freely talk about their experiences. In some of the later interviews, questions pertaining to the emerging theory were asked. The first author also gathered field notes from 15 conversations targeted towards the thesis and 50 informal, semi-structured conversations. In alignment with the classic grounded theory maxim "all is data" (Glaser, 2010) all research notes, diary entries and journalistic notes were discussed between the authors and included in the circular analytic process.

Theoretical Sampling

New decisions regarding data collection were made after each interview (Glaser, 1978). The first author started with interviewing elderly in groups of three with the only question "please tell me about your lives". This was a way to collect data from what they said, how they said it, and what they chose not to talk about. She then went on to interview people in working ages to collect a diversity of data and chose to collect new data in accordance with new questions arising based on the emerging theory. The first author did several interviews with the oldest individual, 97 years old, yielding more than 10 hours of historical data. Since the fishing culture turned out to be a historical base for modern society's contentment, at the very end we decided to make a semi-structured interview with a fisherman who comes from a family with generations of fishermen. This was to see if his life story and remembrances from his parents and grandparents attitudes differed or gave new data to the analysis, which it did not. Rather the analysis was confirmed.

Classic Grounded Theory Analysis

Notes from interviews and observations were written and theoretical memos were written and drawn in different shapes and forms in the comparative process. These memos have been sorted, coded, categorized, and compared to find relationships between categories and concepts using theoretical codes. After each interview or accrual observation the new material was coded, analysed, and compared with previous results. Data was thus collected and analyzed in stages until new data did not provide any new information, i.e., saturation was reached. At saturation the formulated theory was eventually slightly modified in light of existing literature (Glaser, 2010). All authors participated in the analysis. The concepts gradually emerged to explain the participant's attitude towards life. The core category emerged in May 2014. Thereafter, memos and field notes were written without discrimination, but interpretation and analysis was done selectively using the core category as a template. Eventually a grounded theory was generated, with the core category theoretically coded as a cultural manifestation—momentary contentment, explained through doing safety, destiny readiness, and middle consciousness. Grounded theory differs from many qualitative research methods in its focus on incidents and memos rather than persons

(Glaser & Strauss, 1967), and in this study the number of incidents coded and compared amounted to several hundred.

Strengths and Limitations

The strength of this study is the length of time during which the data collection was running, the large number of interviews and the extensive field notes taken. To our knowledge no prior classic grounded theory using ethnographic data of this longitudinal character has been conducted, thus we went into an unexplored methodological area. This can of course be a strength and a weakness. A limitation from a traditional qualitative data analysis perspective is researcher-induced bias. We dealt with this issue by credibility checks from discussing all data in between us as well as by collecting data until saturation was reached.

Results

We found a potential well-being promoting cultural and behavioural strategy with a temporal aspect—momentary contentment. It explains how to deal with the main concern of enjoying life. It also explains how recycling processes of old survival strategies may induce well-being through contentment in modern society. The observed area has a pre-World-War-II history of poverty, dangerous occupations and isolation, confirmed in local historical tales and novels as well as in historical literature (Bottolfsen, 1995; Lauritzen, 2005; Rortveit, 2008). To survive this environment different balancing compensation strategies evolved that are explained by doing safety, destiny readiness, and middle consciousness.

Doing safety

Doing safety illuminates ways to act in order to create stability. Through stereotypes and a well-developed collective support system the participants shape their own safety. The ongoing actions of helpfulness and inclusion create stability and a sense of belonging. It includes practical structures such as a local store, day-care, school, several clubs and annual activities, as well as psychosocial patterns of shared norms, common identity traits and linguistic tools. By using well-known and accepted stereotypes an ongoing confirmatory communion is created.

Destiny readiness

Destiny readiness is a way of thinking. It is characterized by an acceptance of life and an ability to deal with what is at hand by the use of spoken and symbolic language. Both interviews and observations show a down to earth way of handling crisis.

One winter day my nearest neighbor came by. She was heavily pregnant and wondered if I would be willing to help her if she started to give birth during the approaching snowstorm. 'If we get snowed in, you will be the midwife'. She said it without any noticeable nervousness and ended up with explaining/calming me down 'that's just the way life is,' she said. (From memo)

In this context the theory "homeostasis of hope" fits to explain how people create instinctive

compensatory strategies to increase existential hope, including the denial of life-shortening clearance or by increasing the momentary enjoyment of life (Thulesius, 2003). Hope is often connected to some sort of worry and can evolve into demands, thus cognitively draw one from the present into thinking about the future (Sandén, 2006). However, hope is not commonly spoken of by the participants. Instead expressions like "what happens happens" and "one can't worry about the future, life is here, now let's live" are expressed. This means capturing the moment and dealing with what is at hand. These tools for acceptance and preparedness, in combination with a culture of helpfulness, open up for feelings of contentment in the moment.

Middle consciousness

Middle consciousness explains the link between opposite thought processes as a way of handling difficulties and of facilitating a presence in the moment. There are, as an example, ways of dealing with entry and exit from the communion. In short, when someone is absent he or she is moved into a stand-by mode and only sporadic contacts may occur. Local and historical literature describes the importance for women and men to let go of each other while the men were out fishing for months at a time. The present moment needed full attention, as it was crucial for survival. By letting the thoughts of the two lives, when the man was out fishing and when he was at home, be intermittently related, they can exist in one's mind taking minimal energy from the present moment (Bottolfsen, 1995; Lauritzen, 2005).

Today this is not a necessity, but by putting thoughts of people that are not present in a standby mode, in a middle consciousness, feelings of missing and longing are decreased, feelings that otherwise contribute to thoughts that brings a person away from the moment. In a similar way, participants show an ability to separate sick from healthy, to see disability when help is needed, and to not see it when help is not needed or possible to give. Observations and interviews demonstrate how people at one point show great helpfulness and then, in another setting, treat the same person as fully fit. As a disabled person expressed it:

The same people that I talk to about my disabilities and who help me cope can three days later ask me to join in a tough physical activity. It's like they haven't heard, I don't even think they are aware of doing this

Observations show how participants separate illness from health, present from future to past, and what is possible to influence from what is not. By such separation, where parts are intermittently related, a connection through the middle consciousness is kept. This allows each part to be dealt with in its moment. In that moment there is always something to do, either attending the negative through helpfulness, humor, tenderness or the positive by doing safety through for example an activity.

Various combinations of doing safety, destiny readiness and middle consciousness show a structure and organisation of life that seems to retain social peace and stability. They are characterized by collective strategies for joy, safety feelings, inclusion and helpfulness; strategies working towards contentment in the moment.

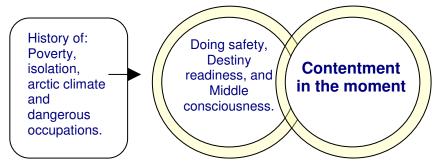


Figure 1. Outline of the development of Momentary contentment theory. The history of hardship and early deaths work as a foundation for the three balancing categories of contentment; doing safety, destiny readiness, middle consciousness; which in their interaction explains momentary contentment.

Momentary Contentment Theory

History shows an unfortunate and weather-beaten society that despite its vulnerability, historically as well as to date, found a way of life that creates contentment. Yesterday's proximity to death has due to climate, distances and nature-related accidents to some extent remained. Interviews and observations show that the balancing mechanisms that existed as a necessity before the Second World War still in large are present in modern life. As a consequence the degree of hardship has been reduced, but the power of balancing the hardship through doing safety, destiny readiness, and middle consciousness has not been reduced to the same extent.

The psychosocial survival culture shows an analogy with literature regarding what creates happiness, joy and satisfaction, linguistically as well as cognitively and behaviorally. People's subjective life experiences may be more important than the actual life situation itself (Haller & Hadler, 2006). Today the culture of helpfulness is not necessary for survival, but it still exists, nourished by accidents and rough weather. Altruism is central in interviews and observations, in the past as well as today. In groups altruism creates a common pride based on partially unconscious internal processes where it is hard to see one's own role. On the societal level, altruism works through well-developed voluntary work and a preparedness to fight for survival.

By including newcomers a base for confirmative communion is created. Contentment is achieved by doing safety in a collective support system that includes momentary helpful and altruistic inclusive attitudes. Simultaneously the language is characterized by adaptability and euphemistic expressions.

The spirit of accepting everyone as a participant in parties and clubs requires a certain form of preparedness that lessens worries of being alone and thus creates a feeling of safety. Together with linguistic strategies and communicative symbols thought processes are transmitted to enhance contentment in the moment. Expressions like "we know where

we live" symbolize a destiny readiness for the harsh climate and its challenges. But in order to protect the preparedness from worries, expressions like "heldig" (lucky) are often heard at the same time. Such expressions create an opportunity to separate a moment of "heldig" from a danger that might come or that used to be in the past, leaving a contentment in the moment.

The separation of those who are present from those who are absent creates a focus on the moment. In combination with inclusion processes no one has to be afraid of not being allowed back in the community when returning from being away. A woman who had been gone for a few months said it was like they hadn't even noticed that she had been gone. This separation phenomenon, a part of the middle consciousness, shows how different aspects are intermittently related by reciprocating in consciousness, thus not leaving issues neither repressed nor fully conscious.

By not expecting life to be easy in combination with a culture of always helping, an accident or hardship is not met alone. When no more help is needed or possible to give the ability to temporarily disconnect from the suffering of a friend or family member creates an opportunity to focus on the positive which includes health. Dark humor helps carrying the person in need through laughter and an activity together with linguistic tools keep bringing people back to the present. And, in the moment there is always something to do to make life a little bit better. If not for oneself, for a friend or a neighbor, thus in its altruistic manner creating contentment.

Four Manifestations of Momentary Contentment

Momentary contentment is specifically manifested in inclusion processes, nature's capriciousness, communication strategies, and in a culture of helpfulness.

<u>Inclusion processes yielding contentment</u>

The inclusion process is characterized by a combination of activity, openness, and individuality. In combination with a culture of helpfulness and altruism, safety and contentment are created. In order for individuality to spire in a culture where everyone is welcome the separation phenomena of the middle consciousness is used to disregard negative individual traits.

Shore et al. (2011) present the following definition of inclusion: "the degree to which an employee perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness" (p. 1265). Inclusion is thus established when individuals have a sense of belonging to the group and, at the same time, perceive themselves to be a distinct and unique member, combined with the group responsibility to include the individual, rather than the individual connecting to the group (Jansen et al., 2014). Through a combination of linguistic and separation phenomena inclusion is enhanced:

The expression 'him NN, that's just how he is' is common when someone breaks the norm. Instead of

trying to change the person or exclude him/her from the fellowship an exception for the behaviour is created, in other words a way to keep both belonging and authenticity. (From memo)

Shore et al. (2011) and Jansen et al.'s (2014) view on inclusion, with the combination of individual authenticity and group solidarity, is apparent in the term "the Swede".

First I believed it was a way to distance me from the others but I soon found out it was just the opposite, 'the Swede' allowed me to break the norms and still be part of the communion. Every time I did something they thought was weird I just said 'I'm from Sweden' and it was accepted. If someone asked one of my friends 'what's she doing' he/she would say "never mind, she's a Swede". Now that they know me, after three years, they don't use 'the Swede' anymore, now they say 'that's just how she US is'. (From memo)

It doesn't logically work to say "she NN, that's just how she is" of a newcomer. Instead the new expression "the Swede" was created. It worked as an explanatory model in "she's from Sweden" and the odd behavior could thereby be separated from the norms without the need to change neither the norms nor the person challenging them. Space was created to allow norms to be broken without a person losing uniqueness, behaviour that otherwise would have put inclusion at risk.

Nature's capriciousness and contentment

Nature and the scenery have a central position as it draws people towards the present. Nature is characterized by unpredictability, beauty and the support it gives to the people. Some see it as a source of joy, some as a necessity for mental survival, while others relate to it as something to rest your eyes on. All refer to nature as something that generates energy and internal strength, thus creates a sense of belonging and pride, contributing to the stereotype description of the area. As a mentally ill participant expressed it: "Three hours walk here means I'm way up on a mountain top. Three hours walk in flat land is only three hours walk."

Alas, nature in combination with the rough climate is also a source of accidents and deaths. But in that hazardous environment the old culture of helpfulness and readiness is preserved which yet furthers contentment. The unpredictability is described as something natural and dealt with through a destiny readiness in where people put the danger in a stand by mode, in a middle consciousness. Through the middle consciousness they create a momentary space where they neither have to think about the danger nor repressing it. Thus they are allowing contentment through the scenery and are still ready to help as soon as help is needed which is yet another source of contentment.

<u>Communicative manifestations – contentment talk</u>

Many expressions and other communicative tools help the separation of positive from negative, thus supporting the middle consciousness maintenance. The tools also support a destiny readiness without reducing contentment in the moment. Symbols of tenderness, humor, and listening bring people back to the moment, away from straying minds of future and history. One characteristic of contentment talk is that hardships often are described by their solutions. This allows problems to exist on one level, leaving a preparedness that negative things can happen, but without giving unnecessary negative thoughts space in the

present moment.

The elderly discussed how warm the cow pee and poop was, no-one during the discussion mentioned the coldness in chasing cows bare feet in the fall even though that was the issue at hand. Focus is on the solution and the problem seems to be a secondary variable which I find in between the lines. (From memo)

Another characteristic of contentment talk is contentment and safety enhancing expressions. The term "heldig" (in English that one can count oneself lucky) is frequently used in relation to being heldig (lucky) to live there; who has the best friends; who got to see the sun today. It thereby contributes to the general notion of contentment. It also functions as a way to describe and confirm the preparedness that hides behind being lucky. "Lucky me to have good friends" implies knowledge of possibilities of life to be otherwise. Another expression, "done with it," is used as a temporal linguistic tool to move on from negative thinking. It is a way to leave the past and return to the present moment. Observations and interviews have confirmed this phenomenon to linguistically put things aside and describe negative incidents with positive expressions.

A third characteristic of contentment talk is to give confirmation through humor: the worse the accident, the darker the humor. This opens up possibilities to create confirmation and joy in a bad situation. The confirmation appears as laughter and contributes to intersubjectivity and contentment in hard times.

Humor is often seen together with a fourth communicative characteristic, active listening. When nothing is possible in a situation, such as a serious disease, one can listen and laugh. Active listening provides no feedback on anxiety nor is the person interrupted. When an anxious person finishes talking, not seldomly with a "done with it" expression, the situation turns into an activity or plan for an activity. Confirmation is given through a combination of active listening, humor, and activity.

Every society has its linguistic ideology, which emerges in interactions and shared experiences. Studies of communicative evolution show that it is impossible to distinguish the understanding of language from its cultural context. Language creates feelings and experiences as much as senses create language (Wilce, 2014). Through the combination of different communicative tools, activities and stereotypes Doing safety, Destiny readiness and Middle consciousness are reinforced in a confirmatory communicative momentum.

Culture of helpfulness and contentment

Our data reveal a norm of helping when help is needed as if it is the most natural thing to do. The contentment inducing helpfulness culture has different levels of helping characterized by interactions between getting help, helping and altruism. The widespread culture of helpfulness creates a certainty of help being there independent of friendships and other relationships. It promotes feelings of safety and a readiness for what life has to bring. Participants talk about helping others, but not in an abstract way, only very concrete situational and as something obvious; like brushing one's teeth.

The obvious and non-reflected help brings an altruistic dimension to helpfulness.

Within happiness research there is something called the hedonic paradox where a pursuit for happiness decreases wellbeing otherwise connected to helping others (Bauman, 2008; Egonsson, 2011; Norman, 1998). Post (2005) finds a strong link between altruism and wellbeing, happiness, health and longevity—as long as a person is not overwhelmed from helping others. He describes how altruism results in positive social inclusion, in distraction from personal problems and self-centred anxiety, in increased wellbeing combined with experiencing meaning and purpose and in a more active lifestyle. Observations show engagement into each other's helpfulness. By assisting each other in giving aid one is not left alone in a commitment to help. By sharing the burden an extra level of safety feeling is created. In a culture where helpfulness is norm, there is no need to diminish the helpfulness, like "I owe you a favor" or paying back for given help, which would put the altruistic motion at stake.

Discussion and Further Research

Momentary contentment theory explains how people in a rough environment enjoy life by doing safety, destiny readiness, and middle consciousness. Momentary contentment might be found also in structural organizations, collective support systems, inclusion processes, and in individual thinking and communication. Momentary contentment is characterized by feelings of safety, inclusion and helpfulness where the present moment is emphasized due to nature's capriciousness and isolation.

When comparing with previous research Antonovsky's studies on health-promoting factors among concentration camp survivors emerged as relevant to study. Antonovsky (1996) generated the salutogenic theory, which connects cognition, behavior and motivation and indicates a sense of coherence (SOC) as the single most important aspect to mentally cope with hardship. SOC consists of three parts: comprehensibility, manageability and meaningfulness. It is not bound by cultural context, but may be designed to fit various cultural settings (Antonovsky 1996). Both SOC and the momentary contentment theory have evolved from empirical studies of different forms of hardship.

Antonovsky examined healthy-sick as opposing forces in a scale of what makes a person move towards health. But our field studies led us to focus on contentment, feelings of safety and the ability to live in the present. We have neither in interviews nor observations recognized what the salutogenic theory was promoting; none of the elderly expressed any meaning or sense of coherence in their hardships. Quite the opposite. They demonstrated a genuine ability to place uncontrollable difficulties in a middle consciousness, reformulating problems into solutions and use of laughter as therapeutic confirmations. In other words, they expressed adequate ways of not having to reflect on purpose and meaning.

The sense of coherence we found was focused on interactions with nature and others, but not in what happens. With symbolic statements like "done with it" and "this is just the way it is" participants move on without context and meaning. This differentiation in results can, at least partly, be explained by the different contexts in which the theories

evolved. Antonovsky's studies of survivors indicate a history of hardship that still influences one's mind and health. Our study involves ongoing hardship, thus the need to find solutions in the moment are of greater importance than finding meaningfulness in what has happened.

The grounded theory of momentary contentment presented in this article reveals a psychosocial capacity where accidents and deaths are apparent in every moment. In future research we wish to explore the possibilities to implement this psychosocial survival knowledge, tools and strategies into modern healthcare. We suggest that strategies and techniques yielding contentment presented in this article are modified and re-designed to help people living close to death and worries. The importance of patient participation and self-action in both diagnostic and treatment processes has been shown in patient testimonies and research (deBronkart, 2011; McDonald et al., 2013). The different ways of finding intersubjectivity, contentment and a momentary view on life by altruism, activities, hope, inclusion strategies, symbolic tools for differentiating between sick and healthy, active listening, and humor could eventually be tried in different contexts.

Conclusion

Momentary contentment theory is explained through its three categories: doing safety, destiny readiness, and middle consciousness, all strengthened by linguistic tools. Through old survival cultural manifestations, today's society found a culture that embraces people's capacity to live in the moment, taking each day as it comes, to act on the things that are possible to influence and to let go of that which cannot be simultaneously influenced. In the combination of doing, thinking and separating momentary contentment theory explains a hidden but present flow of less worrying, strengthened feelings of safety and enhanced satisfaction. By recycling and modifying identified tools and strategies for contentment in everyday life, we believe there is an opportunity to design a new way to approach psychosocial hardship. Interesting to address for future research would be to connect new studies on the safety and contentment of the patient-related care with Antonovsky's (1996) research on health and SOC to see how and if these two approaches can complement each other.

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Utilizing Grounded Theory to Enhance: the Education of Graduate Clinical Social Work Field Students

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Abstract

Recently, Glaser (2014) wrote that there is little in the literature regarding the varied ways in which grounded theory (GT) can be applied, stating that the exploration of the application of GT "is a vital topic for our profession and ourselves" (p. 1). This article presents the first published discussion on how GT can be used in social work field education to enhance learning and interpersonal awareness of graduate students. *All is data* is a well-known mantra of GT and in this research, student field journals are read monthly, coded, and themes conceptualized and shared with students to assist in joint learning and reflection of common experiences. The GT research process used for field pedagogical purposes is shared in the hopes that it may serve as a guide for others and the themes emerging from the research are presented.

Keywords: Social Work Field Education, Social Work Grounded Theory, Social Work Education Research.

Introduction

Recently, Glaser (2014) wrote that there is little in the literature regarding the varied ways in which grounded theory (GT) can be applied, stating that the exploration of the application of GT "is a vital topic for our profession and ourselves" (p. 1). After an extensive literature review, this article presents the first published discussion on how GT can be used in field education to enhance learning and interpersonal awareness of graduate students.

For the past ten years, I have been teaching clinical practice and field courses to second-year social work graduate students. For two hours each week, I meet with twelve students to discuss their field internship experiences, how they are acclimating to their agencies, their successes and challenges with clients, and how they are personally and professionally changing based on these experiences. As part of my field course they are to turn in a five to six-page journal once per month describing experiences and reflecting upon events relevant to their learning and growth as social work practitioners.

The grading of these journals has always been a bit troubling to me because, when done correctly, a journal is a private place to process ideas, feeling, and events that have been personally and professionally impactful. I have felt that the process of critiquing their journals never felt right, much less helpful, and certainly got in the way of the students feeling free enough to openly process their experiences. If students are thinking about my grading when

they are writing their journals, then it directly affects the expression of their real feeling and experiences.

The problem for me as a professor was how to include a very pedagogically sound assignment like a field journal in the course while reviewing it in a manner that doesn't overly influence the writer to the extent that it ceases to be a true reflection and becomes more of an exercise in telling the teacher whatever is thought will receive a good grade. After much thought, two ideas came to mind to answer this question. First, it seemed extremely helpful to student learning if my role as a professor could be to help them pull themes from their journals so that these themes could be discussed. Second, it would be helpful if the class journals could be compared and common emerging themes across all journals could be discussed. These commonly experienced themes could then be brought back to the class in a confidential way so that no student is singled out; the common themes emerging from the journals could be discussed with the group to enhance learning and shared experiences. I wish to point out that I utilized grounded theory in the analysis of field journals as a teaching tool but I did not teach students grounded theory since the focus of the course was field.

Literature Review

My first step was to look for ways in which social work journals had been compared or analyzed previously for the purpose of finding a research method I could use with my course. I emphasize that the literature review was not to form a hypothesis about what students may be experiencing in field but to find a research method. As Glaser (2014) has pointed out, literature reviews can often get in the way by overly influencing the thoughts and expectations of the researcher. I was very attuned to not influencing my results.

A literature review turned up no systematic discussion of how social work field journals could be analyzed to find common themes, nor ways in which these themes could be used pedagogically to enhance student learning. With no results, my next step was to explore the ways in which I might systematically analyze student field journals. Three things were important in this search: (1) that the approach be focused on, or allow for, analysis of written journals, (2) that the approach be open enough to have no preconceived notions of themes, (i.e., no preconceived hypothesis), and finally that the process be rigorous but also practical enough for a professor to be able to conduce the analysis of 12 journals ranging in length between five to six pages in a week's time.

After a thorough literature review exploring research and theory I came across Glaser's (1978) seminal book Theoretical sensitivity: Advances in the methodology of grounded theory and subsequent articles (Glaser, 1998, 2007, 2014). Most impactful to me was Glaser's (2007) article All is data in which he discussed an openness and awareness to the contextual factors of research. For me, the concept of all is data can be summarized as data without pretention. I immediately liked the practicality of this idea for I had a fear that because journal data was being collected in a classroom that it would somehow be excluded or diminished in some way in the paradigm of research.

Glaser (1978) further discussed that GT is not to be seen as defining truth, but it is instead a method used to discover thematic elements from data in a conceptual way in localized context. This was yet another strong moment of connection for me with GT because I was seeking a research approach to explore the local, contextual experience of my students and not necessarily to make truth claims at a larger level.

Finally, Glaser (1978, 2007, 2014) differentiated GT from other forms of grounded approaches such as qualitative data analysis (QDA) by suggesting that GT is an empirical *process*, not only *analysis*, from which a theory of behavior is generated. Glaser (1978) stated, "The goal of grounded theory is to generate a conceptual theory that accounts for a pattern of behavior which is relevant and problematic for those involved. The goal is not voluminous description, nor clever verification" (p. 93).

This insight was important and a great fit for my goals of using research to discover themes for pedagogical reasons. Glaser's GT approach was one that was contextually informed enough to allow this flexibility of use and thought. I will now share the research process used in my data collection and analysis of graduate social work field journals.

Participants and Data Collection

Each year I have twelve graduate social work students in my field course and the course runs across two semesters. In total, the students are with me for seven months and they are required to turn in one journal each month except the final two weeks of the course. I am able to collect a total of six journals from them at monthly increments across the semesters and each journal is five to six pages in length.

I share with students at the beginning of the semester that the journal is not a graded assignment and is a space for them to process their experiences. The assignment as written in the syllabus states:

Each student is required to maintain a reflective journal that includes significant aspects of the learning process, issues and concerns that arise in placement, and anecdotes and/or impressions that identify new self-awareness and professional growth. Journal entries will be reviewed by the faculty liaison with comments designed to guide the student's learning process. The contents of the journal will be held confidential. This assignment will afford the opportunity for the faculty liaison and the student to engage in a dialogue regarding the learning process.

I ask that these journals be turned in to me in electronic format. This requirement is important because for my data analysis I use Microsoft Word to highlight, mark, and note emerging themes.

Data Analysis

When students turn in their monthly journals electronically I begin by having my teaching assistant remove any identify information from the journal so that I do not know the author. I then open the electronic journals and begin the traditional grounded theory open coding

process, followed by utilizing Glaser's six Cs to sort into general categories of causes, contexts, contingencies, consequences, covariance, and conditions (Glaser, 1978). As categories unfold, I then sort larger categories into sub-categories, and write memos to help me organize my thoughts. Note that I utilize Glaser's traditional theoretical coding during this process.

After reading all the journals and coding them I then reread the journals and use highlight colors to further code themes. I have a computer with three screens that allows me to compare and contrast multiple journals simultaneously. I read and reread, first looking for emerging thematic agreements, followed by reading for disagreements.

Results

The results of this analysis are used in two ways. First, the emergent themes from each individual student's journal are written by me, attached to the end of the journal, and returned to the student so that the student may reflect on, and learn from, the findings. In this way the GT results are personalized to the individual and context, and are actively useable for reflection. Second, in class with all the students I share the results of the compared journal themes and we discuss these together, gain feedback, and reflect from the class discussion.

Because the results of the GT process is primarily for the students of each class, and the purpose of this article is to share how GT may be used in social work education, for this paper I share the results in the spirit of Glaser (2007) who maintained that behavior can be empirically analyzed and that emerging themes can transcend person, place, and time. Glaser and Holton (2004) stated, "The conceptual nature of classic GT renders it abstract of time, place and people. While grounded in data, the conceptual hypotheses of GT do not entail the problems of accuracy that plague QDA methods" (p. 1).

With each new journal the students enter a new stage of student experience. For ease of reading and clarity I will divide the findings by journal assignment number and the name of the stage that the students are experiencing:

Journal 1 - Student Apprehension Stage

Emergent themes from the first journal (12 students) are primarily the fear of entering the field and a self-unease about how they conceptualize themselves as social workers. This phase of student experience can be understood to be the student apprehension stage in which fear is centered on three areas, (1) fear of engaging with clients, (2) fear of not-knowing enough to assist clients, and (3) fear about whether social work was the correct career choice.

<u>Journal 2 - Ease of Anxiety and Development of We-ness Stage</u>

Emergent themes from the second journal involve a general ease of anxiety regarding clients. Most students have seen clients at this point and there is a theme of what I describe as "weness;" the idea that clients are not separate from the students, but that client and student share more in common than not. This sense of we-ness allows students to relax with clients as

they recognize that social worker and client operate as teams together in helping. Students recognize that the burden of change creation does not lie entirely on them. Fear remains about specific techniques to use with clients, while questions of social work as the correct career choice diminishes slightly.

Journal 3 - Changing Identity Stage

By the third journal, students are entering the changing of identity stage of which the largest theme is the development of a more sophisticated social work identity of the students. They are now more at ease with their career choices as a whole but anxieties emerge about what job they will specifically seek upon graduation. Students begin to speculate about the client populations with whom they would like to work and which types of problems they would like to help clients overcome. Those in substance abuse internships begin to wonder specifically about working with non-substance abusers and explore ways to expand their exposure to a wider range of clients. This represents a confidence in their skills and an acceptance of themselves as social workers while anxiety begins to surface about the future.

Journal 4 - Acceptance and Patience Stage

Students' transition from stage three in which a social work identity is formed into stage four, represented by acceptance and patience. Themes emerging from the fourth journal are an initial acceptance that, as students, it is impossible to know all of the clinical theories available to them to assist clients. This realization is specifically more present in students who saw themselves as perfectionists or had a general resistance against the ambiguity the social work field presents. All students have developed a sense of patience about client change and recognize that the speed and degree of change is client dependent. Students become less anxious to push their clients to change and become more aware that their anxiety over client change can be counterproductive in counseling. A new focus ensues about employment after graduation and their attention shifts away from worry over their practicums.

<u>Journal Five - Thinking Forward to Employment Stage</u>

All students have acquired a sense of focus by this point, and their goals are to complete their internships and to continue to develop supportive relationships with supervisors for learning and so they can have strong job recommendations. Anxiety with working with clients is all but diminished. In this stage, clinical thought has become much less generalized and clinical questions are explored with more precision. Clinical confidence has risen due to learning more about clinical practice but also through the realization that each practitioner has a unique style and is successful with clients from a variety of clinical approaches. This awareness creates a sense of ease for the students that they will be able to fit into social work in a unique way and be successful with clients while retaining a sense of self with which they are comfortable. Anxiety by this stage has shifted strongly to worry about employment after graduation and students think forward to their employment and begin planning for the future.

<u>Journal 6 - Launching Stage</u>

By the final journal, the students enter the launching stage. Common themes among students are a tension between seeing themselves as students and as professionals. They will be graduating in three weeks from the date of this final journal and while there is a belief that they have successfully learned what they were required to learn in the social work program, they are beginning to wonder if they are in fact prepared for the realities of full time social work employment. Anxiety is centered on the transition to the professional arena and the jobs available to them. Confidence is present in terms of their choice of the profession, their ability to interact with clients, and their general knowledge base. Anxiety is present in the transition from student to paid professional and the employment opportunities in their future.

Conclusion

After conducting a thorough literature review, GT has been used in the study of adjunct faculty teaching (Tyler, 2011), field instructor's teaching perceptions (Havig, 2013), and the study of counselors' experiences (Helpard, 2011), but nothing has been published in the literature about the use of GT as a pedagogical approach in social work field education. This article is the first.

The use of GT pedagogically in the process of social work graduate field teaching has been tremendously helpful in expanding the insight and knowledge base of students, as well as for me, as a professor, in organizing my feedback to students in a helpful way. The use of GT has been impactful in that it is an active use of research in an active ongoing course, for an active ongoing learning purpose. Students have been appreciative, not only of the shared insight gained by the use of GT for teaching, but also because it is an example of the practical ways that research can be used to directly inform and benefit others. Ultimately, GT used in this manner is an active process that has added value to the learning of social work graduate students.

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