
Loneliness and Belonging: A Reflection on the Meanings and Values of Social Networks in the Wake of the Virginia Tech Shootings

Curt D. Gervich, MS

This reflection draws on the author's personal and professional interest in social networks, social capital, and community to explore the implications of losing significant members of one's social network to catastrophic events such as the April 16, 2007, Virginia Tech (VT) shootings. Social theorists posit that the strength of weak ties comes from the opportunities that they present. Weak ties offer opportunities to meet others, expand networks, and become more embedded in our communities. Therefore, for the author, the events of 4/16 represent not only the loss of a friend but also a

loss of opportunity. The VT shootings have pushed him to consider whether personal relationships and social networks can be objectified to the point that they may be managed. On a second analytical level, the shootings have pushed him to ask how local governments may incorporate social networks, community, and social capital into emergency planning and recovery efforts.

Keywords: social networks; community; social capital; terror management theory

My Story: April 16, 2007

At lunchtime on Monday, April 16 the campus shootings felt distant. I watched the tragedy unfold at home, two miles from campus, on TV and online. The first shootings happened in a dorm I'd never visited and the second in a building that I'd only walked through in an effort to stay dry on a rainy day. Statistically, I calculated, the victims were probably not people I knew and this somehow made the events feel as if they did not happen to me. The shootings were not OK, but they were not mine.

That changed at 9:33 Monday night when my wife and I found out that a neighborhood friend who we see with his wife when we walk our dog or at a neighborhood barbeque, was killed. Now his wife is alone. The moment I learned of this acquaintance's death the shootings became mine, and I was forced to reflect and ponder their implications more deeply. It was then that I began to realize that there are no injured and uninjured, victims and non-victims,

affected and unaffected or close and distant. Sadly, these events happened to all of us, no matter how close one was to the victims, how many classes one had in Norris Hall, if one was on campus when the shootings occurred or how well one knew Cho.

Tuesday afternoon I watched the Convocation from the grass in Lane Stadium. By Wednesday I felt well enough to return to campus for a few minutes to see how colleagues from my graduate program were coping. Our student office was empty. On Sunday my wife and I returned to reclaim campus for ourselves. We walked the Drill Field, looked at Norris Hall and the fence being built around its perimeter, and watched undergrads return to their dorm rooms in West Ambler Johnston. Our walk brought the events one step closer to our hearts. Places we walked when we made the decision to move to Blacksburg one year ago were now memorial sites. Our campus was not a university, it was a cemetery. We wondered if vibrancy, soul, life, energy, spirit, humor, and learning could ever return to this place.

It was on Monday morning, April 23, while walking from the Architecture Annex to Cheatam Hall, that I realized it would not. Somewhere in the shaded, outdoor corridors behind Sandy Hall a

From Virginia Polytechnic and State University, Blacksburg, Virginia.

Address correspondence to: Curt D. Gervich, 202 Cowgill Hall, Blacksburg, VA 24060; e-mail: cgervich@vt.edu.

woman wearing a purple armband signifying that she was a volunteer grief counselor and assistance provider greeted me, "Welcome back to campus." In the few steps that followed I absorbed what she meant: that, in addition to losing 33 colleagues, our home lost much more. We lost innocence, we lost drive, we lost desire and we lost whatever else it was that defined us before April 16, 2007. "Welcome to the new Virginia Tech," she meant. "Welcome to the place where everything has changed."

Gervich, 2007, p. B5

Background and Theoretical Approach

Social Networks

I study social networks. That is, the ways in which people are linked to one another through social ties and the ways in which our ties with others influence our own lives and those of others (Raab & Milward, 2003). A social network can be imagined to resemble a spider's web; each junction of the web represents one social actor, and each filament represents that actor's relationships with others in the network. As relationships in one portion of the web change (new linkages are created, made stronger, or broken), the effects of the change may be felt in other portions, just as a spider's entire web vibrates as the spider walks along one filament (Gervich, 2004). Wellman (1988, p. 33) has called social networks the "social distribution of possibilities," meaning that the presence or absence of ties has implications for individual relationships nested within a network and for the network at large.

Social network mapping illustrates the relationships and social interactions between individuals in a community and how these interactions influence linkages and relationships elsewhere in the network. Social network studies often explore the ways in which information, such as news and rumors, or resources, such as money and equipment, flow through communities based on the ties that exist among community members.

Total social networks, one- and two-mode networks, actor and event networks, and egocentric networks, among others (Wasserman & Faust, 1994), represent different network types, structures, and interactions among communities and community members. This reflection makes use of concepts from total and egocentric network studies. Total social network studies seek to describe all the linkages between people in a specified social system,

whereas egocentric network studies describe the linkages among actors within one individual's sphere of relationships. This reflection makes use of these concepts to describe my personal reactions to the events of April 16, 2007, as well as the reactions of the Virginia Tech (Tech; VT) community.

Community

In my research I use the concepts of social networks to study the ways in which multiple relationships among individuals weave together to form communities. A variety of types of communities exist (Bender, 1978; Poplin, 1972; Scherer, 1972; Wilmott, 1986). Wilmott has offered definitions for three types of communities: place, interest, and attachment communities. Wilmott's place-based community emphasizes the significance of geography in defining community. This type of community refers to a group of people bounded to a particular place such as a watershed, valley, township, or state. The boundary lines of a place-based community can be drawn on a map. Generally, an individual is considered, or not considered, part of the community based on where he or she lives.

Wilmott's interest community refers to groups of people with common concerns and activities. For example, the Jewish community, environmental community, or ice-skating community represent interest communities. Members of these communities share common interests, and these interests bring them together. The boundaries of an interest community cannot be drawn on a map. Instead, community members are defined by their shared concerns and beliefs, and participation in activities that relate to them.

Finally, Wilmott's attachment community combines characteristics of both geographic and interest communities. Attachment communities form when people who share common interests also share common connections and affinities for particular places. For example, people working in natural resource industries may develop attachment communities as a result of their reliance on the land for income and livelihood, and the connections those interests and activities give them to the particular locales where natural resources are found. Members of these communities may rely on natural resources for income and economic stability and for maintaining connections to family and friends. It is sometimes said that these communities create their cultural identities

from their dependence on the local environment (Bliss & Flick, 1994; Hinrichs, 1998). Indigenous communities, where people are closely connected by their cultural heritage and share spiritual, economic, and social ties to specific regions and landscapes are examples of attachment communities. Members of the commercial fishing industry may also be said to belong to an attachment community in which linkages between individuals are based on shared interests in fishing, strong connections to the sea, and the close relationships that develop among fishermen while engaged in their trade (McGoodwin, 1990).

The attachment community concept takes on a unique form in my reflection. The students, faculty, and staff of VT, as well as residents of the broader Blacksburg region, are closely intertwined. For instance, many graduates of Tech find jobs in the region; the university is the primary employer in the area, which is in rural and economically stressed southwest Virginia, and many individuals work in jobs that are associated with, and depend on, the university for their employee and customer bases. The region has dozens of restaurants that serve, primarily, students, staff, and faculty; several engineering and high-tech firms are based in the area as a result of research and funding connections to the school, and indeed, many people—if they are not directly connected to the university as students or staff—are connected through social networks via spouses, children, or friends.

Not only are the university and region connected through their economic reliance on one another, they are also joined in physical senses. Many VT offices and campus-oriented businesses are located in Blacksburg's downtown business district so that, in many places, campus and town are indistinguishable. Student-oriented housing takes up a considerable share of Blacksburg's residential space and the student population can, at times, feel overwhelming. The town also has a "university feel," meaning that symbols of the university and its academic-oriented ideals permeate the community. For example, the school's mascot, a turkey, maroon and orange color scheme, and logo are common themes throughout town. The Blacksburg Transit bus schedule fits the university's schedule and the Town's government coordinates closely with the university administration. When the Tech football team is playing at home or when the semester nears closure and final exams are in session, the town of Blacksburg itself

takes on a celebratory or studious feel, respectively. Likewise, during the school's winter and summer breaks, campus and town take on entirely different feels—namely, they can feel quiet, sleepy, and empty.

Blacksburg, with its close association with VT, feels very much like a company town and fits the definition of an attachment community. Community attachments are, in this case, not among people and local natural resources but among people and academic, university-based resources. Blacksburg's and VT's cultural identities, as well as their economies and social institutions, are tightly coupled. The town and campus are, in short, a community of residents defined by geography as well as by attachments to the university setting and its ideals.

It should be noted, however, that in this reflection, I don't feel it is necessary to define what is meant by community each time I use the term. In the context of 4/16, community simply describes the individuals and groups that we rely on to provide comfort, belonging, and support in challenging times, and our need to feel community attachment is especially strong in times of tragedy.

Social Capital

The concept of social capital is central to the study of community (Coleman, 1988; Lin, Cook, & Burt, 2001). The idea suggests that interactions that take place in our relationships develop characteristics such as trust and norms of reciprocity (Putnam, 2000). As relationships take on more of these qualities, they evidence increased social capital. Longer-term, loving, and caring relationships such as close friendships are high in social capital, whereas ties that lack such depth and complexity may be said to evidence less social capital. Social capital is, therefore, the substance of linkages among members in a social network.

Social network and capital researchers often characterize the links among individuals as strong or weak (Granovetter, 1973). Strong ties describe relationships that evince substantial social capital. Strong ties typically link family members and friends, and sometimes coworkers. Weak ties, meanwhile, describe relationships among individuals who do not interact frequently or in deeply meaningful ways. I hold a weak tie with the student who sits next to me in my qualitative methods class, for instance. We interact in cursory ways, by sharing

niceties before class or by discussing class readings, but our relationship ends there.

Yet weak ties are vitally important in the formation of social networks. Stronger ties are held with members of social networks with whom we share multiple commonalities. As a result, strong ties are said to offer us little in the way of new ideas or introductions to others. I know, for example, most of my wife's friends, family members, and coworkers, and I tend to agree with her general outlook on the world and life. As a result, she offers me little in terms of expanding my social network. At one time, early in our dating days, she drastically altered my network and outlook on the world in exciting and new ways, but after dating for many years and 1 year of marriage, our worldviews and social networks have grown, and continue to align, more closely.

The people with whom I hold weak ties offer opportunities for growth. If I were to pursue my relationship with my classmate, it has the potential to change my social network significantly. My fellow student has different friends, comes from a different region of the country, and holds different spiritual and political beliefs. As a result, she holds strong and weak ties with a variety of people that I do not, and she is embedded in the Blacksburg community in ways that are different from mine. This fact represents "the strength of weak ties" (Granovetter, 1973, p. 1360).

In my field, Natural Resource Planning, I use the concepts of social networks, community, and social capital to facilitate stakeholder participation in the development of natural resource management plans and policies. In my personal life, I think about these subjects because I feel a deep need to connect to others and to community. I feel the need to belong. I do not like loneliness, yet at times I feel lonely. My feelings of loneliness are not frequent, and they do not consume my energy, zest for life, or sense of humor, but they are there nonetheless, and they are more frequent since April 16, 2007.

Terror Management Theory (TMT)

These concepts—social networks, social capital, community, and my personal need to belong—can be related to central and current theories of traumatology. These concepts share several parallels and intersections with TMT, which identifies social connections as key buffering mechanisms for individuals involved in traumatic events (Pyszczynski, Solomon, & Greenberg, 2003).

TMT has three key elements. The first is that humans are conscious, and afraid, of death. More important than being afraid of death, in general, we are afraid of our own deaths. This notion, the realization that we are not immortal—that we will in fact someday, and perhaps someday soon and unexpectedly, die—is called mortality salience. We are reminded of our mortality frequently, in severe and mundane ways. Mortality salience may come from horribly extreme and violent events such as the terror attacks of September 11, 2001 or hurricane Katrina, or everyday occurrences such as spooky near-collisions while driving, news that a high school classmate with whom we have not had contact in many years is gravely ill, or sad stories on the nightly news and any number of other ways in between.

TMT also posits that mortality salience gives us great anxiety. As a result, humans spend a great deal of psychological time and resources minimizing and buffering their anxiety concerning death. Our key piece of psychological equipment in our struggle with mortality salience is self-esteem. Self-esteem is derived from feelings like we are valuable contributors to some cause larger than ourselves—namely, that we are connected and contributing to the culture with which we identify. In short, if we feel good about ourselves and the life we're leading we feel less anxiety about death. TMT posits that, at least in America, this is why we feel the need to work, why we volunteer for social and political causes, and why we try to improve our personal situations by attending school, for example. These notions—work, volunteerism, education, and progress—are significant American ideals and, on their most basic levels, give us feelings that we are connected to others like us and contributing participants in shared cultural activities. Members of other cultures derive similar feelings by participating in other culturally appropriate activities.

The final element of TMT suggests that in moments when mortality salience is especially high, we turn to our self-esteem, and hence connections to culture, to buffer ourselves from its depressing and possibly overwhelming effects. This notion is operationalized by our reliance on loved ones, such as romantic partners, family members, and friends—people with whom we hold deep connections and who give us feelings of attachment and inclusion—for security in dark times. In short, through care and concern, loved ones bolster our self-esteem and help mitigate our fears of death.

At other times, or in addition to relying on loved ones for comfort, we also bolster our self-esteem by turning to symbols and artifacts of the culture to which we belong. This component of TMT provides one explanation for Americans' renewed enchantment with distinctly American symbols such as the American flag, bald eagles, and Statue of Liberty, as well as with American ideals such as freedom, democracy, and liberty after the 9/11 terror attacks. This notion may also help explain why, in the aftermath of Katrina, many residents of New Orleans's Lower Ninth Ward exhibited such vigorous commitment to rebuilding their homes and neighborhood. For victims of the hurricane, overcoming the ferocity and scale of the storm by rebuilding and reclaiming one's home may have served to bolster self-esteem in the aftermath of their mortality salient event. On personal levels, these cultural symbols and artifacts give us feelings of attachment to our broader cultural community and reinforce our feelings of inclusion and commonality with others.

TMT also proposes that we buffer our anxiety regarding death by rejecting and denigrating people and ideas with which we hold little attachment and which are in opposition to our cultural worldviews. These notions, sadly, also serve to boost self-esteem and can manifest themselves in terrible ways such as hurtful actions toward Middle-Eastern Americans or Middle-Eastern institutions in the aftermath of 9/11.

A number of empirical studies support the central elements of TMT. A succinct overview of these studies can be found in *In the Wake of 9/11: The Psychology of Terror* (Pyszczynski et al., 2003).

Social Ties, Networks, and Community: The Influence of April 16

The Loss of Weak Ties

On April 16, 2007, I lost a weak tie. The acquaintance that I lost in the VT shootings was someone I saw regularly in my neighborhood but not someone that I knew well or with whom I had deep interactions. We would occasionally meet on the street walking our dogs, converse at neighborhood barbecues and on our bikes on our way to campus, and we shared mutual friends. When we saw each other we exchanged "hellos" and small talk. Yet this loss has had a profound impact on my life. Indeed, it consumed me for several weeks.

I believe that the impact of this loss comes from the qualities of normalcy that weak ties bring to

daily life. Weak ties are commonplace. They punctuate daily routines. They are forged through brief encounters with those we see regularly at the Oasis Grocery, The Cellar restaurant, when we cross the Drill Field on campus, or at Friday concerts on Henderson Lawn. Weak ties elicit feelings of inclusion, a sense that we live in communities rather than merely inhabit places, and a belief that our communities are our homes. Weak ties make acquaintances out of strangers. Weak ties are routine. They are ordinary.

I had always considered my daily life—morning coffee, walks with my wife and our dog, and bike rides to school—to be safe, friendly, and dependable. April 16, 2007, challenged that assumption. In the year I spent at VT prior to the killings, I never saw my neighborhood acquaintance on campus. Our interaction fell entirely within our neighborhood. As a result, his death for me was not a campus incident but a neighborhood event that brought to my doorstep the reality that no matter how mundane and secure life seems, it is not. Shocked from this fantasy, the VT shootings hammered home the salience of mortality. The tragedy, symbolized by the loss of a neighborhood resident, caused me to reflect on my own vulnerability and that of my entire social web.

The events of 4/16 caused me to reflect deeply on the implications of the mortality of others—on the reality that at any time friends, acquaintances, and family members might die. The shootings also highlighted the reality that loss does not always occur in ones and twos, as my previous experiences with death had come, but that entire clusters of my social network could conceivably be lost in a single catastrophic event. This realization made me consider the emotional reactions of the many students and faculty who faced Cho on 4/16 but were not killed. These people emerged from their morning of horror relieved that they had survived, only to realize that several friends, classmates, and colleagues had not. Multiple members of their social networks were gone.

The loss of weak ties carries with it the loss of opportunity. Weak ties offer opportunities to meet others, build strong ties, expand our networks, and become more embedded in our communities. Without weak ties our social networks may grow stagnant. April 16 has raised the question for me of who I will not meet as a result of losing one friend from my neighborhood. Who might this friend have introduced me to? What would these new contacts have brought to my life? Would our friendship have

grown closer? It is likely that if my friend were not killed our friendship would have grown stronger, and we would have answered these questions. In the short time we knew one another we learned that we shared interests in photography and birding and had mutual friends. The materials of a close friendship were present—all we needed was time and opportunities for exchange.

Two students from my college were killed on 4/16. I didn't know either of them by name. Yet I think I waited in line behind one of the victims at our department's copy machine 2 weeks before the shootings. We chatted briefly, but I cannot now remember what was said. I am left wondering—haunted, in fact—what would have happened if I had chatted a second longer, asked another question, or been less impatient while waiting to make my copies? My colleague in the copy line not only offered linkages to others—she also offered the possibility of friendship herself. Could she have been my next close friend? Could she have introduced me to a new friend? In one sense, it is likely that any attempt I would have made to build a friendship in the copy line would have been fleeting. With hindsight, however, comes 20/20 vision, and in the aftermath of the campus shootings, I am left to lament the fact that I did not seize the opportunity to make a new friend when it arose. Too often in life I have missed opportunities like this, and the April shootings now push me to ask why.

The Loss of Strong Ties

I lost an acquaintance, a metaphoric weak tie, on April 16; yet I know people who lost loved ones, who lost those with whom they shared strong ties. Cho's victims, in addition to being students and professors, were spouses, fathers, mothers, coworkers, office-mates, roommates, brothers, and sisters. With their deaths, the social networks of those they left behind were deeply affected.

One specific example brought this point home to me. The student who lives in the townhouse next to my wife and me is Serbian. He moved to the United States for one reason: to work on a PhD under the guidance of one of the murdered faculty members. He began his career at Tech in the Spring Semester of 2007, and the shootings occurred shortly after he arrived. He woke up on Monday the 16th to find that his social network, at least locally, was decimated. In the few weeks that he had been in town,

his advisor had served not only as his supervisor and mentor but also as his means of transportation, his tour guide, and most important, his friend. My neighbor is left feeling he has no purpose for being in this place and no one to help him decipher the puzzling events that have occurred, to help him navigate the process required to find a new advisor, develop a plan of study, or continue with his research.

Social networks are critical components of our lives. Without them we not only lack our sense of belonging, but we also lose the support systems that help us navigate our way. For some, it is connections to others that keep them from falling through the cracks of society, and without linkages, these individuals may become isolated, withdrawn, and forgotten. In the case of my neighbor, I do not see him dangerously isolated, but I fear that without more local support he will return to Serbia where his network is stronger, giving up his dream to study in America and earn his doctoral degree.

I cannot imagine or claim to understand the horror of losing a loved one to violent tragedy. Perhaps VT President Charles Steger came closest to vocalizing this pain when he wrote:

Equally hard to imagine are the depths of profound and limitless sorrow felt by all members of the university community, particularly the families, friends, colleagues, and classmates of those who died here that day. They have lost sons, daughters, fathers, mothers, brothers, sisters, friends, classmates, and professors in a sudden and senseless act of horrific violence, and they must learn to live with agonizing absences that will never be filled. (Steger, 2007, p. 1)

The Breakdown of Community

In addition to the individual linkages that were broken on 4/16, each victim was also embedded in their own web of community ties. Therefore, not only were individuals left reeling from the shootings, but communities were also left feeling the pain of loss. Cho's victims were members of student and community groups; they volunteered, participated in professional communities, coached their children's sports leagues, were members of church congregations, and played in marching bands.

Researchers use a variety of words such as star, bridge, and liaison to describe the roles that individuals play in social networks (Stokowski, 1994). These terms describe those in a network with the

most ties—individuals who link unconnected members and individuals who pass resources such as information to others in the network, respectively. With the loss of individuals who play these roles, networks may be left altered, damaged, or even struggling to survive.

The natural resource literature is replete with descriptions of the importance of networks to community stability, and especially with examples of communities that have experienced the unraveling of social networks and the dire implications of that loss. Without networks, individuals are left drifting, divided, and conflicted. We see this breakdown repeat itself again and again in the boom and bust cycles of timber and mining towns, fishing villages, and farming communities, for example, and it is likely that the communities to which Cho's victims belonged now suffer similar pain.

Managing Sadness, Loneliness, and Anger Through Social Ties

The campus killings have caused me to experience periodic bouts of overwhelming sadness. These feelings come in waves and leave me drained and empty. VT's Cook Counseling Center staff members have reassured me that such feelings are natural and common among people close to catastrophic events and that they will fade. These feelings have indeed come less frequently as the shootings have grown distant, but they have been replaced by periods of deep introspection about how I may become a better person and cope more effectively with the vulnerability that I feel. I wonder if there are ways in which I may reduce the vulnerability of my social network, or at least accept it, so that even in the face of tragedy, I would be able to maintain concentration and energy for family, friends, and work. The idea that I may manage my sadness and feelings of vulnerability through social ties relates closely to TMT. This theory suggests that my desire to manage my sadness and loneliness arises from my fear of death. That is to say that when mortality is made salient, I will respond by bolstering my self-esteem and cultural attachment and that these efforts will enhance my comfort with, or ability to ignore, death.

There are at least three options available that might secure this goal. First, I could manage my life so that I do not make new acquaintances. Certainly, not having weak ties prevents the possibility that

they may be lost one day; yet this option does not address my need to expand my network and become deeply embedded in community, and as a result, feel good about myself. This option would be profoundly isolating and even if rigorously pursued probably infeasible short of leading a hermetic existence. Second, I could seek to create weak ties with everyone, or virtually everyone, I meet, thereby reducing the percentage that may be lost in any single event while nonetheless embedding me in the community. This option also increases my chances of forging stronger ties because such links often grow from weaker ones. The notion of constantly making friends seems ideal, even if these relationships are not deep and abiding ones. Yet I find that I do not have the energy for all the small talk that this approach to life requires and that others are often unprepared or unwilling to reciprocate my approach in any case.

Short of finding community by establishing meaningful ties with everyone that I meet, as the second option suggests, I have happened on a way to develop new ties with individuals and communities since April's events. Shortly after the tragedy, I wrote a brief reflection about it that appeared in another periodical (Gervich, 2007). Since that piece was published, I have received numerous e-mail messages from individuals at VT and across the country. Many of these have shared heartfelt personal stories and memories of the events that took place on the 16th and have mentioned friends and family members who were lost. For me, with each e-mail comes a new friend, and taken cumulatively, they form a sad and lonely—but welcoming—community of mourners committed to finding silver linings in Blacksburg's dark clouds.

By analogy, this experience has taught me that community does not always arise randomly. Individuals can place themselves in positions that will bring them into contact with those who can provide a sense of belonging. As a result, I find myself seeking opportunities for meeting others who share my need to create community in the aftermath of the murders. For example, one reason that I now find myself writing for this publication is because the opportunity to write about 4/16 as part of a team seemed therapeutic. Several university groups also are working to enhance community and understanding on campus by developing memorials and memorializing events. Those participating in these endeavors gain not only feelings of accomplishment

but also friendship and solidarity with other participants. For members, these working groups are likely as much about remembering the events of 4/16 through the development of community social networks as they are about remembering the events through the memorials they create.

A third possible mechanism to address the loss of weak ties is to seek to convert such relationships into stronger ones. Statistically, this approach makes less sense than others because holding fewer weak ties increases the possibility that more are lost in one event, and their conversion to stronger relationships means that the grief suffered when loss occurs will be more profound. Additionally, I can't possibly be deeply and personally connected to everyone in my orbit. Yet holding more close and personal friendships is heartwarming and, at least for me, irresistible, no matter how unintuitive the approach seems. In the aftermath of the shootings, I have found myself building several close friendships, and reflecting on the killings has played an important role in each case.

The campus shootings occurred late in our Spring Semester. This fact caused our administration to allow students the option of not taking final exams, essentially terminating the school year early. As a result, campus emptied of undergraduates and quieted earlier than usual, and the relatively lower level of visible activity seemed to accelerate the university's return to an "ordinary" atmosphere. This struck me as odd. A colleague and I discussed this phenomenon one day during lunch and found that we had many shared feelings, including fear and loneliness as a result of the killings in general and guilt and anger about the campus community's apparent return to normalcy, specifically. We left lunch closer than when we arrived and have continued to develop our friendship. Discussions of 4/16 continue to hold a place of prominence in our relationship, although we have expanded our interactions. We now kayak together regularly, get together for dinner with our families, share books and tools when we need them, house-sit for one another, and care for one another's pets. Our deeper friendship was born out of discussing our shared experience with tragedy, and with this and every other experience we share, our relationship receives a new infusion of social capital.

I have grown other relationships in which 4/16 holds a prominent place as well. A professor with whom I had a purely student-teacher relationship

prior to the murders has become a wonderful mentor for me since the killings. Our relationship remains professionally focused: She helped me refine and write about my thoughts concerning 4/16 as well as brainstorm ways to commemorate the events at the request of Tech's Provost. Yet the very nature of the events we discuss—death, loss, fear, vulnerability, community, learning, and recovery—allow our conversations to wander into personal realms. Our relationship is growing rich in social capital, although it remains professionally based.

Terror Management Theory: An Adequate Explanation?

TMT provides multiple insights into my reactions to the Tech shootings. The importance of 4/16, for me, is local despite the fact that the murders have gained national and global attention. The crimes happened on my campus and to my neighborhood and community. As a result, the cultural elements, symbols, and ideals to which I have become attached and from which I am deriving my sense of belonging are primarily local and campus-centered. For instance, my neighborhood acquaintance who lost his life in the shootings was an artist. In life he loved to give pieces of his artwork to friends, and his artwork hangs in the homes of residents throughout our neighborhood. Since his death, his pieces have taken on greater significance and serve as a comforting symbol of his life for folks in our corner of Blacksburg. My friend's artwork hangs proudly on our neighbors' refrigerators and walls and serves as a symbol of their friendship with the victim. Often, when I visit the homes of others in the neighborhood, the artwork leads to conversations about the artist and the shootings. TMT suggests that the comfort I gain from these moments comes from the boost to my self-esteem that I receive by making friends and from feeling connected to my neighborhood, and the artwork serves as a symbol that initiates these interactions and provides us with a sense of solidarity.

I also believe that my desire to write about the shootings comes, in part, from my desire to connect with the academic community. Like the Statue of Liberty and American ideal of freedom, publications like *Traumatology* and the *Chronicle of Higher Education*, and the intellectual exercise of reflecting on one's personal experience and how experience

relates to theory, are the symbols and ideals of the academic realm. Participating in activities that connect me to the academic community puts me into contact with others like me, providing comfort that, as TMT posits, buffers my anxiety concerning death.

Yet I am conflicted in applying TMT to my personal case. At the same time that I seek attachment to the scholarly community, I also find myself angered by some of my university's responses to the shootings. I do not identify with the notions that "we will prevail!" or "overcome" our sadness. VT's Lane Stadium and Cassell Coliseum, the Hokie bird, memorial T-shirts, and car magnets are not symbols that give me a sense of membership in the VT community. There is nothing wrong with these symbols and ideals; in fact, many people find them comforting. I, however, find them aggressive, competitive, and masculine rather than unifying, and they do not help me grieve.

Perhaps, my rejections of public displays of mourning and solidarity with the VT community are simply signs that I'm not a member. Perhaps I must come to terms with the reality that although I am a student at Tech, I have not developed close attachments to the school's symbols and thus don't belong. If this is the case, the application of TMT to my case still provides meaning. In an attempt to buffer my fear of death in the aftermath of 4/16, I find myself rejecting Tech in exchange for enhanced attachments to the communities that do give me comfort—my neighborhood and the academy. This is a difficult pill to swallow. If I am willing to reject Tech, the institution that has helped me become involved in the academy, who else will I turn against? Or, is my anger toward Tech a safe outlet for my feelings that prevents me from acting in more hurtful ways toward others?

I am also torn over applying TMT to my case because I am so close and familiar with the killings. The notion that TMT provides all-encompassing explanations to my personal, emotional, and psychological reactions to an event that holds such meaning to me seems too simple. Perhaps TMT cannot explain the complex, contradictory, and conflicted responses we have to traumatic events and during our recovery. Perhaps the theory does not intend to explain these contradictions, or at least not for an event that is still ongoing and taking place nearby.

Indeed, those of us in Blacksburg are still living April 16, 2007. The memorials are still visible, and there is an increased police presence on campus. I see the wife of my deceased friend and Serbian

neighbor frequently, and when I sit in class, I wonder what I would do if I heard gunfire down the hall and have visions of an intruder bursting into the classroom. The events are never far from my mind because reminders are everywhere. Perhaps, with distance, TMT will obtain additional relevance and I will feel more comfortable with the ways in which the theory explains my responses. However, at least for now, my emotions are raw and painful, and I remain apprehensive about using the theory as the sole explanation of my reaction to the killings. As a result, my point is not to lend support for, or discredit, TMT. It is only to illustrate some of the relationships the theory holds for the shootings as they apply to me and the fields of natural resource and community planning, as the final section of my reflection discusses.

A Look to the Future: Community Planning and Resilience

The final section of this reflection looks to the future by asking, "What can local governments and community groups do to prepare social networks for catastrophic events and to increase their relative effectiveness in recovering from them?" In addition to developing logistical emergency response plans, one of the most critical roles that local governments may fill in preparation for emergencies is to offer opportunities for building vibrant, supportive social networks, so that residents' support systems are in place before tragedy strikes. Daniel Kemmis, in "Barn Raising" (Kemmis, 1996), uses an example from his youth—raising his family's barn with help from friends and neighbors—to emphasize two key elements necessary for fostering the development of networks: places and activities.

In Kemmis's example, the family farm is a sacred and familiar place for community members. Farms bring individuals together to help one another plant and harvest, and they are places where life is born and growth occurs. As a result, they are natural locations for relationships to be born and made stronger as the function of the farm itself is to nurture. The activity of raising a barn supplies those helping with an opportunity to cooperate in ways that build social capital. Building a barn requires workers to help one another carry equipment and materials, hold them in place while they are hammered and fastened, and work as a team to raise the walls, for example. Each of these activities requires trust among workers and

a shared working approach. As a result, barn raising offers the necessary ingredients for building social networks and social capital, and valuable lessons for communities looking to prepare social networks for disaster.

To develop and prepare their communities for tragedies, local governments and community groups should collaborate to develop activities and places for network development. Examples abound: Third-sector groups and local governments have come together to build playgrounds and parks, hold community performances in which volunteers work together to form a band or theater company, or develop community currencies that encourage shopping locally. These activities take place in locations that hold community relevance—schools, parks, community centers, and farmer’s markets—and offer activities that give residents reasons to interact and foster the development of social capital.

Local governments can also foster the development of grassroots spaces and activities for networking through planning processes and policies. For example, in Blacksburg, Gillie’s Café and Bollo’s Coffee Shop hold characteristics that make them ideal places for creating linkages and building social capital among community members. Local governments can develop policies that encourage local entrepreneurs to develop community networking spaces and activities at their businesses. For example, many of the principles of the Smart Growth initiative, such as live, work, and play communities, offer opportunities for making personal relationships. Smart Growth development encourages the incorporation of public spaces and green space into development plans, as well as a mixture of land-use types, including housing and commercial zones, so that residents in these developments have opportunities to interact in a variety of contexts. Other forms of innovative community design such as conservation subdivisions and co-housing communities also serve similar functions.

Local governments can also encourage desired growth patterns that nurture social network development and strong communities through tax incentives, land conservation programs, and planning and zoning regulations, among other policies. The key to understanding the types of development that foster network growth and community is in recognizing the roles that significant community locations currently play in sustaining networks in times of tragedy. In the wake of 4/16, the VT Drill Field, Bollo’s Coffee Shop, Nellie’s Cave Park, churches, and the Lyric Theater became sanctuaries for coping collectively

with pain and loss. Like the Superdome in New Orleans and Ground Zero in New York City, these Blacksburg and campus locations serve as points of attachment to community for residents here. They serve to renew our senses of pride, belonging, and security after the terrible events of the spring. These are the places where vigils occurred, mourning took place, and hugs were shared, and both emergency response planners and city planners should heed the characteristics that made these locations welcoming and comforting and work to incorporate and sustain these elements throughout their communities before tragedy occurs.

During tragedies, local governments and community groups must supply different services to community members. Once the campus shootings were over and the immediate threats to life and safety were gone, the need for social network and community-based support became urgent. For example, I vividly remember living with the fear that friends and colleagues were on the list of dead and injured from Norris Hall, yet having no way to find out. Community networks, if organized effectively, can play an important role in disseminating information and helping individuals find one another in chaotic times. Additionally, community locations can offer places for residents to go to find lost friends and shelter. In the immediate wake of the shooting, hundreds of students were locked out of their dorms, whereas other students and faculty members were prevented from leaving class buildings while police searched campus. In both cases, social networks and significant community locations could have played important roles in comforting and supporting lost and dazed members of the VT and Blacksburg communities. Well-known venues can be used as clearinghouses for information and as places for community members to receive comfort by speaking with police and counselors and using telephones or e-mail to contact loved ones. Additionally, social networks can be activated to find housing for displaced community members as well as transportation and food, if necessary.

Social networks take on additional significance in light of TMT. Networks can serve as a key buffering element for individuals coping with renewed recognition that death is inevitable and unpredictable. Networks can foster community attachment and the growth of strong ties—both key elements that TMT suggests will be sought by those involved in traumatic events. It must also be remembered, however, that social networks and TMT have darker implications. Just as networks facilitate attachment

and involvement, they can also be used to prevent access of unwanted members. TMT suggests that community members may ostracize or marginalize members of the community whom they consider to be outsiders or different. There was fear (unrealized, as it happened), for example, that after 4/16, Asian residents of Blacksburg might suffer intolerance from others because the shooter was of Korean descent. Planners must heed these notions and develop strategies to ensure the acceptance, tolerance, safety, and access to community resources of all residents.

Once the painful immediate effects of tragedy begin to subside, communities must assess the damage to their local social networks. Broken linkages can hold acute dangers for many community members, especially those who rely on strong civic support systems for survival, such as the economically disadvantaged and elderly. Often broken network ties will become apparent as what were once relied-on pathways for communicating and passing information among community members fail to operate. However, this approach to observing networks requires time and relies on broken linkages to emerge through interactions, rather than direct monitoring. In times of tragedy, community network leaders—individuals who are members of, and intimately familiar with, networks across the community—should take time to evaluate their networks, contact members in more fragile states, and work to strengthen and replicate linkages to less-connected members. Calling trees, e-mail Listservs, and in-home visits, among other modes of contact, may be necessary to make sure that no community member falls through the cracks of support systems.

Finally, once the urgent effects of tragedy wane, communities can look to networks to facilitate healing. Community-organized discussions about pain, loss, and recovery can bring individuals into contact with others who share their feelings, much as writing this article has done for me. Communities may also organize to create memorials of their tragedies as the VT community has done.

Last, as the wounds from tragedy heal, but memories remain, communities can slowly begin to look at network development, not as a way to recover and create resilience but again as a way to prepare. Tragedy will strike again, and my biggest hope is that when it does, our communities and networks are ready, strong, and resilient.

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