SOCIAL MEDIA AND DECISION MAKING IN AVALANCHE TERRAIN

Jerry Isaak

State University of New York College at Plattsburgh, Plattsburgh, NY, USA

ABSTRACT: The rapid advance of social media into remote environments, and the resulting “invisible pressure” of *everywhereness* on many individuals, appears to require a reassessment in the way avalanche educators introduce the topics of human factors and decision making. When Ian McCammon first presented the findings of his research on avalanche accidents and heuristic traps in at ISSW (2002), Facebook was more than two years from its initial launch. McCammon found that “acceptance” and “social facilitation” (where other people, present or nearby, enhances or attenuates risk-taking by a subject) were two heuristics that appeared to play a role in avalanche accidents. In 2002, the phrase, “be nearby,” meant physically near presence. Today, in 2016, with the development of social media and related technology, “other people…nearby” has been simultaneously expanded to a potentially worldwide audience and shrunk to the size and portability of a smartphone. Decisions taken in remote environments are no longer taken in isolation. As a result of these changes, avalanche education must address the impact of technology and social media on decision making. Backcountry social media users should be challenged to consider the questions *to whom* and *for what purpose* they are constructing their online narratives.

KEYWORDS: technology, human factors, avalanche education, social networks

1. INTRODUCTION

Online social media networks are one of the most dominant and dynamic methods of communication in the world. Facebook, the world’s largest social network, has 1.57 billion mobile active users and 1.71 billion active monthly users (Facebook, 2016). Recent studies indicate that two-thirds of American adults are active on social media, including 90% of those aged 18-29 (Perrin, 2015). 92% of American teenagers (aged 13-17) report going online daily, with 24% indicating they are online “almost constantly” (Lenhart, 2015).

Social media are increasingly mobile and are present even in the wildest, most remote locations on our planet (Bisharat, 2016). The realm of social media now includes the highest point on earth and even outer space (Ciras, 2016). Winter backcountry environments and avalanche terrain are not exempt from the expanded presence of the digital world. This is being discussed in popular magazines such as *Outside* and *Powder*, in trade journals such as *The Avalanche Review*, and, naturally, on social media platforms (Isaak, 2013; McLeish, 2014; Schaffer, 2015; Tremper, 2013). Articles such as “Wired: Climb Disconnected” (Selters, 2012), “On Ledge and Online: Solitary Sport turns Social” (Lowther, 2011), “The Instagram Skier” (Taylor, 2015) and “Is Social Media Screwing Over Explorers?” (O’Neill, 2016) all address, and frequently lament, the omnipresence of digital life in outdoor “adventure” environments. Selters in particular cautions that “Technology and a readily twittered public seem to make it easy to mix networking and climbing, but the difference between connecting to terrain and to an audience has profound consequences” (2012). The consequences are revealed not with an altered snowpack or physical landscape, but in changes in the human experience. Social media have profoundly changed the nature of solitude and remoteness. Now, our peers and online communities may travel anywhere with us on our smartphones. They are an ever present audience, generating pressure on our decisions in ways that were not possible in a pre-digital era.

As a result, the discussion of social media in the backcountry is particularly relevant to the community of avalanche educators and researchers who increasingly seek to address elements of “human factors” in avalanche accidents (Isaak, 2013; Tremper, 2008).

2. DECISION MAKING HEURISTICS AND SOCIAL MEDIA

When Ian McCammon first presented the findings of his research on avalanche accidents and heu-

* *Corresponding author address:*
Jerry Isaak, SUNY Plattsburgh,
Plattsburgh, NY 12901;
tel: 518-564-5292; fax: 518-564-5293;
email: jerry.isaak@plattsburgh.edu

ristic decision making at the ISSW in Penticton, Canada (2002), Facebook was more than two years from its initial launch (Facebook, 2016). Ultra-mobile GoPro helmet cameras would not appear for another two years and personal drones were still the subject of science fiction (Paumgarten, 2014). Clearly, enormous social and technological changes have taken place in the past fourteen years. Nonetheless, McCammon's research, though originating in a pre-social media era, has direct, possibly increased, relevance in an age of summit "selfies" and Instagram skiers.

McCammon's six heuristics are now a widely accepted component of avalanche education curriculum (Tremper, 2008). These "mental shortcuts" which assist our decision making process during most of our lives are now recognized as possibly fatal "traps" when applied in the "wicked" (Stewart-Patterson, 2014) environment of avalanche terrain. The acronym FACETS represents the six heuristic traps: familiarity, acceptance, commitment, expert halo, tracks (aka scarcity), and social facilitation (McCammon, 2004).

Of the six heuristics, "acceptance" and "social facilitation" are the two heuristics that relate directly to social media and appear to influence decision making in avalanche terrain. These are not the only heuristics which relate to social media and decision making, but they are two powerful influences which may be most easily recognized by avalanche educators.

2.1 <u>Acceptance and "Kodak Courage"</u>

McCammon (2004) defined the acceptance heuristic as "the tendency to engage in activities that we think will get us noticed or accepted by people we like or respect, or by people we want to like or respect us". Tremper (2008, p. 288) associated this heuristic with "Kodak Courage", a term instantly recognizable to pre-digital generations but possibly incomprehensible to millennials (individuals born 1980-1995). Obviously, engaging in risky behavior so others will notice us is not a new behavior only emerging with the millennial generation. What is new, however, is the nearly constant "virtual presence" of the others we want to impress. This constant virtual presence is especially relevant to the social facilitation heuristic.

2.2 <u>Social facilitation's virtual (omni)presence</u>

According to McCammon, the social facilitation heuristic is a "decisional heuristic where the presence of other people enhances or attenuates risk-taking by a subject, depending on the subject's confidence in their risk-taking skills" (2004, p. 5). His study found that parties who met others on the day of their accident had much higher exposure levels than parties who met no one (McCammon, 2002). In other words, individuals may risk their physical well-being in order to maintain social identity (Beames & Pike, 2008). Interestingly, the social facilitation heuristic "appears to require only that other people be present or *be nearby*" (emphasis mine) (McCammon, 2004, p. 9). In 2004, the phrase, "be nearby," meant physically near presence. Today, in 2016, with the development of social media and related technology, "other people…nearby" has been simultaneously expanded to a potentially worldwide audience and shrunk to the size and portability of a smartphone (Isaak, 2013).

Indeed, for many the connections between the digital world and the "real" world are so strong that a recent *WIRED* magazine article states "[millennials] make no distinction between the real and the virtual. Actions that begin in one realm play out in the other. They are interwoven" (Adler, 2013). The massively popular new mobile app *Pokémon Go* exemplifies the "interwoven" nature of modern "virtual" reality (Thier, 2016). *Pokémon Go's* mix of game features and the real world interacting is known as "augmented reality" (Cunningham, 2016). For many people, particularly millennials and members of younger generations, "augmented reality" is simply reality (Isaak, 2013).

The gradual blurring of lines and often wholesale integration of the digital and the "real" world represents a profound shift in social relations with potentially major implications for understanding the influence of "presence" in heuristic decision making. Laurence Scott identifies the problem of presence in a virtual environment with the term "everywhereness" (2015).

> *If our bodies have traditionally provided the basic outline of our presence in the world, then we can't enter a networked environment, in which we present ourselves in multiple places at once, without rethinking the scope and limits of embodiment…We have an* everywhereness *to us now that inevitably alters our relationship to those stalwart human aspects of self-containment, remoteness and isolation.*
>
> (Scott, 2015, p. 4).

3. *EVERYHWERENESS*: SIMULTANEOUS CREATION AND PUBLISHING OF NARRATIVES

The growth of technologically assisted *every-whereness* has provoked sharp responses from both supporters and detractors. Some proponents of the new digital-social reality audaciously claim that "We have never appreciated a solitary stroll, a camping trip, a face-to-face chat with friends, or even our boredom better than we do now" (Jurgenson, 2012), while critics argue, "in our rush to connect [online], we flee from solitude, our ability to be separate and gather ourselves" (Turkle, 2012). Although proponents and critics argue about the utopian or dystopian nature of the new digital-social reality there is widespread agreement that fundamental social changes have and are taking place (Adler, 2013; Colbert et al., 2016). Significantly for avalanche education, *every-whereness* in modern life seems to collapse previous boundaries between individuals in remote environments and their digital communities. Scott explains this:

> *Social media, for example, makes a moment four-dimensional by scaffolding it with simultaneity, such that it exists in multiple places at once. A truth and cliché of digital life is that our comeliest meals occur both on our table and in the pockets and on the desks of our international 4D colleagues, a meal to be both eaten and approved of.*
>
> Scott (2015, p. XV).

A ski tour or descent in avalanche terrain is the "meal" of the "Instagram" skier (Taylor, 2015). The experience occurs simultaneously for individual consumption and for community approval. The *everywhereness* of the individual now means that the heuristic elements of acceptance and social facilitation can be present even in self-contained, remote, and isolated environments (Scott, 2015). A young ski mountaineer in the Tetons describes it as, "This invisible pressure to create your own content and become part of this crazy social media sphere" (Fredlund, 2014). This invisible pressure is a new, more complex, form of "Kodak Courage" which may be overlooked or misunderstood by pre-digital generations.

3.1 Generational divide

The *everywhereness* of social media appears to amplify the acceptance and social facilitation heuristics. This new development disproportionately impacts members of younger generations who have been raised as "digital natives[1]", fluent in the creation and consumption of digital information (Adler, 2013; Lenhart, 2015; Prensky, 2010). Social media and related technology play a major role in the lives of the overwhelming majority of American teenagers and many young people worldwide (Lenhart, 2015).

The extensive training time and field-experience required of avalanche professionals means that current avalanche educators, practitioners and researchers are not teenagers, or even "young" people. As a result, the majority of participants and presenters here at ISSW in Breckenridge in 2016 are likely to belong to "pre-digital" generations. This community of professionals includes many who are considered experts in understanding and traveling through avalanche terrain. Importantly, however, these same experts are likely to be relative novices in navigating the dynamic social media landscape (Tremper, 2013). This is significant because the majority of participants in avalanche education courses and programs in the next decade will be "digital natives" (Colbert et al., 2016; Prensky, 2010).

3.2 Bafflement or disdain

When I have discussed the topic of social media and decision making at other conferences, avalanche professionals, including ski guides and educators, frequently express bafflement mixed with disdain towards the intrusion of social media in the backcountry. Many experienced avalanche professionals have difficulty relating to or even understanding advice from social media bloggers such as: "If you take selfies, make your audience feel like they're experiencing the moment with you" and "Be deliberate about the hashtags you use" (Ryan, 2015). Summit selfies and field-based twitter updates are viewed by many as simply narcissistic traits of a self-absorbed generation that is unable to connect without the mediating presence of a blinking screen. This critical perspective is summarized by D'Arcy McLeish on the blog of Last Frontier Heli Skiing, "…the need to catalogue and, essentially, advertise to the world our experiences, is bordering on the ridiculous" (2014).

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[1] The term "digital native" was coined by Marc Prensky in 2001. Although "digital native" has often been associated with the generations of people born after 1980, Prensky refers to "native speakers" of digital language rather than defined generational categories. I use the term in this paper to refer to people, regardless of age, who are "fluent" in the language of the digital world.

However, regardless of one's perspective on the ethical, moral or aesthetic worth of social media in avalanche terrain, they have arrived and they plays a significant role in the lives of the majority of young people (Lenhart, 2015). Pre-millennial and "digital immigrant" avalanche educators must find a way to address the human factors of social media in order to effectively reach current and future "digital native" students.

4. IMPLICATIONS FOR AVALANCHE EDUCATION IN A DIGITAL AGE

In his assessment of the implications of heuristic traps for avalanche education McCammon (2004) advocated for "simple, easily-applied decision tools that can compete with the heuristic traps" (p. 9) and warned that "Teaching about human factors alone probably won't significantly reduce avalanche accidents" (p. 8). Partly as a result of his research, innovative new decision making tools were developed and "human factors" became a common part of formal avalanche curriculum (Haegeli et al., 2006; Tremper, 2008).

The rapid advance of social media into remote environments, and the resulting "invisible pressure" of *everywhereness* on many digital natives, appears to require a reassessment in the way avalanche educators introduce the topics of human factors and decision making. An updated approach to these topics would not minimize the importance and effectiveness of simple decision making tools; it would, however, directly consider the powerful effects of social media on the lives of many, if not most, students.

Backcountry social media users should be challenged to consider the questions "*to whom* and *for what purpose*" they are constructing their narratives (Van Dijk, 2013, p. 205). Participants need to be made aware that decisions taken in remote environments are no longer taken in isolation. The sociologist Erving Goffman explains "the self does not derive from its possessor, but from the whole scene of his [*sic*] action" (1959, p. 244). In other words, Goffman asserts that we can only understand our thoughts, actions and feelings in the context of the social group in which we are interacting (1959). In the era of social media and social facilitation on a smartphone, the context of the social group is a virtually unlimited.

Although "Teaching about [social media and related] human factors alone probably won't significantly reduce avalanche accidents" (McCammon, 2004, p. 8) it may have the power to change culture and the way in which we and our students approach terrain, both online and in "real" life. Discussions of social media, narratives and identity are likely to be much messier and more complex than diagraming a snowpit, but "as Canadian helicopter skiing guide Roger Atkins always says to me, 'Staying alive in avalanche terrain probably has more to do with mastering yourself than mastering any knowledge of avalanches'" (Tremper, 2008, pp. 282-283).

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