15

Heroism in the Networked Society

Dana Klisanin

Heroes are most effective not alone but in a network. It's through forming a network that people have the resources to bring their heroic impulses to life.

(Phil Zimbardo, 2011)

On a cold February evening in 2012, Canadian teen, Paige Dayal flew across time and space to save the life of young man in England (DiManno, 2012). Later, that same year, frustrated by the maiming and torture of children, over three million individuals set out to capture war criminal, Joseph Kony (Kony Campaign, 2015).[1] In the spring of 2014, distraught by the sudden disappearance of a Malaysian airliner, millions of individuals joined the search and rescue efforts—scanning the seas for signs of the missing airliner and her passengers (Fishwick, 2014).[2]

How does a teenage girl without a private jet conduct such a rescue operation? How do millions of individuals set out to capture a war criminal, or simultaneously scan the ocean to participate in a search and rescue mission? By using the power of interactive technologies to act *collaboratively*—online and in the real world—often simultaneously. Their actions ask us to look again and anew at our perceptions of heroism and heroic archetypes, perceptions that, while historically, culturally, and situationally determined (Franco, Blau, & Zimbardo, 2011, p. 99) have their deepest roots in our mythologies—the filters through which we examine, inhabit, and depart our world (Campbell, 1949).

Mythologies, in turn, arise from our stories—our interpretation of events and experiences—interpretations that depend in large part upon our *technology* (Clark & Chalmers, 1998; Davis, 1998). Cultural anthropologist, Bruno Latour, calls this breeding ground of meaning-making the "anthropological matrix," and suggests that nothing birthed by humanity can be neatly divided between *nature* and *culture*. Everything in the anthropological matrix is composed of hybrids—'speaking things' that are both natural and cultural, real and imagined, subject and object" (Latour, 1993). To simplify, we can think of *nature* as the egg of consciousness and *culture*, the sperm. We and our world—are the product of their procreation. We are often quick to recognize nature's role, but we are less cognizant of culture's pivotal contribution.

To bring attention to this bias, Joseph Campbell, the well-known comparative mythologist, pointed out the important role *technology*—a product of *culture*—plays in expanding human consciousness. In speaking of humanity's journey to the moon and its simultaneous broadcast via television (two extraordinary technological feats), he explained, "The making and the visual

Dana Klisanin

broadcasting of that trip transformed, deepened, and extended human consciousness to a degree and in a manner that amount to the opening of a new spiritual era" (Campbell, 1993).

What are the characteristics of that era? Campbell again:

> Our mythology now … is to be of infinite space and its light … On our planet itself all dividing horizons have been shattered. We can no longer hold our loves at home and project our aggressions elsewhere; for on this spaceship Earth there is no "elsewhere" any more. And no mythology that continues to speak or to teach of "elsewheres" and "outsiders" meets the requirements of this hour.
>
> *(Campbell, 1993, p. 266)*

Campbell pointed out that within the twentieth century, we went from having no idea how our planet looked to having a beautiful blue-and-white image firmly fixed in our imagination. We learned that our own galaxy is one among millions—that we, here on Earth, are but one strand in a complex web of life. Little by little, we are collectively ushering in a new mythos—*an era of planetary consciousness* (Laszlo, 1997). Planetary consciousness is shorthand for the understanding that everything is interdependent—that our lives and indeed all sentience are engaged in an intimate conversation. The particularities of the conversation sustain the structure of the whole, from the smallest particles to the largest molecule.

The mythos of planetary consciousness, on the horizon of human consciousness, is intimately entwined with advances in technology and unique forms of collaboration—a preview of which is found in the expansive levels of cooperation necessary to space travel. In the years since the first flight to the moon, our rapidly evolving information and communication technologies have come to serve as an external, physical manifestation of the larger web of life. The Internet is now considered to have impacted every dimension of human activity (Negroponte, 1996; Barabasi, 2003; Christakis & Fowler, 2009). From laptops to tablets to smart phones, we have created systems that extend our voices, further our reach, and support greater and greater interconnectivity and interdependence. Renowned communication philosopher, Marshall McLuhan, called this extension of human senses, the "outering" of our nervous systems (McLuhan, 1964). This outering of our sense of self and physical presence has come to be referred to as the "extended mind" (Clark & Chalmers, 1998; Clark, 2003). What does the extended mind mean for scientific inquiry and the study of heroism?

Through each and every technological feat—nature and culture have been mating—the result of their union is a *new level of complex organization*—referred to variously as the global brain, worldwide network, Gaia, collective intelligence (Russell, 1983; Heylighen, 2002, 2011; Lovelock, 1979; Laszlo, 1997). Scientific paradigms being used to explore this new level of complex organization include the systems sciences, network sciences, and complexity science—approaches interested in dynamical properties like self-organization, adaptation, and emergence. These paradigms are both the product and facilitator of the unfurling mythos—they are altering the way we understand and explore our world. Rather than breaking inquiry down into discrete parts and pieces, the methodologies inherent in these paradigms inquire in terms of connections or relationships. This means our understanding of ourselves, as individuals, is determined by our links with others in extensive relational networks—impacting our social identities and cultural attitudes (Christakis & Fowler, 2009) and furthering communal and civic value (Shirky, 2009). These networks and the attitudes they engender are impacting both the methodologies used to explore heroism and the structure of beliefs about the nature of heroism and heroic archetypes (Klisanin, 2012, 2014, 2015, 2016). The emerging field of heroism science speaks to this shift in its resolve "to craft the most inclusive definition of the science as [possible]" one that "is inclusive, transdisciplinary, and risk-taking" (Allison, 2015). Indeed, through acknowledging the extension of our minds via digital technologies, we recognize the

need to extend the study of heroism into the milieu of the network—where heroism can expand to include action by the *many*.

During this age of transition, from a mythos of exclusion, separation, and boundaries, into a mythos of inclusion, relationship, and openness the study of heroism is more important than ever. For the tools of the networked society, in the hands of those adhering to an outdated mythos, become weapons of mass destruction—a "Dark Net" used by terrorist groups, drug syndicates, and others with criminal intent (Bartlett, 2014). Combating these threats while transitioning into the new mythos is one of the greatest challenges of the current era. The complexity of tackling such challenges is exemplified in the debate around mass surveillance—a means to track the behavior of terrorists, but an anathema to societies that value privacy.

The contentious nature of this debate is seen most clearly in the ongoing dispute around the actions of Edward Snowden. Vilified by many, and hailed a hero by others, Snowden is a man between countries—unable to find a home in the transition. His actions aim to promote a worldview of 'infinite space and its light' in an era where 'elsewhere and outsiders' dominate the discourse. Rather than disappearing, walls and boundaries are increasingly being erected, or reinforced—as Syrian refugees and other migrants can attest. And yet, in the midst such activities, millions of individuals are using the tools of digital connectivity to collaborate at a level and scale never before possible, contributing to a revolution in the way people perceive heroism. Snowden exists in this hyper-connected milieu—although physically exiled, he is one of the most interconnect people on the planet. According to Pilkington (2015), "Within half an hour of the launch of his verified feed on Tuesday morning from his exile in Russia, Snowden had attracted more than 70,000 followers and counting." Four months later, Snowden has attracted over 1.7 million followers. His "extended mind" is reaching every corner of the globe and his rhetoric reinforcing the "borderless horizons of infinite space," as evidenced by his second tweet to astrophysicist, Neil deGrasse Tyson:

> @neiltyson Thanks for the welcome. And now we've got water on Mars! Do you think they check passports at the border? Asking for a friend.
>
> *(Snowden, 2015)*

The issue of mass surveillance demonstrates the complexity of heroism in the networked era—an era in which the solitary hero and the collective are intimately intertwined.

Extending the Heroic Imagination into the Cloud

> Eternal truth needs a human language that alters with the spirit of the times. The primordial images undergo ceaseless transformation and yet remain ever the same, but only in a new form can they be understood anew.
>
> *(Jung, 1985, p. 196)*

Research on heroism in the networked society began as a consequence of research in the area of *digital altruism*, taking a turn toward heroism when it became increasing apparent that the actions of some digital altruists were resulting in contributions of food, water, and/or medicine to individuals in desperate circumstances. Those digital altruists who were far more active than others, for example, taking action each day, sometimes more than once a day, were posited to represent the emergence of a new form of the hero archetype—the *Cyberhero*. The Cyberhero archetype represents "individuals motivated to act on behalf of other people, animals, and the environment using the Internet and digital technologies in the peaceful service of achieving humanity's highest ideals and aspirations, for example, world peace, social justice, environmental protection, and planetary stewardship" (Klisanin, 2012).

Dana Klisanin

The venture from altruism into heroism was based, in part, upon Rankin and Eagly's (2008) investigation of gender differences in the social construction of heroism; research that cast heroism in a new light, helping the researcher to recognize its' pliability. Soon, the venture was recognized as a step into what Franco, Blau, and Zimbardo (2011) noted to be an "exceedingly complex area of human behavior" (p. 109). The Internet—with its warp of interdependency and weft of interactivity—intensified the complexity. The decision to continue exploring the convergence of heroism and interactive technologies was motivated, in part, by a lack of extant pro-social research—searches of both academic and popular literature consistently turned up a preponderance of research on the negative aspects of its use, for example, cyber-bullies, cyber-crime, and cyber-war. Pro-social research was considered vital, due to research suggesting that human communities are only as healthy as our conceptions of human nature (Maslow, 1971; Hubbard, 1998), and research demonstrating the persuasive nature of interactive technologies (Fogg, 2002, 2008).

Further encouragement came in the form of the "banality of heroism" argument, which asks, "What if the capability to act heroically is also fundamentally ordinary and available to all of us?" as well as the theoretical construct of the "heroic imagination" which suggests the importance and/or possibility of fostering the heroic imagination (Franco & Zimbardo, 2006). Because digital technologies were changing the situation of human life, the possibility that they were also impacting heroism was further supported by Zimbardo's (2007) research showing that "situational factors" play a pivotal role in behavior.

In one of the first investigations, a multiple-case study method was used to explore the impact of social media initiatives on the social construction of heroism (Klisanin, 2015). The research was guided by the premises inherent in the theoretical construct of the heroic imagination (Franco & Zimbardo, 2006), thus criteria for case studies involved selecting social media initiatives in which participants were thought to represent "average citizens" rather than "heroic elect." The Cyberhero archetype was posited as an integral aspect of the "mind-set" of the heroic imagination. However, while the broad field of heroism science requires *heroism* to remain "in the eye of the beholder" (Allison & Goethals, 2015), a networked society transitioning toward a mythos of planetary consciousness, requires the conscious adoption of an ethos that respects diversity, but requires greater inclusivity, one that is fully aware of the "vital interdependence and essential oneness of humankind" (Laszlo, 1997, p. 143). A suicide bomber may yet be hailed a hero within the context of his/her terrorist organization—but in *the eyes of all the world* (i.e., the networked society) the action is seen as an abomination.

Because the networked society requires heroic actions to support the good of the global body, its study required a shared definition of what constitutes the noble, or heroic act. Early on, Csikszentmihalyi (1993) suggested that directing our evolution toward greater complexity would require we find an "appropriate moral code to guide our choices":

> It should be a code that takes into account the wisdom of tradition, yet is inspired by the future rather than the past; it should specify right as being the unfolding of the maximum individual potential joined with the achievement of the greatest social and environmental harmony. The development of this code is no easy task.
>
> *(Csikszentmihalyi, 1993, p. 162)*

Ultimately, a unified view for heroism at the global level is necessary. To address this need, the Universal Declaration of Human Rights (UDHR) and the Earth Charter were posited as consensus documents for research purposes (Klisanin, 2015). The UDHR is a declaration representing a global consensus of rights to which all human beings are entitled and was designed to promote both individual rights and social harmony (United Nations, 1948). The Earth Charter (2015) is a document with a strong focus on environmental protection and stewardship.

In an era when the majority of the world's citizens still lack many of the basic rights described in the UDHR and the natural world is imperiled, actions to secure those rights, and protect our planetary home, that do not violate those selfsame rights, can be consensually recognized as worthwhile, noble and/or heroic goals. While the document asks us to extend our sense of compassion to people of all nations, cultures, and religions, it does not place them all on a level playing field—a caveat that is clearly defined in Article 30 of the UDHR: "Nothing in this Declaration may be interpreted as implying for any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein."

Findings from the case studies indicated that millions of individuals had used interactive tools to take actions with direct correspondence to a variety of Articles within the UDHR. The Kony 2012 campaign primarily addressed Articles 4 and 5 (i.e., prohibiting slavery and torture respectively), while campaigns by members of Avaaz.org addressed seven Articles including, 1, 2, 5, 7, 19, 21, and 25—acting to protect individuals from torture, providing medical care, and more. The research strongly suggested that social media was impacting the social construction of heroism. The "data cloud" was revealed to be a situational factor, placing individuals within an interactive matrix where clear dividing lines between action in the "cyber" world and the "real" world disappeared. Contemporary expressions of heroic behavior were seen to be manifesting in a collaborative form—seamlessly bridging the online and offline worlds (Klisanin, 2015).

To extend the investigation, the method of evolutionary systems design was later used to explore the impact of information and communication technologies on three areas of heroism previously identified by Franco, Blau, and Zimbardo (2011) as martial heroism, civil heroism, and social heroism. That study looked at ten dimensions of human activity and found evidence that digital technologies and cloud computing had impacted heroism in each sector. For example, martial heroism was seen to be impacted by drone warfare, digital surveillance, and counter cyber terrorism, while civil heroism was impacted by crowd-sourcing initiatives, and social heroism by citizen activism (Klisanin, 2014).

But what about the public's perception of the impact of digital technologies on heroism? To explore this question, a study was designed using a survey research approach (Klisanin, 2016). In it 300 participants from 25 countries completed an online survey that consisted of numerous questions about their understanding of heroism and aspects of it. Survey items consisted of statements that the respondents indicated to be more or less true using a four-point response scale. Response data were coded as scale-level data for principal component analysis. A robust five-factor structure emerged, based on five sets of distinct and tightly interrelated subsets of items, as shown in Figure 15.1. Consensus among participants indicated that:

1 collaboration expands heroic potential;
2 Internet technology expands heroic potential;
3 heroes are motivated to serve and protect;
4 heroes are responsive to injustice; and
5 concern for justice is a required ingredient.

The results of the study support a strong collaborative dimension to contemporary and consensus beliefs about the nature of heroic behavior, suggesting that the digital age is contributing to a revolution in the way that people perceive heroism (Klisanin, 2016). While collaboration has always been recognized as essential to the achievement of heroic endeavors, for example, the Salt March led by Mohandas Gandhi, and the March on Washington led by Martin Luther King, Jr., for the most part, research has focused on the actions of the leaders (e.g., Gandhi and King), rather than the collective. While leadership is an essential element of collaborative heroism, in that actions are set in motion by the efforts an individual, a small group of individuals,
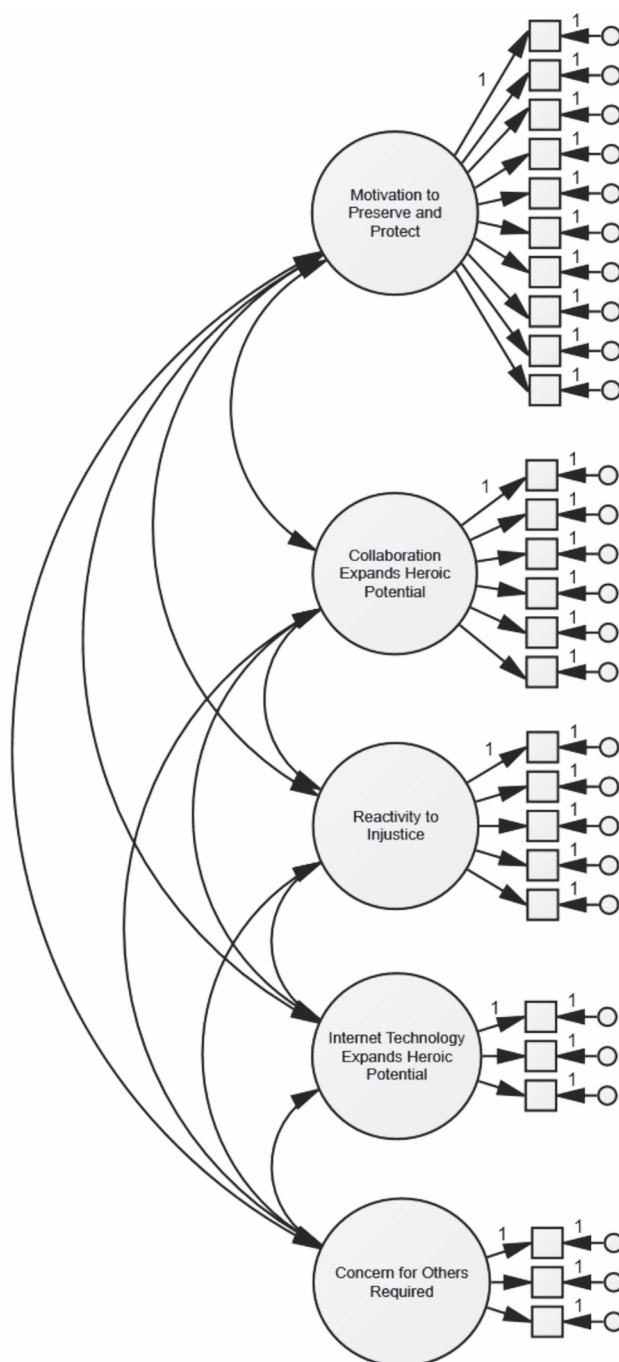
Dana Klisanin

Figure 15.1 Path Diagram of Factor Structure

or through collective decision-making, (Klisanin, 2015), it is now possible to study the behavior of the collective in a manner that was previously impossible (Christakis & Fowler, 2009). When millions of individuals change their profile picture on Facebook to show support for same-sex

marriage, or tweet their solidary with a controversial figure such as Edward Snowden, their names become part of networked history. Their vulnerability and/or the personal risks they face largely depend upon the societies in which they live (situation) and their ability to manage the physical, emotional, mental, and spiritual stress associated with participation. At the level of the collective, however risk is often recognized to be social and planetary, rather than personal—thus involving a measure of foresight.

Because the taxonomy of heroism research (Franco, Blau, & Zimbardo, 2011, p. 109) focuses on individual heroes, rather than the collective, a taxonomy for collaborative heroism is warranted (Klisanin, 2014). However, if we focus on the *individuals* engaging in collaborative social heroism (i.e., rather than collaborative marital or civil heroism), and recognize their actions as those that support the adoption of values previously deemed unacceptable (e.g., same-sex marriage, animal rights legislation, environmental protection regulations), we can recognize their resemblance to the individual social hero:

> The true power (and perhaps the final measure of success) of a social hero is that their actions *can* ultimately guide us through the dissonance, *which they themselves produced*, to embrace a challenging new set of values that has the potential to drive further constructive action.
>
> *(Franco, Blau, & Zimbardo, 2011, p. 111)*

The power, risks, and rewards brought about by individuals engaging in other forms of heroism mediated by cloud computing (i.e., soldier maneuvering a drone, individual thwarting cyber terror attack, etc.), require further investigation.

The Psyche of the Networked Hero

What little we know about the psyche of the networked hero is based on a self-report questionnaire generated to explore theoretical research on individuals using digital technologies to help other people, animals, and the environment—described as the Cyberhero archetype (Klisanin, 2012). Archetypes are "collective patterns … a typos [imprint], a definite grouping of archaic characters containing, in form as well as in meaning, mythological motifs" (Jung, 1968, p. 41). Jung explained these motifs as "appear[ing] in pure form in fairytales, myths, legends, and folklore" and cited "the Hero, the Redeemer, the Dragon," as some of the most well-known (p. 41). In 1938, the hero took another form: the superhero, "secularized forms of supernatural beings that populate folklore and legend and religious literature" (Packer, 2010, p. 23). The Cyberhero is a specialized form of the hero archetype—one that relies upon digital technologies. Because the Internet confers abilities akin to superpowers, the Cyberhero brings the superheroes of sci-fi and/or fantasy—into human embodiment. Thus, as a theoretical construct, the Cyberhero archetype was hypothesized as embodying some of the highest ideals of heroes and superheroes.

An example of this archetype is found in the persons of Paige Dayal, the Canadian teen mentioned in the open line of this chapter. When Dayal learned that a young man in an online chat room had swallowed 36 pills in a suicide attempt, the 14-year-old shared her concerns with her mother. Then "mother and daughter scoured through the Tumblr site" in an attempt to determine the young man's location. After determining his location in Bath, England, they began making phone calls, eventually persuading the police to investigate (DiManno, 2012). Rather than being bystanders, through using the tools of the networked society, Dayal and her mother, set in motion a series of events that ultimately saved the young man's life. The Cyberhero archetype provides a way to recognize such behavior, providing an antithesis to the cyber-bully and related constructs.

Dana Klisanin

To explore the Cyberhero archetype, a study was designed to test premises that (1) individuals are motivated to act on behalf of other people, animals, and the environment using the Internet in the peaceful service of achieving humanity's highest ideals and aspirations, and (2) they embody a transpersonal sense of identity. A total of 298 individuals from 32 countries indicated the degree to which they agreed with 15 statements, with all respondents reporting engagement in one or more form of Internet activism considered beneficial to other people, animals, or the environment (Klisanin, 2012). Results supported both premises. Representative sample statements and results are provided in Figures 15.2 and 15.3.
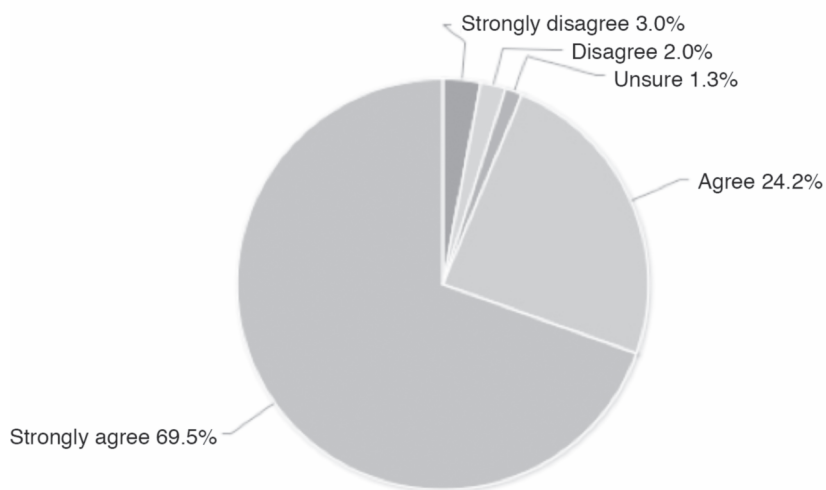

Figure 15.2   Responses to the Statement "I believe my life is interconnected with all the life forms on the planet"
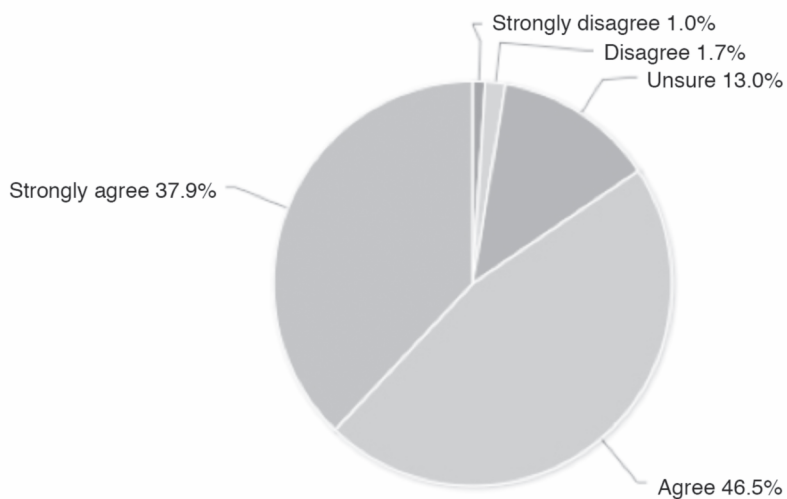

Figure 15.3   Responses to the Statement "Through using the Internet to help others, I am contributing to conditions that create peace in the world"

The transpersonal psyche is to the individual psyche, what planetary consciousness is to the collective. It describes a self or Self that extends "beyond the personal to encompass wider aspects of humankind, life, psyche, and the cosmos" (Walsh & Vaughn, 1993). The psyche brings with it highly developed character strengths and virtues (e.g., altruism, compassion, empathy), the ability to transcend paradox, and a feeling of interdependence, or unity, with all of life. Individuals embodying this psyche have moved beyond the paradox of the "individual" and the "collective"—they understand the "self" as both a strand in the web of life and the web itself.

Traditionally, heroes have been understood as "reactive"—that is, as taking action only when the need to act arises (for example, rescuing a drowning man). Individuals embodying this archetype are however, both reactive and proactive: "reactive" in that they are reaching beyond physical boundaries to address existing problems, and "proactive" in trying to prevent the worst consequence of social inequality and environmental destruction. They recognize global threats to social and ecological wellbeing as personal/collective threats, and rather than requiring a personal confrontation with immediate danger, the individual has a psychological confrontation with current and/or impending species-wide dangers (Klisanin, 2012).

While there is a seeming lack of risk involved and an ease of engagement, traditionally unassociated with heroism, rather than being a solo feat, action arising through the Internet and mobile technologies takes place within a system that is kept online by the actions of a complex network of others. Risks to one individual may be mitigated by the concomitant actions of millions, however the agency of the individual to act is not lost within the matrix, but instead carries tremendous exponential potential. The expansion of the network dramatically decreases risk while inversely increasing individual agency. The level of risk and ease of engagement involved is only determined by the situation in which the individual and/or collective resides. While interactive technology enables some individuals to avoid personal confrontations with immediate danger, this is not true in all circumstances. We have only to look to conflicts in Moldavia, Egypt, and Syria, to bear witness to individuals who have risked their lives by using social media to promote democracy (Bennett, 2011).

Rather than setting out on an epic adventure to faraway lands and encountering life-threatening dangers, as in the traditional heroic narrative (Campbell, 1949), the individual, paradoxically, both stays at home and sets off–into cyberspace with the goal of benefiting others. The "ordinary world" and the "special world" commingle. In this matrix of interactivity, the stages of Campbell's (1949) model of the hero's journey become chaotic, with some of the stages becoming circles in constant motion—concentric circles cycling across multiple dimensions of human action. This hero is called to adventure, but the threshold may move further way, even as it's crossed. For example, the individual may go online to participate in a crowd sourced "search and rescue" mission or to map the territory of a recent Earthquake, and simultaneously receive tweets, posts, or emails, requesting participation in petitions aimed at preventing the execution of an inmate on death row, the protection of an endangered species imperiled by impending development plans, or messages to government officials demanding protection for migrants, or refugees. Likewise, various aspects of these activities may cause an individual to revisit "the descent," continuously meet "tests, allies, and enemies," the "ordeal" may be ongoing (i.e., remain unresolved) and the "rewards" temporary, or solely psychological, as "tangible achievements" may be untenable in the course of a lifetime (depending upon the quest/goal).

The individual's psyche may be bolstered by the tools of networked society—tools which impart abilities and/or powers, historically purview of gods, legends, and superheroes. The latter have been described as including: hyper interconnectivity, super-speed, bi-location/ omnipresence, transparency and invisibility, dual persona, avatars & shape shifting (Klisanin, 2012).

• *Hyper Interconnectivity:* The World Wide Web and Social Networks cause Time and Place to converge, giving rise to *hyper interconnectivity*.

Dana Klisanin

- *Super-speed:* Depending on the sped of the server and the size of one's social network, action can be near immediate.
- *Bi-location and/or Omnipresence:* While physically remaining in one location, individuals can extend their senses into other locations. If we consider "cyberspace" as a third, or neutral space accessible to all—the individual can be considered to be "virtually" present in all places—becoming omnipresent.
- *Transparency and Invisibility:* Transparency and invisibility are two distinct approaches to online activities. Opting for one over the other depends largely on the acceptability of the action taking place and the situation within which the individual is acting. Individuals living within democracies may feel comfortable opting for radical transparency—while those living within dictatorships may need to render themselves "invisible" to survive. Examples of software that renders the user invisible (or near invisible) include the Tor Network (www.torproject.org) and Wickr (www.wickr.com).
- *Dual Persona, Avatars and Shape Shifting:* Dual persona and shape shifting are enabled through the use of an avatar. When an individual uses the Internet, or a gamer sits down to play a video game, he selects a digital representation of himself (an avatar). The individual is free to select a gender identity, race, hair color, as well as a variety of other features; depending on the choices available he may choose to "shape shift," identifying, for example, as a mythological creature or a Jedi knight. This ability to create a new identity for oneself, while in reality remaining the same person, mimics the dual-persona and shape-shifting characteristics of the superhero archetype. Research has shown that the type of avatar an individual uses impacts health and other aspects of life (i.e., the Proteus effect; Yee & Bailenson, 2009). The ability to take actions that benefit others in the real world while using an avatar, such as in a video game, will provide interesting opportunities for future research.

In summary, the Cyberhero archetype is an embodiment of some of the best qualities and characteristics of heroes and superheroes—a fusion of the real and the imagined. Harbingers of planetary consciousness, their allegiance is to the health and wellbeing of the Earth and all her inhabitants. While it is unrealistic to suggest that everyone using the Internet to take action across a wide range of "causes" has a transpersonal psyche, or embraces the mythos of planetary consciousness, the research suggests that some individuals do fit this psychological profile. They are best understood as harbingers of the unfurling mythos of planetary consciousness.

Future Horizons

The milieu of collaborative heroism is a situation defined by Cloud computing. While collaboration has always been part of the human experience and is inextricably linked to heroic social movements, in the years since the introduction of interactive technologies, the ability to act on behalf of others has expanded exponentially. Collaborative heroism is a form of heroism arising in, and dependent upon, the networked society. It is emerging in a time of transition and supporting the evolution of higher levels of consciousness, themselves intimately entwined with the outering of our nervous systems (McLuhan, 1964) and extension of our minds (Clark & Chalmers, 1998).

The goals and aspirations of individuals engaging in collaborative heroism include exposing, challenging, and changing untenable conditions around the world, be they social, environmental, economic, political, or otherwise. Rather than standing idly by waiting for the world to change, they are tweeting about the policies of harsh dictators, uploading and sharing videos of human rights abuses, creating accessible online education platforms, signing petitions to save lives, holding virtual rallies on behalf of the natural world, using social media to support charitable causes, creating massive computing grids to solve global challenges, and much more. They appear

to be constantly looking for ways to use interactive technology to alleviate suffering.

While they may not all embody the transpersonal psyche of the Cyberhero archetype, future research on the collaborative hero may reveal the presence of one or more of the "eight great traits" described by Allison and Goethals (2011): smart, strong, resilient, selfless, caring, charismatic, reliable, and inspiring. As we move further into a cyborg future (Clark, 2003), the study of heroism will be increasingly important. Indeed, the cost of not pursuing a heroic life may prove disastrous, for although our actions have always impacted others, the nature of "the network" to multiply impact means that individual action carries more weight. At the individual level, we see this in the emotional and psychological ramifications of cyber-bullying—consequences that have included everything from depression to suicide (Goldman, 2012).

At the global level, challenges in a networked society include preventing attacks to the network itself, particularly cyber-attacks and cyber terrorism aimed at disabling critical infrastructure, such as the power grid (Koppel, 2015). The use of digital technologies by those embodying medieval narratives is particularly dangerous. Wood (2015) reports that the Islamic State, which "rejects peace as a matter of principle" and "considers itself a harbinger of—and headline player in—the imminent end of the world" has "toiled mightily" to disseminate propaganda via the Internet. Individuals using the tools of the networked society to stop or prevent cyber-attacks, cyber terrorism, and the use of the Cloud to spread medieval narratives via social media, fall within the *martial sphere of collaborative heroism*—an area for future research.

To a great extent, however, preventing the spread of outdated narratives and affiliated terrorist activities requires supporting the evolution of higher stages of human development (Wilber, 1995). The latter can only be achieved through collective efforts to improve the living conditions of people around the world, such that no strand in the web of life is left to languish in conditions that do not support human flourishing and planetary wellbeing. The 2030 Agenda for Sustainable Development speaks to world resolve to achieve such aims:

> This Agenda is a plan of action for people, planet and prosperity … *All countries and all stakeholders, acting in collaborative partnership, will implement this plan.* We are resolved to free the human race from the tyranny of poverty and want and to heal and secure our planet. We are determined to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path. *As we embark on this collective journey, we pledge that no one will be left behind.*
>
> *(United Nations, 2015; emphasis added)*

Notably, the language of the agreement reflects the understanding that such achievement will require unprecedented levels of collaboration.

The Sustainable Development Goals (SDGs) exemplify the complex nature of the challenges that lie before us (Table 15.1). Achieving these goals will require expanding the heroic mindset in society, such that it encompasses initiatives designed to address such goals, initiatives that are by necessity, collaborative. Many such initiatives exist: a recent example related to SDG 13 is found in the actions leading up to and during the United Nation's Climate Summit in December of 2015 that aimed to bring world leaders to an agreement around climate change. Online and offline activism took place simultaneously, with Avaaz.org (2015) delivering a petition to key German and French ministers signed by 2.7 million individuals around the world. During the Summit, nearly 800,000 people marched at 2,300 events in 175 countries calling for a 100 percent clean energy future (Avaaz.org, 2015). Social media was flooded with images of solidarity, many from the "Earth to Paris" campaign launched by the United Nations Foundation, Good, UNESCO, and a bevy of partners (www.earthtoparis.org). The campaign video had over 1 million views and the hashtag, #EarthtoParis reached over 1.4 billion impressions during the final week of the campaign (Hughes, 2015).

Dana Klisanin

Table 15.1 United Nations Sustainable Development Goals (2015)

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

By the end of the climate summit, individuals around the world were celebrating: G7 leaders had committed to phase out carbon pollution over the course of the century (Jervey, 2015). The celebration was short-lived, however, with those who participated realizing their real work was far from complete.

> We know this agreement alone will not meet the threat of climate change; that will require continued ambitious action from governments, the private sector, and all of us to limit the global rise in temperature and move more rapidly toward a clean energy future with net zero emissions.
>
> *(Earth to Paris, 2015)*

The hero in the collaborative matrix of the cloud brings rewards to the global society, but another threshold immediately appears. What are the psychological costs? Does the collaborative hero suffer? Are there physical, emotional, mental, and spiritual risks involved in collaborative heroism? Future research will help us answer these questions. One thing appears certain—to flourish in this heroic matrix, an individual will need to recognize himself/herself as part of a larger whole, enfolded in an implicate order that while in flux, has a certain stability. Bohm (1980) explains this type of stability in terms of a forest that maintains its integrity although the trees within it are continually dying and being replaced by new ones (p. 246). Individuals collaborating to tackle global challenges will need to recognize that they may not accomplished their aims in the course of a lifetime, but the larger community—*the forest*—will remain. Although the individual dies and is replaced by another, the heroic journey continues. The scientific paradigm of the networked revolution will support such understanding, for it

294

> Has the promise of reshaping our basic commonsense expectations of the world around us, and may allow us to recognize that we are not a basically individualistic, asocial, and quarrelsome creature that comes in bounded linguistic, ethnic, racial, or religious types, but a social species linked to one another by far-reaching network ties.
>
> *(Terrell, Shafie, & Golitko, 2014)*

A recent study conducted by Kinsella, Ritchie, and Igou (2015) has underscored the "importance of heroism in everyday life," and suggests wide-reaching effects across a wide range of human experience. Collaborative heroism is poised to expand the heroic imagination in ways that make heroism accessible to all, particularly where education is designed to support the understanding of our interdependence, as well as the skills necessary to support heroic behavior such as currently taught and promoted by the Heroic Imagination Project (http://heroicimagination.org) and the Hero Round Table (www.heroroundtable.com). Because heroes serve as aspirational models of behavior (Allison & Goethals, 2015), such education should be prioritized—for although the space walk was half a century ago, and the World Wide Web has enmeshed us in a global matrix of instant communication, a critical mass of the world's population is yet to evolve beyond the mentality of warring and tribalism (Wilber, 1995).

If we require yet more impetus to explore heroism in the networked society we need only look to Csikszentmihalyi (1993), who reminds us that it is "our responsibility to try imagining what human beings could be at the next stage of its history":

> If we do not, evolution will continue to proceed blindly. Yet we have advanced too deeply into the future to simply let things work out as they will. And we cannot chart a hopeful course without meaningful models, without realistic images of what we can become.
>
> *(Csikszentmihalyi, 1993, p. 234)*

A product of the networked society, collaborative heroism is the child of complexity. Where Chaos Theory tells us that the flapping of a butterfly's wings on one side of the world can affect climate on the other side, collaborative heroism tells us an individual on one side of the world can tweet and set in motion a movement capable of toppling dictators on the other side. With over two billion people yet suffering under dictatorships (Freedom House, 2016) the *heroism of the many* will require courage, leadership, and foresight. In the networked society, *expression* itself carries risk—even in so-called democracies. The Turkish government's detention of academics for signing a petition criticizing military operations exemplifies this risk. The petition called for the government to halt massacres in the south-east region of the country. Individuals signing the petition stated that they "refused to be 'a party to the crime' and called for the resumption of peace efforts with the rebels" (BBC, 2016). Rather than supporting terrorism (as claimed by the government), the signatories aim to address violations of the Universal Declaration of Human Rights. By doing so, they were acting on behalf of the global body and engaging in collaborative heroism.

Collaborative heroism complements more traditional conceptions of heroism. Indeed, some of the individuals who spearhead collaborative initiatives (i.e., the leaders) may best be studied using definitions of heroism such as provided by Allison and Goethals (2011) or Franco, Blau, and Zimbardo (2011). These forms of heroism overlap and support one another. An example of their merging narratives is found in the collaborative effort that brought the Ebola epidemic to an end. In 2014, Time magazine named the "Ebola fighters" as "Person of the Year," (Gibbs, 2014) a designation intended to honor those who voluntarily exposed themselves to the deadly virus—this designation speaks to traditional heroic narratives. However, if we look closely, we find that their efforts were aided by collective intelligence—thousands of volunteers from around the world used OpenStreetMap to create detailed maps and map incoming data. Their actions

Dana Klisanin

provided crucial support for the volunteers on the ground (Center for Disease Control, 2016), helping to curtail the spread of Ebola. Time's runner-up selection, "Ferguson protestors—activists" (Altman, 2014) is another example. The "Ferguson protestors—activists" represent a movement for social justice that exemplifies the networked situation of the "cloud"—with thousands of individuals marching in the streets, while sharing and encouraging participation through social media.

> As 2014 closed, stories and unrest regarding police brutality in Ferguson and other parts of the country led to big outcry on social media … #BlackLivesMatter was Tweeted 9 million times this year, and the hashtag that started on social media, has become a social calling card for social justice and racial equality activists across the U.S.
>
> *(Morrison, 2015)*

A final example is Time's 2011, naming of "The Protestors" as "Person of the Year." The "Protestors" included activists across the world, by and large seeking democracy and accountability. The role technology played was instrumental, in the words of the cover story's journalist, Kurt Andersen:

> The degree to which the social media were important in those revolutions, in those protests, has been understated … the way that social media mobilized and directed protestors to this square, at this time, was really extraordinary.
>
> *(Anderson, 2011)*

In each of the movements previously described, each "Person of the Year" took action aimed at accomplishing one or more Articles of the UDHR: the "Ebola Fighters" in providing health care (Article 24); the "Ferguson Protesters—Activists" in seeking equal protection before the law (Article 7); and "The Protesters" in seeking the many benefits of democracy. Those "Protesters" living in the most repressed countries were seeking to accomplish a variety of Articles in the UDHR, while individuals living in more advanced democracies sought a reduction of the influence of corporations on politics, which manifests in issues of access to governance (Article 21) and social and economic inequality (Articles 22, 23, 25).

From Egypt to Greece, Tunisia to Occupy Wall Street, Liberia to Ferguson, the individuals taking action to secure such rights are doing so in the situation of the Cloud. They represent a highly interdependent, globally interconnected body—a global body that is bringing new meaning to heroism. One in which the heroism of the individual is embraced—understood as essential to the heroism of collaboration. Rather than replacing it, individual leadership and heroism are more important and powerful than ever—for the expansion of the network increases individual agency. Efthimiou's (2016) research on the "hero organism," and suggestion that we may one day "manipulate the environment to induce the Big Five neurochemicals of flow states, and by implication instill heroic action and heroic consciousness, thereby altering our cellular and genetic profile," evokes additional directions for future research. For as we move further into the future—of wearable, augmented and virtual realities—we will increasingly be required to recognize the *digital environment of our extended mind as part of our embodiment*. Thus, the study of the manipulation of the digital environment to support states of flow, and potentially support the evolution of heroic consciousness, is warranted. Ultimately, as humanity evolves to embody the emerging mythos and ethos of planetary consciousness, evidence suggests that heroism will become ever more collaborative and the rewards will be communal, societal, and planetary. Where collective intelligence is the global brain, and collaborative heroism the global heart, we will have a global body capable of tackling the complex challenges that lie ahead.

Notes

1   The stated aim of the campaign was to "make Joseph Kony famous," but the purpose, or intent, was to facilitate action toward his capture.
2   The search and rescue attempt was unsuccessful at that time. The purpose here is to introduce new approaches in the sphere of civil heroism.

References

Allison. S. T. (2015). The initiation of heroism science. *International Advances in Heroism Science*, *1*, 1–8.

Allison, S., & Goethals, G. (2011). *Heroes: What they do and why we need them*. New York: Oxford University Press.

Allison, S., & Goethals, G. (2015). Defining heroism: Objectively possible or In the Eye of the Beholder? Retrieved from http://works.bepress.com/scott_allison/26

Altman, A. (2014). Protester, the activists. *Time Magazine*. Retrieved from http://time.com/time-person-of-the-year-runner-up-ferguson-protesters

Anderson, K. (2011). Why Time chose "the protesters" [video interview]. Retrieved from http://content.time.com/time/specials/packages/article/0,28804,2101745_2102134_2102355,00.html

Avaaz.org (2015). Avaaz. Retrieved from https://secure.avaaz.org/en/climate_story_loc/?slideshow

Barabasi, A. (2003). *Linked: How everything is connected to everything else and what it means for business, science, and everyday life*. New York: Penguin Group.

Bartlett, J. (2014). *The dark net*. London: William Heinemann.

BBC (2016). Turkey academics held "for criticism of army offensive." Retrieved from www.bbc.com/news/world-europe-35321895

Bennett, B. (2011). Where even cellphones aren't safe: Under authoritarian regimes, texting and emailing can be risky. A U.S. program aims to help. *Los Angeles Times* (April 10), A6. Retrieved May 18, 2013 through ProQuest.

Bohm, D. (1980). *Wholeness and the implicate order*. New York: Routledge.

Boroditsky, L., (2011) How language shapes thought. *Scientific American* (February), 63–65.

Campbell, J. (1949). *The hero with a thousand faces*. Princeton, NJ: Princeton University Press.

Campbell, J. (1993). *Myths to live by*. New York: Penguin Compass.

Center for Disease Control (2016). Retrieved from http://blogs.cdc.gov/publichealthmatters/2015/01/mapping-for-ebola-a-collaborative-effort

Christakis N. & Fowler, J. (2009). *Connected: The surprising power of our social networks and how they shape our lives*. New York: Back Bay Books.

Clark, A. (2003). *Natural-born cyborgs: Minds, technologies, and the future of human intelligence.* Oxford: Oxford University Press.

Clark, A., & Chalmers, D. (1998). The extended mind. *Analysis*, *58*(1), 7–19.

Csikszentmihalyi, M. (1993). *The evolving self: A psychology for the third millennium*. New York: Harper Perennial.

Davis, E. (1998) *Techgnosis: Myth, magic, mysticism in the age of information*. New York: Harmony Books.

Detchon, R. (2015). Moving from words to action on climate change. United Nations Blog. Retrieved from http://unfoundationblog.org/moving-from-words-to-action-on-climate-change.

DiManno, R. (2012). Newmarket teen reaches out to save suicidal boy after seeing Tumblr postings. *The Star*. Retrieved from www.thestar.com/news/crime/2012/03/03/newmarket_teen_reaches_out_to_save_suicidal_boy_after_seeing_tumblr_postings.html

Earth Charter (2013). The Earth Charter. Retrieved from www.earthcharterinaction.org/content/pages/What-is-the-Earth-Charter%3F.html

Earth to Paris (2015). About. Retrieved from www.earthtoparis.org/about

Efthimiou, O. (2016). The hero organism: Advancing the embodiment of heroism thesis in the 21st century. In S. T. Allison, G. R. Goethals, & R. M. Kramer (eds), *Handbook of heroism and heroic leadership*. New York: Routledge.

Fishwick, C. (2014). Tomnod—the online search party looking for Malaysian Airlines flight MH370. *The Guardian*. Retrieved from www.theguardian.com/world/2014/mar/14/tomnod-online-search-malaysian-airlines-flight-mh370

Fogg, B. (2002). *Persuasive technology: Using computers to change what we think and do.* Burlington, MA: Morgan Kaufmann Publishers.

Fogg, B. (2008). Mass interpersonal persuasion: An early view of a new phenomenon. In *Proceedings of the Third International Conference on Persuasive Technology*. Berlin: Springer. Retrieved from http://bjfogg.com/mip.html

Dana Klisanin

Franco, Z., & Zimbardo, P. (2006). The banality of heroism. *Greater Good*. Retrieved from http://greatergood.berkeley.edu/article/item/the_banality_of_heroism

Franco, Z., Blau, K., & Zimbardo, P. (2011). Heroism: A conceptual analysis and differentiation between heroic action and altruism. *Review of General Psychology*, *17*(2), 99–113.

Freedom House (2016). Freedom in the World 2015. Retrieved from https://freedomhouse.org/report/freedom-world/freedom-world-2015#.VpqDSrRtCAZ

Gibbs, N. (2014). The choice. *Time Magazine*. Retrieved from http://time.com/time-person-of-the-year-ebola-fighters-choice

Goethals, G., & Allison, S. (2012). Making heroes: The construction of courage, competence and virtue. *Advances in Experimental Social Psychology*, *46*, 183–235.

Goldman, C. (2012). *Bullied: What every parent, teacher, and kid needs to know about ending the cycle of fear*. New York: HarperCollins.

Heylighen, F. (2002). The Global Superorganism: an evolutionary-cybernetic model of the emerging network society. *Journal of Social and Evolutionary Systems*, *6*(1). Retrieved from www.sociostudies.org/journal/articles/140540

Heylighen, F. (2011). Conceptions of a global brain: An historical review. In L. E. Grinin, R. L. Carneiro, A. V. Korotayev, & F. Spier (eds), *Evolution: Cosmic, Biological, and Social* (pp. 274–289). Retrieved from http://softarchive.la/blogs/thebestfreeebooks/evolution_cosmic_biological_and_social.695131.html

Hubbard, B. (1998). *Conscious evolution*. Novato, CA: New World Library.

Hughes, S. (2015). Update: #EarthtoParis reaches over 1.4 billion impressions during COP21. Retrieved from https://hatchexperience.org/earthtoparis-update-over-1-4-billion-impressions-during-cop21

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.

Jervey, B. (2015). The Paris Agreement is Adopted. Retrieved from http://magazine.good.is/articles/brink-historic-climate-pact

Jung, C. (1968). *Analytical psychology: Its theory & practice*. New York: Vintage Books.

Jung, C. (1985). *The practice of psychotherapy: Essays on the transference and other subjects*. Princeton, NJ: Princeton University Press.

Kinsella, E. L., Ritchie, T. D., & Igou, E. R. (2015). Lay perspectives on the social and psychological functions of heroes. *Frontiers in Psychology*, *6*, 130. doi: 10.3389/fpsyg.2015.00130

Klisanin, D. (2011). Is the Internet Giving Rise to New Forms of Altruism? *Media Psychology Review*, *3*, 1.

Klisanin, D. (2012). The hero and the Internet: Exploring the emergence of the cyberhero archetype. *Media Psychology Review*, *4*, 1.

Klisanin, D. (2014). Changing global mindsets: Convergence & activism. Paper presented at the annual conference of the European Meeting on Cybernetics and Systems Science. Abstract retrieved from http://emcsr.net/book-of-abstracts

Klisanin, D. (2015). Collaborative heroism: Exploring the impact of social media initiatives. *Media Psychology Review*, *9*, 2.

Klisanin, D. (2016). Collaborative heroism: An empirical investigation. *International Advances in Heroism Science*, *1*.

Kony Campaign (2015). The campaign: An experiment. Retrieved from http://invisiblechildren.com/kony/#epic-progress

Koppel, T. (2015). *Lights out: A cyberattack, a nation unprepared, surviving the aftermath*. New York: Crown.

Laszlo, E. (1997). *3rd Millennium: The challenge and the vision*. London: Gaia Books Limited.

Latour, B. (1993). *We have never been modern*. (C. Porter, Trans.). Cambridge, MA: Harvard University Press.

Lovelock, J. (1979). *Gaia: A new look at life on earth*. Oxford: Oxford University Press..

Maslow, A (1971). *The farther reaches of human nature*. New York: Viking.

McLuhan, M. (1964). *Understanding media: The extensions of man*. Cambridge, MA: MIT Press.

Morrison, K. (2015) 2015's top 5 social activism campaigns: #BlackLivesMatter, #LoveWins & More. Retrieved from Adweek, www.adweek.com/socialtimes/2015s-top-5-social-activism-campaigns-blacklivesmatter-lovewins-more/632051

Negroponte, N. (1996). *Being digital*. New York: Vintage Books.

Packer, S. (2010). *Superheroes and superegos: Analyzing the minds behind the masks*. Santa Barbara, CA: Praeger.

Pilkington, E. (2015). Edward Snowden joins Twitter: "Can you hear me now?" *The Guardian* (September 29). Retrieved from www.theguardian.com/us-news/2015/sep/29/edward-snowden-joins-twitter.

Rankin, L., & Eagly, A. (2008). Is his heroism hailed and hers hidden? Women, men, and the social construction of heroism. *Psychology of Women Quarterly*, *32*, 412–422.

Russell, P. (1983). *The global brain*. New York: Tarcher.

Shirky, C. (2009). *Here comes everybody: The power of organizing without organizations*. New York: Penguin.

Snowden, E. (2015) Twitter, September 29, 2015. Retrieved January 9, 2016 from https://twitter.com/Snowden/status/648899559507271680?ref_src=twsrc%5Etfw

Terrell, J., Shafie, T., & Golitko, M. (2014). How networks are revolutionizing scientific and maybe human thought. *Scientific American*. Retrieved from http://blogs.scientificamerican.com/guest-blog/how-networks-are-revolutionizing-scientific-and-maybe-human-thought

Time Magazine (2011). Why Time chose "The Protester." Retrieved from http://content.time.com/time/specials/packages/article/0,28804,2101745_2102134_2102355,00.htm.

United Nations (1948). Universal Declaration of Human Rights. Retrieved fromwww.un.org/en/documents/udhr.

United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved from https://sustainabledevelopment.un.org/post2015/transformingourworld

Walsh, R., & Vaughan, F. (1993). *Paths beyond ego: The transpersonal vision*. New York: Tarcher/Putnam.

Wilber, K. (1995). *Sex, ecology, and spirituality: The spirit of evolution*. Boston, MA: Shambhala.

Wood, G. (2015). What ISIS really wants. *The Atlantic* (March). Retrieved from, www.theatlantic.com/magazine/archive/2015/03/what-isis-really-wants/384980

Yee, N. & Bailenson, J. (2009). The difference between being and seeing: The relative contribution of self-perception and priming to behavioral changes via digital self-representation. *Media Psychology*, *12*(2). 125.

Zimbardo, P. (2007). *The Lucifer effect: Understanding how good people turn evil*. New York: Random House.

Zimbardo, P. (2011). What makes a hero? Retrieved from http://greatergood.berkeley.edu/article/item/what_makes_a_hero