



Zombies and the Liberal Arts: Shambling Toward a Greater Understanding of Ourselves and a Generation's Capacity to Solve Problems

Dr. Kevin Minch, Director

The Truman Institute, Truman State University

The July 2012 *Chronicle of Higher Education* probed the risks to scholarly reputation that come with exploring some of the more esoteric topics in popular culture. They investigated the pros and cons of a decision by two PhD neuroscientists to explore the biology of the zombie brain as an exercise in thought experimentation.¹ The article, which chronicled Timothy Verstynen and Bradley Voytek's foray into presentations and publications about hypothetical zombie neurobiology, explained how the pair was met with both praise and caution by academics and students. What is legitimate scholarship? Does a scholar waste time by engaging fanciful questions such as how the undead could function after their rise? Is there anything to be gained?

During the course of the past two years I've had the privilege of working with several authors, academics, physicians, scientists, and self-proclaimed "nerds" of all stripes to develop a summer academy for youth that would take the most thought-provoking elements of an imaginary apocalyptic scenario and use them as vehicles for interdisciplinary exercises in critical thinking. **The Zombie Scholars Academy: A Problem-Based Exploration of Science, Literature, and Leadership** drew its initial inspiration from the Centers for Disease Control's **Zombie Preparedness** campaign, which has since garnered national attention and spawned numerous duplicate initiatives to promote disaster preparedness. Since we started this journey I have been amazed at the breadth and depth of meaningful scholarship that has risen – like a reanimated corpse from the grave – from the vision first described by George Romero in *Night of the Living Dead*. More importantly, I have come to the informed conclusion that zombies are a superb tool for promoting interdisciplinary critical thinking and problem solving skills, and that they are an excellent vehicle for meaningful thought experiments. While it is easy to dismiss them as a passing fad, their potential is far greater than one might first assume.

To fully appreciate the undead's power, you have to get past the gore and camp of the genre. Undoubtedly, zombie films offer some of the most grizzly and terrifying images in

horror. Strangely, for a genre that spills more blood and tears more flesh than sharks at a raw meat buffet, the books, films, and television of the zombie apocalypse also contain their share of comic relief, wry social commentary, and predictable acts of human ineptitude to conjure a laugh and desensitize us enough to debate the more interesting questions the fiction raises:

- Is it moral to kill a zombie? How do we reconsider values regarding life and death when the definitions of life and sentience change?
- If a brain is necessary for motor function, how does the zombie brain work? Is what we see on our movie screens possible?
- What kinds of pathogens could cause zombie-like symptoms and how would they spread? What does this tell us about the spread of diseases in general?
- What are the best resources to have when major services collapse? How does a society accustomed to creature comforts adapt when they are no longer available?
- Is survival more likely when we work alone, or in teams? What is the nature of leadership in a crisis?
- How would governments respond to a wide-spread, apocalyptic threat? How would they relate to each other? Could they hold together?
- What role would, or should, the mass media play in a disaster? What are the obligations of journalists?

These and more questions are being addressed by legitimate scholars who explore questions of much broader import; each of which can be engaged in a non-threatening way through the discussion of zombies.

In addition to Verstynen and Voytek's explorations of zombie neurobiology - now appearing in venues such as YouTube and TedX, Daniel Drezner of the Fletcher School of Law and Diplomacy has penned *Theories of International Politics and Zombies* for Princeton University Press. Four Canadian mathematicians, using assumptions derived from zombie movies, modeled the spread of a zombie plague using established mathematical techniques and

concluded that a "true" outbreak of zombies would be hard to overcome. More importantly, however, their research offered a way of thinking about modeling the atypical spread of infections, such as when a dormant infection is present in a population.² Several authors, through works that combine elements of fiction and real science, have explored the zombie biologically. Like the aforementioned neurobiologists, Harvard psychologist Steven Schlozman, MD, and pathologist Peter Cummings, MD, have both penned novels with neuroscientists as protagonists, leading the reader to explore the deep recesses of the brain and think hard about whether some of the behaviors we see in movies could even occur biologically, and if so, how.³

These thought experiments are not limited to the scientific or social scientific. An important piece of the recent resurgence in zombie popularity has been the birth of a genre of "literary mashups" in which pieces of classic literature are merged with monster mayhem to breathe



new life (or death) into a classic work. Seth Grahame-Smith broke new cemetery ground with his *New York Times* bestseller *Pride and Prejudice and Zombies*, later followed by Steven Hockensmith's *Pride and Prejudice and Zombies: Dreadfully Ever After*. Numerous others authors have tried their hands at similar adaptations. Novelist Mira Grant has made her own thoughtful contribution to the genre with a trilogy of books – *Feed*, *Deadline*, and *Blackout* – that merge the thrills of the post-apocalyptic genre with Woodward and Bernstein-esque journalistic and political drama. Her gripping novels help readers envision a world still functioning politically, socially, and culturally, yet hampered by the restrictions created by widespread infection.

Likewise, we cannot neglect the contributions of authors such as Max Brooks (author of *World War Z* and the *Zombie Survival Guide*), and Matt Mogk (*Everything You Ever Wanted to Know About Zombies*), who have devoted significant effort to presenting practical questions of disaster preparedness and survival in books that amuse with their hyper-literal adherence to the notion that zombies exist and preparedness is critical. These texts exercise that portion of the brain, motivated by our survival instinct, that must be fully-informed and problem-solve with the resources around us. How would we build shelter on the run, fashion practical weapons, address medical and health challenges, and so forth? They are, in a way, the “Boy Scouts Handbooks” of the apocalypse.

Even if scholars have managed to frame these texts in select subjects, how credible is the claim that these thought experiments help readers intellectually? It is certainly not a new claim to assert that science fiction positively contributes to society’s intellectual life. Science fiction has also long offered groundbreaking social commentary and forecast real technological advances. But how can something as outrageous as flesh-eating corpses be viewed as anything but farcical? For me, the entire debate boils-down to a question not especially well-posed in futuristic science fiction: “What if everything we have come to rely on unravels? Especially modern gadgetry?”

There isn’t a teacher in the world who hasn’t fielded the question “How will I use this in real life?” There probably isn’t a single reader of these words who didn’t once ask that question themselves. When the electricity goes away, communication networks are down, the police and the army have been eaten, and all sources of manufactured goods are closed, do we possess the necessary knowledge to survive? If we have lost certain skills, do we have the problem solving capacity to reacquire them? Just as the math teacher tells a student they must still work a problem by hand – even though they have a calculator – a curriculum that adopts an apocalyptic metaphor poses an even broader challenge to students as they think about functioning in the absence of familiar tools.

The simplest illustration of this point is probably in the realm of food and water



safety. For many people, the dependence on manufactured goods is so pronounced that existence in a world without factories, fast food, and microwaves might prove apocalyptic in its own right. If the power suddenly went out – for good – our perishable food would start to spoil. Bottled water would run out. In time, some semblance of trade *might* begin to reassert itself; but in the absence of that development, individuals and groups would become dependent on their own resourcefulness to survive. How many of us could say with certainty that we know how to purify water for drinking, that we would be able to hunt for meat (let alone prepare it safely and preserve it for more than short-term use), or that we would be aware of what plants, fungi, and other flora of our environment are safe to eat? If we did know the answer to these questions, but still got sick, would we have any inkling of how to treat the illness once the local pharmacy shelves became devoid of Cipro?

The problems become exceedingly more complex when we begin talking about building shelter (math, physics, and engineering skills), defending against threats (strategic and critical thinking skills), containing the spread of disease (biology, epidemiology), and reorganizing the fabric of society (psychology, sociology, anthropology, communication, and more).

One take-away from this argument could be that what young people need is a “survival camp.” While generic survival skills are important (and are, in fact, part of the curriculum at the **Zombie Scholars Academy**), building complex problem solving skills in which survival is an imbedded motivator is far more critical. Zombies afford us a working metaphor in which most of the tools we take for granted are eliminated from the toolbox (or at least their use is significantly constrained). We cannot Google answers, we cannot phone a friend, and we cannot casually wait for the answer to come to us. We must think quickly and adapt. We must make tough choices. We must

survive just a little bit longer to grow, and improve, and rebuild what is lost. Even if we are never confronted with disaster, these are skills for a lifetime. I began this essay by proposing that zombies were a powerful tool for fostering interdisciplinary and liberal learning. There will still be some who see this topic and argue, “Stop wasting your time!” True, a zombie apocalypse isn’t going to happen. The Mayan Calendar’s end has not hastened a crumbling world. I prefer to think of apocalyptic threats as the metaphor that helps us think about solving much smaller problems that we will confront in our everyday lives.

In closing, I cannot help but recall the lines of an infamous ad from Ronald Reagan’s 1984 re-election campaign. A man stands along in a pine forest, facing a large bear. The deep voiceover calmly intones:

There’s a bear in the woods. For some people, the bear is easy to see. Others don’t see it at all. Some people say the bear is tame. Others say it’s vicious, and dangerous. Since no one can really be sure who’s right, isn’t it smart to be as strong as the bear, if there is a bear?⁴

¹ Mole, Beth. “Young Neuroscientists’ Popular Zombie Study Frightens Their Advisers Most of All.” *The Chronicle of Higher Education* 23 July 2012, <http://chronicle.com/article/Zombies-on-the-Brain/133043/>

² Munz, Philip, Ioan Hudea, Joe Imad, and Robert J. Smith. “When Zombies Attack!: Mathematical Modeling of an Outbreak of Zombie Infection.” In *Infectious Disease Modelling Research Progress*. J.M Tchuente, and C. Chuyaka, eds. Nova Science Publishers, Inc., 2009: 133-150.

³ See Schlozman’s *The Zombie Autopsies: Secret Notebooks From the Apocalypse* and Cummings’ *The Neuropathology of Zombies*.

⁴ <http://www.youtube.com/watch?v=NpwcjmjBgNA>



Dr. Kevin Minch is a Professor of Communication and Director of the Truman Institute at Truman State University in Kirksville, Missouri. Send comments to the author at kminch@truman.edu.