The International Community's Response to the Hypothetical Emergence of Superheroes

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The International Community’s Response
to the Hypothetical Emergence of Superheroes

Submitted to Professor Pitney
And
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I) Introduction

“[I]n this world, with great power there must also come - great responsibility.”¹

These words, spoken by the narrator - not Uncle Ben - in a Spiderman comic, are easily recognizable to those familiar with the superhero genre. For many, they embody the conceptual heart and soul of super powered individuals. The phrase even has the distinction of being the first comic book quotation to be part of a Supreme Court opinion, in the 2015 case of Kimble v. Marvel Entertainment LLC.²

The idea of people with exceptional abilities and unexplainable powers has origins in early mythology and religion, with stories of intermingling gods and men, of the exceptional walking among the ordinary. In the Christian bible, Judges 13-16 tells the story of Samson, a figure blessed with superhuman strength. The polytheistic traditions of the Greeks and Romans give us Aphrodite/Venus, who incites desire and love among living beings. Ancient Egyptian mythology includes Isis, an enchantress who healed the wounded and revived the dead. Traditions across time and space include figures that are larger than life, enhanced in ways that provide capabilities exceeding those of the average human.

The allure of this genre stems from the presentation of fantastic concepts and of worlds similar to reality but also wildly different. While stories of exceptional people and powers exist in mythologies throughout world history, the nineteenth and early twentieth

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¹ S. Lee and S. Ditko, Amazing Fantasy No. 15: “SpiderMan,” p. 13 (1962)
centuries introduced mass printing, increased literacy, and the idea of free leisure time, leading to the commercialization of the genre.³

The 21st century ushered in a veritable golden age of comic based media, with dozens of movies and television shows emerging. In 2014 alone, there were thirteen comic-based movies, and between 2014 and 2018, there are nearly forty additional adaptations scheduled for release.⁴ Among these are box office blockbusters *Avengers: Age of Ultron* and *Suicide Squad*. Netflix has released Marvel’s *Daredevil, Jessica Jones*, and *Luke Cage*, with plans to release *Iron Fist* and *The Defenders* in the near future. Marvel also has television shows: *Agent Carter* and *Agents of S.H.I.E.L.D.*, and the DC universe has now linked four separate programs together on primetime: *Arrow, The Flash, Legends of Tomorrow*, and *Supergirl*. *Gotham*, inspired by the Batman comics, also holds its own as a successful paper to screen adaptation.

While comic book movies and shows make up only a small percentage of overall media,⁵ their visibility as a popular culture phenomenon is evident. Part of the attraction is the recognizable and accessible narrative devices and plots: the clear divisions between good and evil, the difficult choices, and the satisfying if not quite happy endings. People can relate to flawed heroes trying to do the right thing in a complicated world, and enjoy the escapism of new realities and outlandish characters. Viewers follow stories, delving

⁵ Ibid.
into realities filled with people from other planets, with special abilities, with the fate of humanity resting on their shoulders. They enter alternative universes where anything is possible, and held against the uncertain reality of the world today, that makes these media compelling.

Another, more nuanced part of the allure is the modernization and depth of comic content. Today’s comic based media diverge from the content of early comics: the inspirational, patriotic, value based stories popularized during and after World War II. Modern comics, and their accompanying adaptations, maintain the feeling of good versus evil but also tackle deeper issues: civil rights, responsibility to protect, discriminatory legislation, and sovereignty, among others.

Stan Lee pioneered the transition towards modern comic media norms in the 1960s, shifting the tone of superhero media towards a human reality. Lee’s vision for adding depth and personality to the people with incredible abilities began with the Fantastic Four; he presented the super characters with human problems: marital discontent, familial relations, and financial difficulties. By depicting the characters as responsible for saving the world while also maintaining personal obligations, he deepened the genre and catalyzed a shift towards more nuanced plots and characters. In adding complexity to the personalities and responsibilities of superheroes, Lee opened the

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9 Ibid.
10 Ibid.
doorway for the genre to tackle more dynamic conceptions of good and evil. Instead of battling a singular villain, the hero also faces the human experience, in its somewhat messy and multifaceted glory. Stan Lee also placed his heroes in real cities; Peter Parker grew up in the Forest Hills neighborhood of Queens, and the X-Men operated out of Westchester County. Many children from the Big Apple actually learned a lot about the geography of New York from reading comics.

Providing depth and accessibility to enhanced individuals also allows the genre to tackle issues relevant to society as a whole. If normal people experience emotional turmoil, discrimination, and difficult choices, heroes will experience these situations as well, amplified by the potential costs of failing to save the world. In making heroes relatable through highlighting their humanity, the genre can draw from history and precedent to discuss serious issues facing the human race. Because comic characters evolved into people – rather than godlike creatures, held up as infallible – their experiences also reflect social paradigms and cultural conditions.

For example, in X-Men: Days of Future Past (2002), shape-shifting Mystique’s DNA is adapted into the Sentinels, which hunt and exterminate mutants after the government decides they pose a threat to mankind.11 There are clear parallels to the persecution experienced by European Jewish populations and other “undesirable” groups by the Nazi war machine during the regime’s expansion. In the Civil War comics, King T’Challa - the Black Panther - discusses his reluctance to intervene in America’s

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11 X-men: Days of Future Past, directed by Bryan Singer (20th Century Fox, 2014), DVD. For additional information on the Sentinel program and legislation persecuting mutants, see the Uncanny X-Men and X-Factor comics.
domestic politics because of his respect for the principle of sovereignty.\(^{12}\) The DC comic inspired television franchise\(^ {13}\) tackles LGBTQ rights, political corruption, the gray zones of morality, and what ethical and practical challenges 21st century heroes face.

These are but examples of how comics\(^ {14}\) reflect a global reality, including domestic politics and international relations. Using comics, with recognizable and fantastic characters, allows media to address serious and complicated issues in a way that is relevant and accessible to a broad audience. The nuanced plots of media bring up important issues, comment on social paradigms, and reflect real-life political events and ideologies. Using an accessible platform engages and informs readers about complicated issues without losing their interest.

The content of comics thus presents a useful case study for political analysis. With many links to history, legal precedent, technological advances, and international affairs, the genre is substantively relevant. The power, complexities, and nuances of supers allow them to stand in metaphorically for a wide range of threats and phenomena, including nuclear weapons, weaponization of technology, identity politics, and the “unknown unknowns.”\(^ {15}\) The agency of soldiers in war, the idea of unacceptable but unavoidable collateral damage, the conflict between ideologies, and the role of power in the international community are issues the world faces today. The heroes in comics and

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\(^{13}\) Supergirl, the Flash, the Arrow, and Legends of Tomorrow.

\(^{14}\) For simplicity, “comics” will be used for the rest of the paper to mean comic books, and movie and television adaptations. Please see citations for further information about specific media mentioned.

on screen are tackling these problems. Presenting complicated conundrums in narrative form allows even children to grasp difficult concepts, teaching readers and viewers that what is right is not always what is easy, the importance of personal sacrifice, and the importance of ethics in wielding immense power.

As a hypothetical “case study” or “thought experiment,” supers are especially appropriate as a stand in for the “unknown unknowns.” The phrase, coined by then Secretary of Defense Donald Rumsfeld in 2002, sought to articulate the idea that some challenges the international community will have to face in the 21st century are ones policymakers have not even thought of. Put simply, they are threats governments do not know they do not know about.\(^\text{16}\) The emergence of superheroes is a stand-in for “unknown unknowns” because the emergence of enhanced individuals could be sudden, unexpected, and threatening to the stability of the international community. The existence of enhanced individuals would constitute a transnational security threat, eliciting policy responses.

The example is also an opportunity to test the merit, descriptions, and prescriptions of different political theories. Further, it provides an occasion for analyzing international problem solving and global cooperation. That is, could the world effectively handle the emergence of super-powered individuals? How do international relations theories posit the international community would respond to such a challenging and unique threat? The questions hinge on unpacking and applying different theoretical perspectives to see how they fare.

\(^{16}\) In the same comments, he discussed known knowns and unknown knowns. Known knowns are issues that the government is aware of and actively handling. Unknown knowns are threats that we now know we do not know - and thus require further investigation as to which foreign policy tools should be implemented as part of a response program.
Fundamental differences between schools of thought and levels of analysis present varying foundations for understanding the world, relations between states, and prescriptive options. Each perspective presents different assumptions about how the world would respond to the emergence of superheroes. An unpacking of these theories provides a foundation for understanding how the international system operates, how states make decisions, and what policy options are feasible in the modern political climate.

The thought experiment, and the comic genre itself, provides vehicles for thinking about the political and social ramifications of successful or failed problem solving, state interaction, and scientific advances. Comics consistently reflect the real world, paralleling events and concepts discussed in foreign affairs dialogues. For example, *Captain America: The Winter Soldier* is an allegory for rogue bureaucracies, exploring the erosion of civil liberties and ethically questionable technology. Domestic and systemic level problems are adapted into complex plots, allowing writers and directors to explore nuanced concepts in creative ways.

Further, applying international relations theories to a hypothetical case study can help test their objective value. Political science, which previously concerned itself with qualitatively describing and explaining global events and conditions, now emphasizes

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17 When comics emerged in the 1930s, they included what seemed like outlandish ideas: space travel, nuclear weapons, ray guns, computers, handheld communication devices, etc. Technological advances that seemed unrealistic at the time came to fruition, and comics continue to push the boundaries of possibility.

causality and quantitative analysis. Shifts towards data sets and rigorous calculations privilege economic explanations over cultural characteristics; a thought experiment considering the emergence of a unique threat allows international relations theories to explore uncharted territory and stretch their explanatory powers to the max. Without real events or numbers to apply, the value of the theories hinges on their ability to integrate a novel concept into their understandings of the international system.

Definitions

While ideological and methodological divisions are clear in theory, real world applications are much more complex. Thus, before delving into the tenets of each school, we should define key concepts.

“Super-powered” will be used interchangeably with “enhanced,” “superheroes,” “heroes,” and “supers.” The definition of these individuals must encompass those with physical or intellectual capabilities enhanced by technology, extreme training regimens, mutations in DNA, or forces mankind has yet to observe. This paper does not address super “villains” though the emergence of super-powered individuals would almost necessarily presume that some would use their powers for evil, presenting additional policy challenges. Alien superheroes – such as J’onn J’onzz or Superman - serve as examples, but the nature of their status as extraterrestrials and the implications of additional life in the universe are beyond the scope of this paper.

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“Success” in dealing with the emergence of enhanced individuals is international consensus on a course of action that is both actionable and acceptable to the majority of parties involved. The “international system” consists of all states, institutions, and individuals in the world; problem solving in the international system is thus subject to various levels of scrutiny, and input. “Cooperation” is best understood through the lens of game theory, which posits that rational actors - in this case, members of the international system - make decisions based on cost-benefit analyses and expectations about the behavior of other actors. Variables such as iterations, number of players, and shadow of the future are all influential in the potential for game theory to assist in analyzing cooperation prospects.20

II) Theory

International relations theories seek to explain and predict the behavior of states in the international system. Each theoretical framework thus represents its own explanations of global phenomena and prescriptions for policy, articulating different perspectives for understanding power politics. In providing various frameworks to analyze the international system and present the case study of enhanced persons, it is necessary to present the basic assumptions and expectations of the three main international relations paradigms: realism, liberalism, and constructivism. Within each theory chapter, the fundamental assumptions of the paradigms engage the case study, hypothesizing how each would posit the world might react to the emergence of superheroes.
Realism

“I exist only to protect Krypton. Every action, no matter how violent or cruel, is for the greater good of my people.” - General Zod

Political realism remains the most prominent theoretical paradigm in discussions of state behavior and international relations. The conflict-based theory understands mankind - and thus states - as competitive, greedy, power-seeking, and selfish, living in an anarchic system. The assumption that states operate in an anarchic system - one without a supranational authority to enforce rules and mitigate disputes - underpins the realist understanding of state preferences and behaviors.

Anarchy creates a self-help dynamic, wherein each state consolidates resources and power, motivated by a fear that other states will take those same resources and threaten the state’s survival. The result is a lack of cooperation, increased competition, and decreased trust between international actors. States therefore determine their own interests to ensure survival, with success marked by accumulating power and resources to defend against other states. Interactions are a zero-sum game wherein gains of one state – specifically power and capabilities - are losses of another.

Realism dates back to Thucydides, who in the “Melian Dialogue” wrote “the strong do what they can, and the weak suffer what they must” when describing the conflict between the invading Athenians and the citizens of Melos. He argued that distribution of power, not logic or morality, determines outcomes. From his writing

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21 Man of Steel, directed by Zach Snyder ( Legendary Pictures, 2013).
23 Thucydides, History of the Peloponnesian War (431 BC), Ch. XVII.
comes the expression “might is right,” indicating that states with the most power can force their will on weaker states, and that any understanding of ethics is determined by those who have established dominance.

In the 16th century Machiavelli’s *The Prince* echoed the concept, rejecting the inclusion of morality in political decision-making in favor of calculated cost-benefit analyses.\(^\text{24}\) His political writings determined that the primacy of state security justified harsh means, and that a ruler need not concern himself with inspiring love but rather with the protection and benefit of the state.\(^\text{25}\) The Machiavellian take on realism is considered radical, yet its basic tenet represents an important aspect of the paradigm as a whole: actions which further the state’s interests are good, and maintenance of the state is the priority of government.

Realism also rests on the Hobbesian belief that man is selfish and brutish, with the lack of authority resulting in an unending state of war.\(^\text{26}\) His assumptions about man’s behavior under anarchy parallel the behavior of states in an anarchic system. Without a global authority to provide organization and law, conflict dominates state interactions.

The classical realism of the twentieth century was born out of a response to the increased influence of an idealistic perspective after World War I.\(^\text{27}\) Edward Carr challenged the “utopianism” of idealism, specifically its proposition that war is an


\(^{25}\) Ibid.


exception to the naturally harmonious, moral, and reasonable relations among states. He rejected moral universalism, putting forward the idea that morals are state specific, driven by states acting in self-interest or to justify their own actions. Carr wrote “pure realism can offer nothing but a naked struggle for power which makes any kind of international society impossible.” He also challenged the efficacy of collective security arrangements such as the League of Nations, arguing that each state’s interests ultimately remain primary and compromise cooperative action.

Even more prominent is the work of Hans Morgenthau, who took the realist perspective and developed it into what Korab-Karpowicz describes as “a comprehensive international relations theory.” Morgenthau defined six principles of political realism, each of which elaborates on the central idea that a set of objective laws with their roots in human nature characterizes international relations, and that state interest is best defined in terms of power. Rational actors pursue their own interests, and politics is an autonomous sphere that cannot be subservient to ethics, but does acknowledge moral prudence.

Realism thus presents a picture of international relations characterized by power struggles and conflict. In describing state behavior, the paradigm presents two important concepts: balancing and bandwagoning. Balancing is a state’s decision to counter a rising power by joining other powers. The combined power of the initial state and its new ally

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29 Carr, 87.
30 Ibid.
31 Korab-Karpowicz.
33 Ibid.
reduces the rising power’s ability to influence the behavior of other states in the international system. Bandwagoning describes the tendency of states - often smaller, less powerful ones - to latch on to a rising power in hopes of garnering more influence or security in the international system. These practices are key in understanding how states interact, and what opportunities and incentives there are for cooperation.

At first, enhanced individuals seem to fit clearly into the realist paradigm as opportunities for states to accumulate power. Using individuals to increase a nation’s relative power is no stretch; world powers have been attempting to enhance individual abilities for years. Since the era of Sparta’s harsh, rigorous training in pursuit of the ideal fighting forces, countries have been trying to capitalize on the potential of citizens to increase the nation’s relative military capabilities.\(^{34}\) Successful efforts to eliminate traditional barriers to performance - guilt, fatigue, fear, stress, and shock - could create history’s most efficient armies.\(^{35}\) Beyond attacking human barriers to efficiency with chemicals, technology has also been adapted to increase an individual’s war fighting abilities.

Thus, there are two types of enhancements: biological and technological. Biological enhancements, providing speed, flight, strength, and other abilities, are part of the individual. That is, these abilities cannot easily be separated from bodies or suppressed without specialized scientific contraptions. For example, the Flash’s speed is difficult to contain, and Captain America’s chemically induced rise to the peak of human


\(^{35}\) Ibid.
efficiency alters his physical characteristics. Technological enhancements, such as Tony Stark’s Iron Man Gear or the Green Arrow’s arsenal of projectiles, do not constitute a part of the individual as a being. Therefore, the enhancements exist separately from the enhanced individual and are subject to government confiscation.

Reality may indicate that the human race is well on the path to creating biologically and technologically enhanced individuals. Militaries around the world have issued battlefield performance enhancing drugs – including “Go Pills” (speed) used by the U.S. Air Force – to combat the shortcomings of human physiology.\textsuperscript{36} Both America and the United Kingdom started official biological modification efforts in the past ten years; though neither program achieved its goals, efforts to biochemically enhance individuals continue.\textsuperscript{37}

The Human Universal Load Carrier (HULC), created by Lockheed Martin and Berkeley Bionics, is a wearable exoskeleton that increases an individual's strength and endurance.\textsuperscript{38} Inspired by the Iron Man suit, the United States Special Operations Command (SOCOM) is developing the Tactical Assault Light Operator Suit (TALOS),

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\textsuperscript{38} \textit{Berkeley Robotics and Human Engineering Laboratory}, HULC\textsuperscript{TM}, accessed October 24, 2016, \url{http://bleex.me.berkeley.edu/research/exoskeleton/hulc/}. 
liquid body armor capable of deflecting shrapnel and enemy rounds. While still in the early stages, these efforts suggest the world is on a path towards significant human modification technology.

Successful experiments to make people biologically and technologically superior would encourage governments to conscript them. Their enhanced abilities or expertise in using modification technology would render them uniquely equipped for military operations. The paradigm would likely be unconvinced that any radical change in human behavior would result. As superheroes integrated into national militaries as units of power, the realist assumption of politics as a zero sum game would force other states to consider the relative increase of power as a decrease in their own security.

A new existential “threat,” in the eyes of realists, is unimpressive. There have been dozens of new existential threats in the history of human and then state interactions, including disease, natural disasters, and advances in weaponry and warfare. It is worth noting that at one point the stirrup was so novel an invention it changed the dynamics and strategies of contemporary warfare. Emerging threats have largely reaffirmed established power structures, relationships, and behaviors.

For realists, superheroes would enter existing structures as units of power added to the state in which they reside. The real implications for national security rely on the volume and distribution of these resources. Variations in where and how many

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40 The stirrup allows soldiers to maximize the efficiency of horses and arrows. With stirrups, they were able to ride horses (improving speed and endurance) while shooting arrows (which was an innovation that reduced the need to fight in close quarters). See: Lynn White, Medieval Technology and Social Change (n.p.: Oxford University Press, 1962).
41 Drezner, 42-43.
superheroes emerge could drastically alter or reaffirm the balance of power in the international system, which could cause disruption in relations but would eventually result in a new status quo. This outcome is directly in line with the realist understanding of how power shifts in the international system.

The geographical distribution of emerging superheroes is critical. In reality, scientific research indicates that intentional enhancement of individuals is likely to succeed in China first.42 China was the first to edit embryo genes using the CRISPR-cas9 tool,43 which potentially allows scientists to alter DNA to affect traits (intelligence, appearance, physical capabilities), but the country also boasts a domestic audience more comfortable with genetic manipulation and less focused on human rights than populations of Western countries.44 Democratic Western countries are subject to public opinion and ethical considerations of human manipulation, reducing the likelihood of funding for controversial programs.45 In the U.S. specifically, there has been significant opposition to genetic manipulation and human enhancement, so much so that lawmakers have prohibited the provision of federal funding for gene editing.46

The implications for enhanced human emergence in China are immense. As a rising economic power and a balancing state against U.S. hegemony, China aimed with a

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44 Schaefer.
45 Ibid.
46 Ibid.
new form of power could disrupt the balance of power. Because of the limitations of genetic manipulation, it may be safe to assume that characteristics like speed, endurance, intelligence, and strength may be affected by manipulation; flight, telepathy, time traveling, and the like are unlikely to emerge by these means and will be addressed later. If China created super soldiers, they would likely trigger a security dilemma with other major nation states.

In realist theory the anarchic system drives the security dilemma; because the system is anarchic, each actor lives in a perpetual state of fear and need for self-help. Therefore, when the state sees another state increasing its capabilities, it feels the need to match and then exceed those capabilities. This reaction prompts the enemy state to again increase its capabilities, increasing competition for security and military advantages. This increases each state’s proclivity to go to war, and often results in the militarization of many states within the system. Since China is currently a rising power, Western states would likely put immense resources towards matching and exceeding China’s capabilities. In the event that Western states could not acquire a superhero or group of superheroes to match China’s increase in power, they would increase traditional military power and nuclear capabilities.

In the hypothetical instance that supers emerged naturally, it could occur anywhere, at anytime, in any quantity. The introduction of superheroes into Western countries would reaffirm the democratic hegemonic alliance.\(^47\) Introduction of

\(^47\) It may be noted that if a super emerged in say, France, there might be a disruption of power within the alliance. Further, that disruption could threaten the balance of power overall. The United States is the primary military repository of the alliance’s capabilities and has a preponderance of power. If another state increased its power through the emergence of supers,
superheroes into a secondary power, such as China or Russia, could shift the system into bipolarity, causing small periphery powers to balance and bandwagon in a dynamic similar to that of the Cold War. If supers emerged in significant numbers in less developed periphery states, such as Chad, Madagascar, or Malawi, realists would expect a disruption of the balance of power and a realignment of states proportional to the increase in power. For example, if a periphery state all of a sudden had Superman, its relative power would skyrocket, as would the power of its close allies. Finally, if super humans emerged in a region or country characterized by tension, realists would expect escalation of that conflict. For example, if either Pakistan or India acquired super humans, one would expect to see the newly increased power leverage their capabilities over other in order to demand concession.

For realists, it matters less about the specific characteristics of superheroes and more about which states they emerge in, how many emerge, and the current relationships between now emboldened “super” states and other states in the international system. Although superheroes are a new “type” of power, they are still a unit of power through which the state can threaten and enforce its will. The mechanisms through which states interact and compete would remain unchanged, only the balance of power and distribution of capabilities relative to how it currently stands would shift.

Yet, because of the potentially overwhelming power of superheroes, there is one possible challenge to the realist paradigm. Just as individuals band together in the form of nations for mutual security, the emergence of enhanced people may provide the powerful,
legitimate authority capable of creating a supranational government. The emergence of
the Justice League in the DC multiverse, a conglomeration of Earth’s heroes whose base
is in space and whose members are dispatched to respond to the planet’s problems would
serve as an unprecedented challenge to realist understandings of the world. That level of
organization and power would warrant reconsideration from even the staunchest realist.

An additional concern might be uncontrollable supers. Realists would initially
look at rogue heroes the way they look at terrorists.48 Most are working in one region,
one state, or one city. Even those with transnational aims are largely powerless to change
the balance of power in the international system, blips on the radar for powerful states.49
Terrorist groups, and other non-state actors, derive their influence in the international
system from the attention they receive following their actions, which is often not
proportional to the actual events but superficially exaggerated because the attacks are
often lethal. Western countries, where terrorism is the least frequent and the most
effective because of the response it elicits, exacerbate this phenomenon. The realist
tradition recommends more appropriate responses in terms of proportionality and
intensity, and would thus suggest a measured response to a limited emergence of supers.

The exception would be large numbers of superheroes with advanced powers.
Shape shifters like X-Men’s Mystique or DC’s J’onn J’onzz can alter their appearance,

48 Stephen Walt, “Monsters of Our Own Imagining,” Foreign Policy, March 24, 2016, 1, accessed
October 19, 2016, http://foreignpolicy.com/2016/03/24/monsters-of-our-own-imaginings-
brussels-bombings-islamic-state/.
49 This does not mean that terrorism is not an important or painful issue for many. Realists just
disregard it as a threat to the international system, and are not concerned about the domestic
implications. The effectiveness of terrorism (by nature of it being an asymmetrical weapon) is
predicated on the responses of large states. No response would likely reduce terrorist
organizations proclivity to use the means we generally understand to be terrorism.
infiltrating power structures by impersonating those in leadership positions.\textsuperscript{50}

Unprecedented technological capabilities allow heroes like Batman and Iron Man access to encrypted data and confidential information. With cyber concerns on the rise, the ability of “technologically assisted” supers to gain access to critical infrastructures, networks, and databases could constitute a legitimate threat to existing power structures. If Batman resided in Turkey and could gather U.S. and Russian information, its power relative to those states would increase. Teleporters like Nightcrawler and \textit{Teen Titan} Raven could pose similar threats; just as Nightcrawler infiltrated the White House in \textit{X2}, any teleporter might be capable of breaching any security measures and posing a threat to any world leader.

The potential for powers to develop that could alter state interactions during peace and war is worth noting. While Carl von Clausewitz’s \textit{On War} remains relevant in modern discussions of war, the emergence of superheroes might alter the conditions of interstate dynamics to the point where warfare changes forever. As Clausewitz says, “war is the continuation of politics by other means,”\textsuperscript{51} and understanding the mechanisms of conflict are crucial for the deployment of forces and the wielding of power.

Developments in technology influence the way countries fight wars, yet many conditions remain the same. Terrain, distance, supplies, and tempo are all important. Teleportation, enhanced endurance, and other enhancements could disrupt the traditional considerations and conditions of warfare.

\textsuperscript{50} As occurred in \textit{X-Men: Days of Future Past} (2014), with Mystique impersonating a Senator on television to publicly withdraw support for the Mutant Registration Act and the CW’s Supergirl (2015-present), where J’onn J’onzz spent years impersonating Hank Henshaw, director of the D.E.O.

The realist notion that people with powers would serve as units of power and force is compelling, but with immense power and individual cognition, heroes with extreme powers are a concern. Some have powers extensive enough to justify the proposition that they are as dangerous as nuclear weapons. While this may be effective for mechanisms of deterrence, compellence, and coercion, the fact that heroes are essentially sentient weapons complicates the clear-cut, traditional picture realism presents of enhanced persons as units of power.\(^{52}\)

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\(^{52}\) The “nukes with brains” situation played out in Marvel’s *Civil War* comics, as villain Nitro detonates his nuclear capabilities in Stamford, Connecticut. He kills over 60 schoolchildren and takes out massive amounts of property, prompting domestic and international outrage over the lack of oversight and regulation of people with powers.
“There is a right and a wrong in the universe. And the distinction is not hard to make.” - Superman

Liberalism challenges realism with its assertion that states can overcome the challenges anarchy poses to international cooperation. Proponents of this paradigm posit that concerns of power and strength succumb to mutual economic, social, and political considerations. A state’s desire for stability and prosperity - and an acknowledgement that cooperation with other countries can facilitate these conditions - allows the international system to normalize non-conflictual interstate relations. Liberal scholars assume state preferences, values, and goals matter, holding democratic governments as the ideal creators of international peace and stability.

Classical liberalism is rooted in the Enlightenment, where ideas of individualism, rights, rationality, and human nature abounded. Maximizing individual agency and freedom is the ultimate goal, with state behavior - which is human behavior - driven by a desire to maintain sovereignty and independence. Natural law, which articulates an inherent right to life, liberty, and property, enables humans to engage with one another in productive and cooperative ways.

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56 Ibid.
Yet while classical liberals believe individuals can respect one another and work together, they do not assume peace and stability will necessarily characterize the international system. Rather, they emphasize that conflict is in some cases unavoidable, and therefore minimizing conflict, engaging in conflict under just war principles, and upholding values and rights when disagreements occur between nations should take precedence when considering policy options. With the nation state as the highest organizational unit of people, classical liberals warn against overstepping national jurisdiction, over regulating multi-state issues, and building organizations to take on tasks they do not have a right to perform.

Modern liberal theorists built on the foundation of classical liberalism, embracing the idea of creating international institutions to facilitate cooperation and build stability and lasting peace. In establishing itself as a rigorous, relevant paradigm, liberalism often challenges realist notions directly. For example, the idea of mutual or absolute gains supplants the concept a zero-sum game. Cooperation yields benefits for all involved parties, making the interaction positive instead of competitive. Liberalism articulates a picture of the world as anarchic, but not necessarily conflictual; it is in the best interest of each state to pursue common interests through mutually advantageous action.

The paradigm also presents several concepts that are more specific. The first, and most prominent, is democratic peace theory (DPT). Following the end of the Cold War

57 Ibid.
58 Haar, 37.
59 It may be noted here that game theory studies discussing the benefits, conditions, and characteristics of international cooperation are extensive, and illuminating. Those who wish to investigate this further should direct themselves to the following paper: Kenneth Oye, “Explaining Cooperation under Anarchy: Hypotheses and Strategy,” World Politics 38, no. 1 (October 1985): 1, accessed October 20, 2016, https://www.jstor.org/stable/pdf/2010349.pdf.
and the collapse of the USSR, this theory gained traction as the number of democracies increased. DPT presents a simple idea: democracies do not go to war with one another.\textsuperscript{60} Michael Doyle is one of many scholars who have tried to explain this phenomenon, presenting “three pillars of the liberal peace.”\textsuperscript{61} The first is the tendency of democratic action to remain subject to an obligation to the people, who restrain the government’s ability to make rash or counterproductive measures.\textsuperscript{62} The second is the ability of shared liberal principles and norms to build trust between states, reducing their proclivity for violence towards each other.\textsuperscript{63} Third, capitalism and free trade ideology supports economic engagement with other countries, which discourages violence because economic interdependence raises the cost of war for both or all parties.\textsuperscript{64}

Another concept is the primacy of institutions, which led to the “liberal institutionalist” strain of liberalism. These scholars support classical liberalism’s emphasis on rights, human individuality, cooperation, and respect, but propose that the best way to ensure the protection of these values is through institutions. The benefit of institutions is their ability to provide a platform for communication, establish clear rules and norms of behavior, and facilitate cooperation.\textsuperscript{65} The North Atlantic Treaty Organization (NATO), described by Robert Keohane as “not only the most successful multilateral alliance in history but also the most highly institutionalized,” is an example

\textsuperscript{60} Walt, 39.
\textsuperscript{62} Ibid.
\textsuperscript{63} Ibid.
\textsuperscript{64} Ibid.; also referred to as economic peace theory (EPT).
of a cooperative international organization. While NATO’s adaptation to modernization and emerging threats challenges its ability to navigate the international system, its relative success in facilitating recurrent cooperation between major states is a testament to the potential of international organizations.

Through these institutions, countries also codify norms into international law. Facilitated by globalization, the rise of international institutions, and technological advances, liberals say that the rise of transnational law fundamentally changed the way states interact and behave. The primacy of international law presupposes a mutually constituted framework, driven by powerful actors but also granted legitimacy from the participation of smaller nations. Three primary areas of international law are human rights, criminal law, and private international law. What is today a relatively organized, coherent set of rules and behavioral expectations started with the evolution of international norms and the willingness of many states to participate in cooperative ventures, resulting in global institutions, regulation, and stable platforms for communication and negotiation.

The liberal strain of international relations theory would likely welcome the presence of enhanced persons, provided that that these superheroes were amenable to joining international institutions, promoting peace, and working to resolve conflict. As indicated in comic-inspired media - Marvel’s *The Avengers* and *Civil War*, DC’s longstanding *Justice League* television - many heroes absolutely see their enhancements

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68 Sterio, 226-240.
as opportunities to help. In fact, some even believe that their abilities present a moral imperative to protect those in the world who cannot protect themselves. The Green Lantern Oath - “In brightest day, in blackest night, no evil shall escape my sight, let those who worship evil’s might, beware my power… Green Lantern’s light!”⁶⁹ - embodies the understanding that powers come with the responsibility to serve others.

Yet the utopian perception of individuals with powers would likely parallel the idealistic post-World War II expectation that all states can and would work together to make the world a better place. Supers, like countries, would be bound both by an obligation to the world and to their own values and ambitions. Those closely aligned with governments, such as Captain America or the Black Panther, are clearly bound to a political agenda and would thus be engaged in foreign policy and institutions under the auspices of national interest. The influence of others, whose allegiance more closely aligns with local, domestic contexts - such as Luke Cage and the Green Arrow - might seem more diluted.

Those with sufficient power and abilities⁷⁰ would join existing frameworks of international cooperation. Since institutions are comprised of states and do not themselves constitute a supranational authority, they are platforms for communication and messaging, at best a partial answer to the problem of anarchy. The relative failure of international institutions in guiding state behavior stems from the lack of enforcement.

⁷⁰ “Name brand” heroes, with their fancy abilities and a clear level of power, would be wanted and sought after for positions of influence. Many less impressive heroes - think the Justice Leagues Booster Gold or Marvel’s squirrel girl - would be useless to foreign policy and international institutions, but the liberal promotion of equality and human (ish) rights would likely result in their protection under international law as long as they were willing to comply with domestic law.
mechanisms. Superheroes, with their unique talents and their desire for justice, would be especially well suited to participate in and cooperate with international institutions as a means of enforcing norms and behaviors.

Supers, because of their talents and in some cases their physiology, could enter conflict zones blue helmets cannot. Wonder Woman and Colossus need not concern themselves with mortars or stray bullets, and would be able to make a tangible difference in assisting civilians and legitimate rebel groups combat corrupt governments and human rights abuses. The Flash or Quicksilver could read a book on structural engineering in a matter of seconds, gaining the knowledge necessary to rebuild homes, hospitals, and other structures to provide shelter for those in war-torn countries. Super genius heroes, such as Hank Pym or Reed Richards, could join groups like the World Health Organization or the InterAcademy Panel on International Issues to create solutions to issues like climate change, overpopulation, and resource scarcity.

Supers would also be mission critical to the evolution of institutionalized military alliances. In this capacity, liberals agree with the realist understanding of enhanced persons as units of power that may be mobilized to promote, protect, or punish.

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72 The “blue helmets” are the military and peacekeeping troops of the United Nations. Because of concerns for their safety, they are often unable to enter conflict zones and provide aid, assistance to resistance, or diplomatic guidance. To read more about them see: “Military,” United Nations, accessed October 28, 2016, http://www.un.org/en/peacekeeping/issues/military/.

difference would be the amount of agency and free will liberalism would allow the
individuals to have. Although institutions and thus alliances are complicated, they are
also voluntary. Super engagement would require, in the purest understanding, consent to
engage in these institutions and alliances in order for participation to be legitimate. Once
supers integrated into the armed forces,\textsuperscript{74} liberals would expect them to be powerful in
terms of combat capability, but also in regards to their ability to act as international
toys of peace, justice, and goodness. Their ability to mobilize soft power\textsuperscript{75} would
allow them to promote political and military goals. Their celebrity would elevate them to
international renown, facilitating the spread, protection, and affirmation of global norms,
national law, and cooperation.

A brief caveat to the idealism of liberal institutionalism is that the integration of
supers into institutions and organizations depends on society’s acceptance of them as
human. One of the scope conditions of liberal theory is that relationships among human
beings operate on the assumption of natural rights. Disregarding the anomalous case of
space aliens, supers would likely need to qualify as fully human in the eyes of society in
order to receive the same rights and responsibilities under international law. Since human
equality is enshrined in international law – although not yet in practice – seeing supers as
non-human would likely shift the international community’s trust in them and their
willingness to place them in positions of power.

\textsuperscript{74} Which would likely look like it does today, with domestic forces in the form of standing armies
engaged in alliances via treaties that could at any time require their service. Further, supers would
likely also be part of the troops many countries allot to the United Nations for peacekeeping,
nation building, and humanitarian relief.

\textsuperscript{75} Defined best by Joseph Nye in his article: “Soft Power,” \textit{Foreign Policy} no. 80 (Autumn 1990):
153-71, accessed November 1, 2016, \url{http://www.jstor.org/stable/1148580}; soft power is the
ability to exert influence via culture or economics.
Classifying them into a different category, like Marvel’s self-identified “Inhumans”\textsuperscript{76} and DC’s super-alliance “the Justice League,” may prevent their participation in human institutions. They may instead opt to form their own communities and organizations, ensuring their own security and defending against threats from the human world. Liberals would suggest early and consistent integration of supers into institutions to prevent prejudice from solidifying into total ostracism. Further, providing enhanced persons with a purpose and a role in providing security would help foster trust within society for superheroes.

\textsuperscript{76} The Inhumans were created as a result of Kree (alien) experiments on homo-sapiens.
Constructivism

“You wear a flag on your chest and think you fight for your nation. I have seen the future, Captain! There are no flags.”

Realists and liberals debate the influence of structure (primarily anarchy and power) and process (characterized by institutions, interaction, and learning) on the behavior of states in an anarchic system. Constructivism is an alternative, the third major international relations paradigm. It seeks to provide an additional alternative perspective for analyzing state behavior and preferences.

A main assumption of constructivism is that people use subjective meanings and perceptions to determine their action towards the objects of interaction. The paradigm is useful for describing the past or the status quo, and gained respect within the international relations community after the Cold War. Realism and liberalism failed to predict the end of the Cold War, and the assumptions and predictions of each theory failed to explain the event in hindsight. Constructivism provides an explanation championing the influence of perception on state behavior, preferences, and history.

State behavior towards other actors depends on their classification of the outside state as an ally or an enemy, both of which are socially constructed ideas about norms, expectations and interactions. These classifications rely on repeated interactions - positive or negative - and reification of a specific understanding of the character of the

77 Captain America: The First Avenger, directed by Joe Johnston (Marvel Films, 2011).
80 Walt, 41.
81 Wendt, 397.
relationship over time. With norms, beliefs, and identity as the foundation for decision-making, constructivists determine that the individual level of analysis allows for extrapolation at the state level.\textsuperscript{82} Since perceptions drive the behavior of rational actors, the impact of ideas is a fundamental consideration for social constructivist scholars. There is therefore an emphasis on tracking social discourse and prevailing beliefs.\textsuperscript{83}

An understanding of the international community as an intersubjective social context is the crux of the constructivist argument. Individuals, and state actors, develop relationships with and understandings of others through repeated norms and practices.\textsuperscript{84} These norms and understandings give actions and relationships meaning, allowing others to recognize the origins of state behavior and respond appropriately.\textsuperscript{85}

Constructivists do acknowledge the relevance of anarchy. Nevertheless, prominent constructivist Alexander Wendt best describes the theory’s understanding of the concept: “anarchy is what states make of it.”\textsuperscript{86} As a structural concept, the existence of anarchy within the paradigm’s framework stems from mutually constituted rules and practices. Anarchy exists because people believe it does, making it an imagined community structure.\textsuperscript{87} As an intersubjective concept, anarchy can have different meanings and implications for different actors based on their understanding of global

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\textsuperscript{82} Walt, 38.
\textsuperscript{83} Walt, 40-41.
\textsuperscript{86} Wendt.
\textsuperscript{87} Hopf, 174.
\end{flushleft}
implications and practices. The relevance to international relations is that different understandings of what anarchy means can lead to misunderstandings and tension between states regarding cooperation prospects, security, and relationships. A lack of consistent understanding of anarchy across relationships and international politics can hinder the ability of states to interact and cooperate productively.

The social construction of politics reaffirms the importance of identity in explaining state behavior. Just as individuals have identities linked to their roles - daughter, sister, friend, citizen, etc. - states have multiple identities, such as first world power, democracy, or sovereign. Actors define their identity through comparisons to other actors, creating a sense of self reinforced by their counterparts. A state’s perception of its role in the world, and the role of other states, influences its decisions and behavior. Socially constituted transactional norms constrain behavior in global politics because states avoid violating expectations, because to do so might lead to ostracism.

The social construction of superheroes would be important, and would dictate how the international community - and domestic populations - responded to their emergence. Daniel Drezner discusses the social construction of zombies in his book *Theories of International Politics and Zombies*, specifically the idea that since zombies used to be human, but are also distinctly very much not human, that they inspire disgust. A similar phenomenon might occur upon the emergence of superheroes, as

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88 Ibid.
90 Wendt, 398.
91 Drezner, 66.
92 Ibid.
93 Ibid.
evidenced in comic-inspired media. The *X-Men* storylines deal with the ostracism of mutants as a result of their physical and capability differences, while Marvel’s *Civil War* sees international public outcry to limit and control exceptionally powerful individuals because they are perceived as a threat to civilian populations. Constructivists argue that understandings of self and identity depend on conceptual othering; one sees oneself and one's peers as one group, and anyone or anything that constitutes something different as part of an outside group. Thus identity is formed only in a comparative format, depending on the existence of multiple groups in order to identify based on the differences.

In the case of superheroes, the extent of physical and capability differences would determine how “ordinary” humans project an identity onto supers. Some - specifically the technological, intellectual, or skill based supers\(^ {94}\) - could assimilate, as their differences could be easily hidden (and thus easily forgotten). Others whose capabilities do not alter their physical appearance might similarly be capable of socializing normally.\(^ {95}\) Those from other worlds or planets may be incapable of assimilation due to a lack of familiarity with norms and culture,\(^ {96}\) and those with visible physical abnormalities might qualify as beasts, monsters, or abominations to some less accepting factions of society.\(^ {97}\) The combination of all types of enhanced people would likely result in chaos as the world attempted to construct an identity for supers. If there were a critical mass of them, one might expect a norm cascade causing the socialization and acceptance of supers, or pressure on “ordinary” humans to attempt to enhance themselves.

\(^{94}\) For example, Tony Stark, Green Arrow, Batman, Hawkeye.
\(^{95}\) For example, the Flash, Charles Xavier, Robin.
\(^{96}\) For example, Thor, Wonder Woman, J’onn J’onnz.
\(^{97}\) For example, Beast, the Thing, the Hulk.
If enhanced persons emerged, constructivists might try to avoid chaos by directing the human race to study comics and comic inspired media. The genre captures the nuances and complications of supers, explaining their imperfection, highlighting their humanity, and emphasizing their struggles without negating their immense power to shape the world. Further, the positive response to the genre within popular culture indicates a normative perspective towards supers that could be the foundation of human-enhanced relations.

As long as the relationship dynamic between enhanced and non-enhanced individuals normalized quickly, society could temper the fear that may inevitably result from the emersion of such power. Marvel’s television show *Agents of S.H.I.E.L.D.* recently addressed the importance of political efforts to encourage acceptance of enhanced people. The organization chose Jeffrey Mace, an Inhuman, to lead the organization following its return to legitimacy. The deliberate effort to include an enhanced individual in a position of power indicates an understanding of how society views legitimacy. If the government trusts an individual to run an important organization – and the individual succeeds - society will accept the group from which the individual comes. Further, integration into communities and organizations reduces the proclivity of society to discriminate against a group. Creating opportunities for enhanced individuals to contribute to society would allow them to prove their worth and usefulness while also reducing the fear that their capabilities may otherwise inspire.
III. Conclusion

While each paradigm presents clear descriptions of the international system and a framework for understanding state motivations and interactions, reality is less precise. Often, occurrences and behaviors reflect a fluid mixture of theoretical assumptions. Realists seem to understand state motivation the best; the primacy of security is unavering, self-interest drives behavior, and trust in the international system is given only with conditions and hesitation. Liberal institutionalists best describe the organization of the international system; while anarchy drives state behavior, the introduction of confidence building measures and platforms for interaction has constrained the need for states to live in a constant state of war. Constructivists provide a necessary qualification to state behavior in its assumption that reification and mutually constituted norms and definitions determine how individuals and nations perceive the world. The world is complex, as are the nations that make up the international system. The nuances and inconsistencies of the human experience humble international relations scholars at every turn, reminding them that theory is best at describing events and only marginally capable of predicting the future.

Thus, the global response to superheroes would draw from all three theories. Enhanced beings are units of power. They would be facing global threats, and would likely join or work in conjunction with national military forces and international institutions. Additionally, their ability to work effectively within global, domestic, and personal settings would depend on the society’s perception of them.

Further, international relations theory fails to address all of the nuances that would inevitably accompany the emergence of enhanced people. Netflix successes
Jessica Jones,98 Luke Cage,99 and Daredevil100 exemplify the interpersonal complications arising from being super. Not only are enhanced people fitted with the burden of protector, the title “vigilante,” and cast with the social shadow of obligation, they also have jobs and relationships like other “normal” people. Yet unlike normal people, they cannot “lose it,” as their abilities make them potentially capable of inflicting the type of pain people are protected from under the Eight Amendment to the American Bill of Rights. The Hulk is the ultimate example; at the end of Avengers: Age of Ultron, he voluntarily exiles himself because of an inability to control the rage accompanying his transition from Bruce Banner into his alter ego.101

If Supergirl gave someone a dirty look, she would need to make sure she suppressed her laser beam vision so as not to maim or kill the intended target of “the stink eye.” Rogue has to avoid physical contact because her touch brings death. Supers live ordinary lives while simultaneously being extraordinary beings. The agency superheroes have in their actions and their ability to form their own opinions allows them to transcend their status as a simple weapon and become a truly unique occurrence, but their potential – whether recognized or not – to harm will always mark supers as dangerous.

The shows also indicate that some heroes will reveal a proclivity for helping local communities instead of an individual state or the international community. International relations theory traditionally places the nation state as the primary unit of analysis, whose

98 Jessica Jones, created by Melissa Rosenberg, (Netflix streaming, 2016)
99 Luke Cage, created by Cheo Hodari Coker, (Netflix streaming, 2016)
100 Daredevil, created by Drew Goddard, (Netflix streaming 2015-2016).
security depends on either accumulation of power, international cooperation, or social construction. These heroes – as well as DC’s Batman, Flash, and Green Arrow – operate from and within their home cities, drawn out of their communities on the rare occasion that a global existential threat appears. At the domestic level, issues at play are not necessarily international relations theory considerations like sovereignty and relative power. They are issues of national law, civil rights, jurisdiction, and community.

The deep commitment, loyalty, and love that many heroes harbor for their cities places them in conflict or cooperation with local law enforcement, criminal organizations, and other resource providers. Operating in a local context is different from a superhero acting as a member of the armed services or enforcing the laws of international institutions. Democratic norms do not promote vigilantism, they promote elected officials and mandates from the represented population; this is antithetical to what superheroes are: extralegal operators filing in where law enforcement cannot or will not intervene successfully. Active, community based supers would operate within cities where organized government is failing or when the threat is also super.

Most important, superheroes are a unique threat. They are multifaceted sentient beings subject to influence from emotion, upbringing, social setting, and personal ambition. Recent blockbusters *Batman vs. Superman: Dawn of Justice*\(^{102}\) and *Captain America: Civil War*\(^{103}\) reveal superhero ideology as neither uniform nor necessarily consistent.


\(^{103}\) *Captain America: Civil War*, directed by Joe Russo and Anthony Russo (Marvel Films, 2016).
When powerful players such as the Black Panther, Iron Man, and Captain America disagree on issues as big as superhero registration – or, hypothetically, the use of nuclear weapons, the limits of sovereignty, or the use of drone strikes – global understanding and perception of enhanced persons could fail to materialize. Disagreements between enhanced persons, especially when between former allies with no clear distinction between right and wrong, can facilitate national or global feelings of chaos and uncertainty. Further, conflicts between supers are likely to be personal, resulting in even more pain and suffering than a fight between traditional ideologically opposed parties.104

People fear what they do not understand, and the damage superheroes could cause105 and the immense power they are responsible for wielding could likely incite a culture of fear-induced ostracization similar to the rampant Islamophobia in the Western world today.106 Bias and discrimination, steeped in misunderstanding, could lead to the marginalization of supers from social and political communities just as Muslims are stereotyped and excluded in parts of the world today.107 Comic media tackled this issue

107 Ibid.
with Marvel’s various registration acts\textsuperscript{108} and DC’s various anti-hero plots in which the public questions the legitimacy of their “protectors.” Mankind’s tendency to categorize and classify might prompt mankind into creating a dichotomy: supers and non-supers. The intentional othering of supers might foster intolerance, tension, and hostility between those with powers and those without. The fear that some supers might inspire could jeopardize any amount of kindness others might show their communities or the global society.

Enhanced individuals would thus forever oscillate between beloved popular phenomenon and public enemy number one – they are the best worst option, they are destructive, they are different, and the government may be against them as their actions are a result of the government’s inability to handle problems.\textsuperscript{109} Therefore, while theory provides a useful framework for considering the emergence of superheroes, the likelihood of any one paradigm being always correct seems unlikely. The unique characteristics of superheroes as one of Rumsfeld’s potential “unknown unknowns” present a threat unlike any other: a new type of person. A new variation of humanity whose capabilities mark them as “super,” as somehow superior in terms of capabilities.

The international system, as described in any of the three paradigms, seems incapable of sustaining the emergence of superheroes without significant reorganization


or realignments of power. In the age of globalization, even enhanced persons desiring to remain within their communities would draw international attention, prompting responses from local and national governments, the global community, and international organizations. The introduction of superheroes into modern society would change the world in a way that other changes rarely have – it would usher in an era of change international relations theory would find difficult to fit into current frameworks.
Bibliography


Thucydides. History of the Peloponnesian War. 431 BC.


