

THE PSYCHOLOGY OF  
**SUPERHEROES**

Kerri L. Johnson,  
Leah E. Lurye,  
and Jonathan B. Freeman

**GENDER TYPICALITY AND EXTREMITY  
IN POPULAR CULTURE**

Superheroes are, to some extent, caricatures in that their “super” qualities are exaggerations. In this essay, Johnson, Lurye, and Freeman examine the ways that the gender-related qualities of superheroes are similarly exaggerated—specifically their physical proportions and their superhero actions. The essay also describes the results of the authors’ creative study investigating gender-related attributes of Mr. Incredible and Elastigirl as well as of their alter egos, Bob and Helen Parr.

“The reason to do animation is caricature. And good caricature picks out the elements that are the essence of the statement and remove[s] everything else. It’s not simply about reproducing reality. It’s about bumpin’ it up.”

—BRAD BIRD, WRITER/DIRECTOR OF THE INCREDIBLES

WHAT IS IT THAT'S CARICATURED to make superheroes so exceptional? What made Superman super? Or Wonder Woman wonderful? By definition, superheroes possess some extraordinary capability or skill that renders them super. Such abilities far surpass the physical and perceptual abilities of people—this is the intent of caricature. But caricature in superheroes is not restricted to their strength or skill. In addition to their remarkable abilities, “Supers” are also extreme in other socially meaningful domains—including gender.

The very nomenclature of superheroes suggests that the gender of Supers is a critical aspect of their identity. Supers' names, for example, frequently highlight not only an exceptional talent, but also their sex. This is true for both female (e.g., *Wonder-Woman*, *Supergirl*, *She-ra*, *Powerpuff Girls*, *Vampirella*, *Invisible Girl*, and *Elasti-girl*) and male (*Superman*, *He-Man*, *Spider-Man*, *Mr. Fantastic*, *Mr. Incredible*) superheroes. Granted, sex is important for identifying the non-superheroes among us too (e.g., Mr., Mrs., Ms., etc.). Yet the manifestation of sex in superheroes is unique. In addition to possessing super-human powers, superheroes possess a super-human gender as well. Indeed, even the Supers whose names do not connote their gender (e.g., Storm from X-Men) remain highly gender stereotyped in form and function. (We should note that we did seek exceptions to this general rule—that whether in name or in form, Supers' gender is noted and caricatured—to no avail. In fact, we would hazard to suggest that there is simply no such thing as an androgynous superhero.)

In this chapter, we will explore how the gender of superheroes is “bumped up” to transform the ordinary into the extraordinary, the so-so to the sublime, to make Superman literally a super man. We propose that certain gendered cues are extremetized to magnify the differences between men and women (e.g., body size and body shape), while others are amplified to accentuate valued gendered traits (e.g., masculinity/femininity). We describe the theoretical underpinnings that make such transformations successful and report empirical evidence to support our claims.

## THE PSYCHOLOGY OF SEX AND GENDER

For decades psychologists have recognized that social categories play a critical role in how we perceive others. The moment we see people we effortlessly sort them into social categories (Stangor, Lynch, Duan, and Glass, 1992). Sex, race, and age are the big three. This type of categorical thinking makes perceiving others more efficient and easier (Allport, 1933) because knowing an individual's sex, race, or age is informative—or so we think. Specifically, identifying a person's sex, race, or age calls up existing stereotypes in memory that are connected to each category (e.g., girls like pink; old people walk slowly, etc.). These stereotypes are then used to guide person perception. Initially, these processes were presumed to be inevitable, obligatory (Stangor et al., 1992), and automatic (Bargh, 1999)—to occur without intent. Recent evidence, however, suggests that under certain conditions we may be able to resist categorizing others by age and race (Kurzban, Tooby, and Cosmides, 2001; Quinn & Macrae, 2005), although overriding sex categorization appears to be more difficult. This difference in our ability to resist categorizing others by age and race, but not by sex, is not terribly surprising since sex categories are among the first social categories young children learn (Ruble, Martin, and Berenbaum, 2006), and are arguably the most important social categories in American society. The importance of biological sex is highlighted at birth (e.g., “It’s a boy!”; pink or blue booties and bottles), and it remains important throughout our lifespan. Such distinctions dictate where we may go (men’s room versus ladies’ room), what we may wear (ties versus skirts, with the possible exception of the mini-kilt), and which traits and emotions we are permitted to exhibit (sadness versus anger, assertiveness versus passivity). This has profound implications for how we view and interact with others.

Once perceived, knowledge of another’s sex unleashes a cascade of events. Specifically, sex category knowledge activates sex based stereotypes and attitudes that affect how we feel about and interact with others. It also provides a foundation for interaction, influencing how we behave toward others. Finally, sex categories function as a lens through which other gendered cues are perceived—and deemed either compatible or incompatible with the construed biological sex.

Frequently, the sex of a person is fully compatible with other gendered cues (e.g., masculine men and feminine women). Sometimes, however, known sex and gendered cues are at odds (e.g., feminine men and masculine women). In other words, knowing whether someone is a man or a woman also leads to the perception that the individual is either gender typical or gender atypical.

What happens when people appear gender atypical? In general, gender atypicality is penalized quite harshly in our society. Beginning in preschool, *gender nonconformity* (the label that developmental psychologists use to refer to children who possess interests more common in the opposite sex) compels harsh evaluations from parents, peers, and teachers (e.g., Fagot, 1977). And such consequences are not restricted to childhood. In evaluative attractiveness judgments, people who walk in a gender atypical manner (i.e., men who sway their hips or women who swagger their shoulders) are judged to be less attractive than their gender-congruent counterparts (Johnson and Tassinari, 2007), and are frequently presumed to be gay (Johnson, Gill, Reichman, and Tassinari, 2007). Although categorizing gender nonconformists as homosexuals does not necessarily connote harsh evaluations, it relegates the individuals to a minority status.

Interestingly, the adverse effects of gender atypicality are considerably stronger for men and boys than for women and girls. This asymmetry can be partly explained by the traits our society values. Sandra Bem (and others) have argued that what is male or masculine represents the ideal, while that which is female or feminine does not. For example, in American society, it is generally considered better to be assertive (which is associated with males and masculinity) than to be yielding (which is associated with females and femininity). Bem calls this “androcentrism,” and proposes that the reason men are punished more harshly than women for gender atypicality is that when men do something feminine, they also do something less valued. A man who exhibits feminine characteristics (be they traits, behaviors, or appearance) is moving away from a societal ideal; a woman who exhibits masculine characteristics, in contrast, is striving to achieve a societal ideal. Thus, although gender atypicality among women is not liked, it is tolerated, and penalized less severely. Women who exhibit agentic traits (masculine traits that are highly valued) in the



workplace, for example, are perceived to be competent (consistent with the agentic traits that are deemed necessary for successful business), but they are not liked. In contrast, men who exhibit communal traits (more feminine traits that are less highly valued) are presumed to be incompetent.

What aspects of superheroes' appearance and behavior are likely to be caricatured? Put simply, where should we look? We should probably begin with aspects of appearance and actions that are either truly sexually dimorphic (i.e., men and women *really* differ on the dimension) or are stereotypically sex-typed (i.e., men and women are *presumed* to differ on the dimension). Two cues—bodies and behavior—are likely candidates for caricature.

Bodies differ between men and women, and numerous cues are reliably dimorphic. Compared to women, for example, men are taller, hairier, and brawnier. Women, in contrast, are smaller, softer, and more curvaceous. Many sexual dimorphisms exist in absolute measures (e.g., height and weight), but other differences are more contextualized. Women, for example, are more likely than men to have an hourglass figure, a body shape that can be quantified by dividing the circumference measurements of the waist and the hips, called the waist-to-hip ratio (WHR). Observers rely strongly on this cue to make sex category judgments (Johnson and Tassinary, 2005). Small WHRs have been related to perceptions of attractiveness, and recent evidence highlights that these effects emerge because this body shape is perceived to be feminine (Johnson and Tassinary, 2007). Men are more likely than women to have a tapered torso (think V shaped upper body), a body shape that is quantified by dividing the measurement of the chest and the waist, or chest-to-waist ratio (CWR). Although there is considerably less empirical work relating this body cue to social perceptions, it is a body cue that is sexually dimorphic, and research from our own and others' labs has related it to perceptions of biological sex and masculinity (see e.g., Lippa, 1983; Frederick, Fessler, and Haselton, 2005). Both of these measurements reliably distinguish men from women. Thus, one way that Supers may be exceptional is in their body's physical proportions. If the bodies of superheroes are caricatures of men and women's bodies, the WHR and CWR might be good places to look.

Behavioral norms also differ between men and women, and these correspond to stereotypic notions of sex roles. Compared to feminine individuals, masculine individuals are more likely to describe themselves to be assertive, aggressive, self-sufficient, and independent. Feminine individuals, on the other hand are more likely to describe themselves to be affectionate, gentle, soft-spoken, and warm. These examples come directly from a scale developed to assess adherence to common conceptions of masculinity and femininity, the *Bem Sex Roles Inventory* (BSRI; Bem, 1974). Not surprisingly, men and women tend to differ along these dimensions. Some have argued that the labels *instrumental* and *expressive* might more aptly describe these dimensions (e.g., Spence and Helmreich, 1980), but we will use the more common vernacular—masculine and feminine. Although the BSRI purports to measure attributes that are desirable for both men and women, the masculine items are generally recognized to describe traits and behaviors that are more highly valued in our society. If the behaviors of superheroes are caricatures of men and women's sex roles, the masculine and feminine subscales of the BSRI are likely to reflect those differences.

*How can we tell if superheroes possess caricatured bodies or behaviors?* Ideally, we could compare non-super individuals with superheroes on measures of bodies and behaviors (i.e., WHR/CWR and masculinity/femininity). One way to achieve this would be to compare the bodies and behaviors of the average man and woman to the bodies and behaviors of super-men and super-women. Such comparisons prove to be quite difficult. Everyday men and women differ from superheroes along many dimensions in addition to those we expect to see caricatured. Real men and women live in corporeality whereas superheroes live in a virtual reality; real men and women's bodies and behaviors are dictated by DNA and experience whereas superheroes bodies and behaviors are limited only by artistic imagination. For these and other reasons, comparing real men and women to superheroes is not only inconvenient, but also imperfect. So we elected to compare the virtual identities of non-super and super characters. Candidates for such a comparison are easy to generate—Clark Kent/Superman, and Diana Prince/Wonder Woman—yet these characters were rendered by different artists and appeared in different

mediums. Fortunately, two superheroes (one male, one female) recently emerged on the superhero stage. These Supers achieved fame and fortune (at least for the producers and executives), and their characters provide the perfect opportunity to compare male and female superheroes from a single source. Put simply, they were an incredible find.

In the blockbuster hit *The Incredibles*, all superheroes were forced to shelve their super identities and adopt non-super secret identities to live among the rest of society in anonymity. Although clearly not thrilled with the monotony of regular life, everything was relatively normal until a malevolent pseudo-super, Syndrome, came into the picture. When the evil Syndrome threatened the well being of all humanity, two former Supers abandoned their secret identities to return to their crime-fighting superhero ways. These circumstances led to super transformations: Bob and Helen Parr became Mr. Incredible and Elastigirl. These two characters, linked in identity but different in exceptionality, provided the perfect comparisons for examining how sex differences in bodies and behavior are “bumped up” with super results.

## OUR STUDY

We first asked a very simple question: Are the bodies of Supers caricatured or “bumped up” to extremize the sex typicality of their body shape? Specifically, are the WHRs of female Supers and the CWRs of male Supers more extreme than the WHRs and CWRs of non-super men and women?

To answer this question, we selected static images of the bodies of Mr. Incredible and Elastigirl and their non-super secret identities, Bob and Helen. We measured the chest, waist, and hip breadth for each image. Using these measures, we computed two indices that vary reliably (and stereotypically) between men and women, the WHR and the CWR.

For both physical measures, we made two types of comparisons. First, we compared the body shapes of Helen/Elastigirl and Bob/Mr. Incredible. Next, we compared the body shapes of each character to the anthropometric averages for each sex. We used one of many pos-

sible comparison groups—Army recruits. Now, at first blush, it may seem odd that we selected army recruits as a foundation for comparison. Doing so, however, has several distinct advantages that justify these comparisons—some theoretical, others empirical. Theoretically, this comparison group makes perfect sense. In selecting a comparison group, one might hope to identify the closest approximations of non-mutant superheroes with the most conservative of all possible tests. Army recruits, in many ways, are more like superheroes than the average man or woman. After all, the call to duty for superheroes and Army recruits shares considerable overlap. According to the official Army recruitment website, one role of the U.S. Army is “[to] defeat adversaries responsible for aggression that endangers the peace and security of the United States and our allies.”

By merely substituting “villain” for adversaries and “evil” for aggression, the goals of the U.S. Army and Superheroes appear to be strikingly similar. This comparison group, therefore, provides a conservative test of our hypotheses. That said, our own research has found few differences between the bodies of the Army recruits in our database and college undergraduates, a fact that makes comparisons with this group warranted from an empirical standpoint. Finally, and perhaps most importantly, we had ready access to a database containing the body measurements of over 5,000 Army recruits. So we used it.

### **BOB PARR → MR. INCREDIBLE**

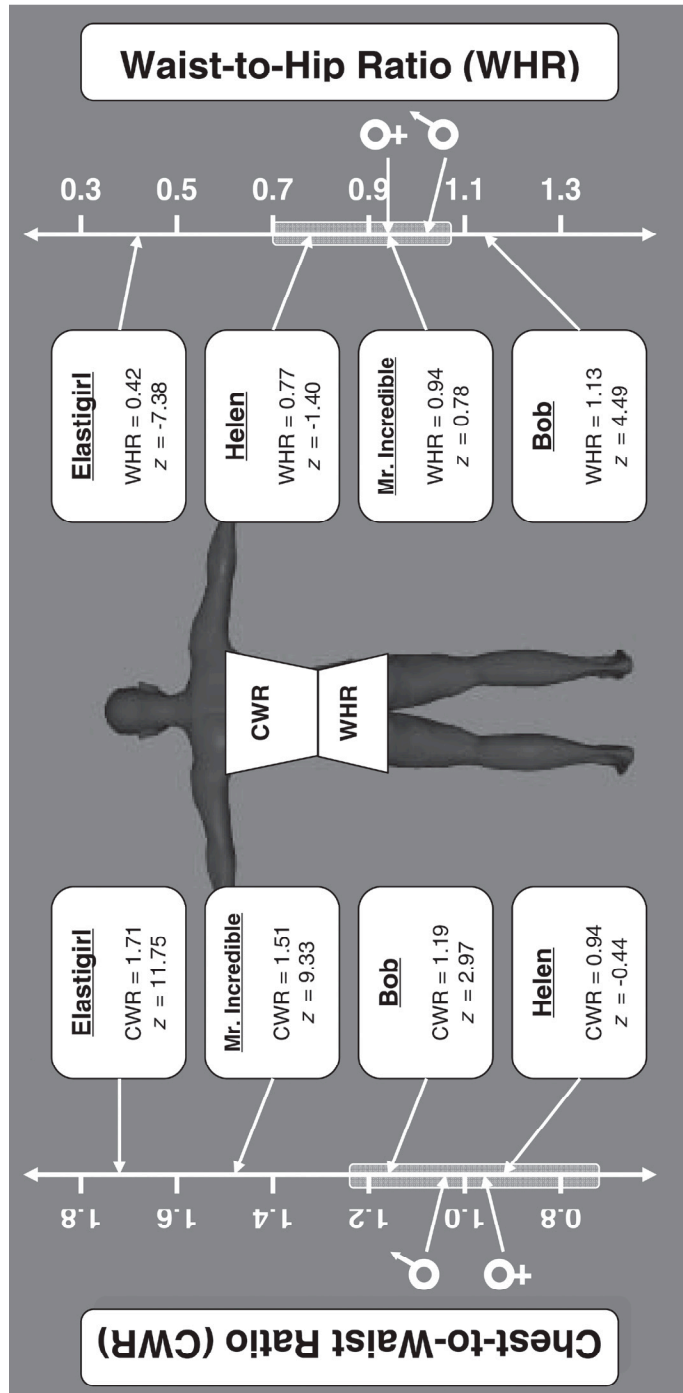
The shift from Bob Parr to Mr. Incredible brings with it a considerable physical transformation. While both Bob and Mr. Incredible are enormous in sheer physical size, their bodies differ considerably in their relative proportion. Let's begin with the CWR, the male stereotyped V shaped taper of the upper body. As seen in Figure 2, Bob's CWR is 1.19, which is actually quite close to the population mean (1.039). When Bob becomes Mr. Incredible, however, his CWR swells to a whopping 1.54! Prior research indicates that this transformation is likely to increase perceptions of strength, endurance, and masculinity. Thus, Mr. Incredible is not only more manly, physically speaking, than Bob Parr, but also a caricature of the “male” body shape!

Because small WHRs are stereotypically related to femininity, we didn't expect any profound caricature for Mr. Incredible's WHR. We were surprised to learn, however, that the WHR of Bob was the exceptional one, albeit not in a "super" manner whatsoever. Bob's WHR is 1.13, whereas the population average WHR for men is 0.91. Bob's particularly large WHR is consistent with the growth of a beer belly in his sedentary civilian life. We believe that this difference points to one simple fact—Bob is fat. This supposition was underscored by comments made by Edna Mode, who had not seen Bob since the "glory days" of hero work. When Bob arrived seeking Edna's assistance to repair his super suit, Edna's immediate response was, "My god, you've gotten fat!" Thus, Bob's larger than average WHR simply implies that he is fatter than the average man. Mr. Incredible's WHR, in contrast, is a completely gender typical 0.95 and is consistent with a svelte and super physique.

### HELEN PARR → ELASTIGIRL

The shift from Helen Parr to Elastigirl brings with it an equally profound physical transformation. For these characters, let's begin with the WHR, the female stereotyped hourglass shape of the torso. As seen in Figure 1, Helen Parr, physically speaking, is indistinguishable from the average woman in our database. Her WHR is 0.77, a measurement that falls well within the normal range, for which the average is 0.84. When Helen becomes Elastigirl, however, her WHR shrinks to a shockingly small 0.42, a caricature of feminine female curves! This WHR, by the way, is so extreme that it does not exist in nature. In fact, it is well beyond the smallest observed WHR in our comparison group, 0.69. Prior research indicates that this transformation is likely to increase perceptions of femininity and even attractiveness. Thus, Elastigirl is not only more womanly, at least physically, than Helen Parr, but also a caricature of the "female" body shape!

Because large CWRs are stereotypically related to masculinity, we didn't necessarily expect any profound caricature for Elastigirl's CWR for theoretical reasons. Because the extreme caricature of the WHR entailed a dramatically small waist, however, it was likely that



Physical Measurements of Chest-to-Waist and Waist-to-Hip Ratios for Pre/Post Transformation Male and Female Characters. Shaded bars represent the range of human variation for CWR and WHR. Sex symbols represent anthropometric mean for the average man and woman. Z scores indicate the extent of departure from same-sex anthropometric means.

Elastigirl's CWR would also be quite extreme. Indeed, Helen's CWR, 0.94, fell well within the range of normal women, and quite close to the population average, 0.97. When Helen became Elastigirl, however, her CWR became quite large, 1.70. It's important to note that this CWR, in spite of its more masculine measurement, is unlikely to convey masculinity. Instead, within the context of the hip breadth, this CWR is likely to balance the feminine hourglass shape and highlight the extremity of Elastigirl's feminine physique.

Compared to their non-super identities, the bodies of Mr. Incredible and Elastigirl appear to be caricatures of the masculine tapered upper body and the feminine hourglass figure. This is likely to promote favorable social evaluations, based solely on the physical manifestations of masculinity and femininity. Supers, because their bodies are caricatured in a gender-normative manner, are likely to be perceived as quite attractive.

## **SUPER BEHAVIORS**

Whereas the bodies of superheroes are caricatures of a sexual dimorphism, the sex normative behaviors and traits of those same superheroes are unlikely to be extreme versions of gender-normative roles. Why? If this were so, it would simply not be equally effective for male and female Supers. If male Supers were more extreme on gender-typed behaviors and traits, the result would be, well, super. This would mean that super men possessed greater levels of agentic and instrumental characteristics (e.g., assertive, aggressive, and independent). If female Supers were more extreme on gender-typed behaviors and traits, in contrast, the result would make them kinder and gentler superheroes. This would mean that super-women possessed greater levels of communal and expressive traits (e.g., gentle, soft-spoken, and warm). While these characteristics are generally desirable for women, they are unlikely to be the most effective strategies for battling evil and saving the world. Instead, the stereotypically masculine characteristics seem to be the stuff that superheroes are made of. Therefore, gender roles appear likely to be extreme, but not along gendered lines. Instead, we predicted that Supers, whether they are male or female, were likely to be *masculine*. If correct, this

predicts that super men will be *more* gender typical, but that super women will be *less* gender typical (and possibly even more typical of the opposite sex) than their non-super selves.

We asked our participants to evaluate the gendered behaviors and traits for both of the characters in the movie. Participants completed the sixty-item BSRI for each of the four characters. We computed an index of gender typicality by subtracting the average of the gender-incongruent sub-scale from the gender-congruent sub-scale. Thus, for Bob and Mr. Incredible, we subtracted femininity from masculinity; for Helen and Elastigirl we subtracted masculinity from femininity. This gave us a single index of gender typicality. Sex-typed behaviors and traits gave positive values (masculine men and feminine women); Cross sex-typed behaviors and traits yielded negative values (feminine men and masculine women).

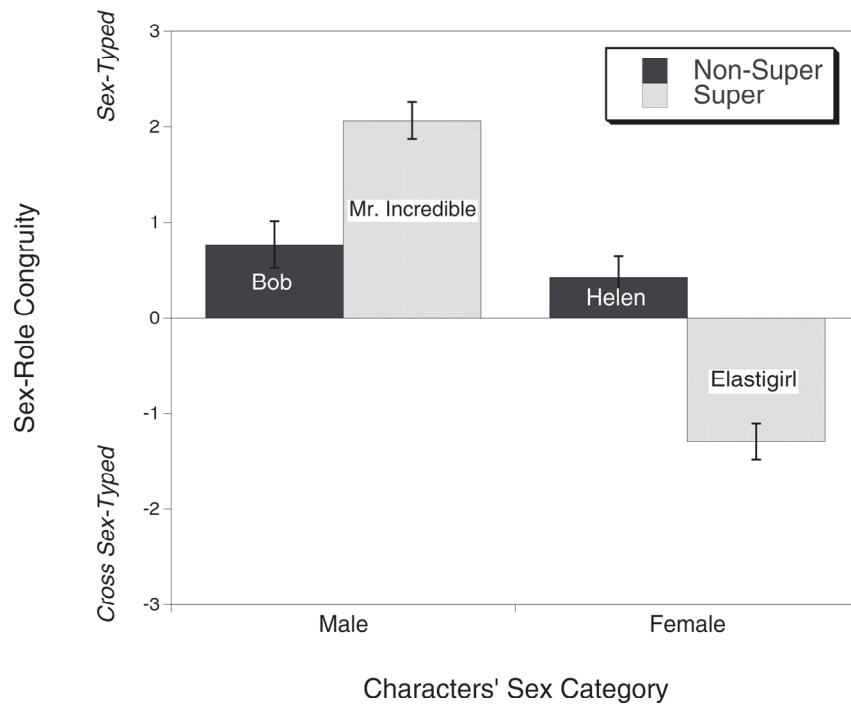
The transformation from their non-super to super identities brought about drastically different changes, depending on the sex of the character. As seen in Figure 2, when Bob became Mr. Incredible, the transformation brought with it greater levels of sex-typed behaviors and traits. Put simply, compared to Bob, the extent to which Mr. Incredible is more masculine than feminine is even larger. A different pattern emerged, however, as Helen became Elastigirl. In this case, the transformation brought with it *cross* sex-typed behaviors and traits. Whereas Helen is more feminine than masculine (sex-typed), Elastigirl is more masculine than feminine (cross sex-typed).

This pattern suggests that behavioral caricatures of male and female Supers are decidedly unidirectional—they become more masculine. Within a society that puts such high value on masculine traits, this type of caricature is likely to convey competence, skill, and excellence—the very stuff that superheroes are made of!

## **SUPER SUMMATION**

According to our opening quote, caricature is about taking the essence of a statement and “bumping it up.” We found that superheroes are caricatures of gender, but exactly how gender is caricatured varies by domain. The bodies of Supers are caricatures of sexually dimorphic body shapes. Super men have a super physical presence





Extent of Sex-Role Typicality for Pre/Post Transformation Male and Female Characters. Error bars depict 95 percent confidence intervals.

with a highly masculine V shaped upper body; super women have a super physique with an exaggerated hourglass figure. The behaviors of Supers, in contrast, are caricatures of masculinity regardless of the super’s sex. Both male and female Supers were judged to possess highly valued agentic and instrumental traits, which are advantageous when fighting the forces of evil.

It is worth noting that as extreme and remarkable as their superpowers are, superheroes’ gender is at least equally so. It is interesting that when we think about superheroes we tend to think explicitly about their super powers, not their super gender. However, super gender is tightly coupled with super powers, at least in some circumstances. How, for example, could Superman fly “faster than a speeding bullet” or be “stronger than a locomotive” if he did not have the uber-masculine shoulder breadth and muscle mass to do so? Per-

haps this is why we readily accept such super gender as part and parcel of superheroes' identities. We suspend disbelief because the extreme gender seems to fit. Yet this premise is complicated by the physical transformations of female Supers, morphological changes that seem unrelated to anything but men's ogling. How, for example, does a small waist and large breasts enable Wonder Woman, and others like her, to perform the death defying feats of which only Supers are capable? But maybe that is part of her charm. Her simultaneous embodiment of the ideal feminine physique and the ideal masculine/ agentic attributes allows her not only to be adored and admired as a woman, but also respected and honored like a man. Such an existence is super, indeed.

**Kerri L. Johnson** is an assistant professor of communication studies at UCLA. She earned her Ph.D. from Cornell University in 2004. Her research examines the causes and consequences of social categorization, often involving perceptions of sex and gender. Together with her students, she aims to "save the world, one bullet point at a time (Mercurio, P. Two Spoons)."

**Leah E. Lurye** is currently a graduate student in the Social Psychology Program, with a special focus in Developmental Psychology, at New York University. Currently she is interested in what people conceive of as gender typical or atypical, and how they react to those who violate gender norms. She is an enthusiastic Pixar fan and believes *The Incredibles* is one of the coolest movies of all time.

**Jonathan B. Freeman** recently completed his B.A. in psychology and gender & sexuality studies at New York University, and is currently a doctoral student at Tufts University, earning his Ph.D. in experimental psychology. He is currently interested in the social, neural, cultural, and cognitive processes involved in person construal, first impressions, social evaluation, and interpersonal interaction. In search of nuanced understandings, he tries to work at multiple levels of analysis: social (and cognitive) psychology, social and cultural neuroscience, and critical/cultural studies of gender, sexuality, race, class, and capitalism. Hopefully not having to entirely abandon his delusional ideas about making sense of interesting mental life and its inextricable ties to society and culture, he desperately tries to reconcile a se-

cret infatuation with Mr. Incredible with his varied resistances against heteronormative patriarchy.

## REFERENCES

- Allport, G. W. and P.E. Vernon. *Studies in Expressive Movement*. New York: Macmillan, 1993.
- J. Bargh, "The Cognitive Monster: The Case against the Controllability of Automatic Stereotype Effects," in *Dual Process Theories in Social Psychology*, edited by S. Chaiken and Y. Trope. New York: Guilford Press, 1999.
- S. L. Bem, "The Measurement of Psychological Androgyny," *Journal of Consulting and Clinical Psychology* 42: 155–162.
- Bem, S. L. *The Lenses of Gender*. New Haven, CT: Yale University Press, 1993.
- Fagot, B. I., "Consequences of Moderate Cross-gender Behavior in Pre-school Children," *Child Development* 48 (1977): 902–907.
- D. A. Frederick, D. M. T. Fessler, and M. G. Haselton, "Do Representations of Male Muscularity Differ in Men's and Women's Magazines?," *Body Image* 2 (2005): 81–86.
- K. L. Johnson, S. Gill, V. Reichman, and L. G. Tassinari (in press), "Swagger, Sway, and Sexuality: Judging Sexual Orientation from Body Motion and Morphology," *Journal of Personality and Social Psychology*.
- K. L. Johnson and L. G. Tassinari, "Compatibility of Basic Social Perceptions Determines Perceived Attractiveness," *Proceedings of the National Academy of Sciences of the United States of America* 104 (2007): 5246–5251.
- K. L. Johnson and L. G. Tassinari, "Perceiving Sex Directly and Indirectly: Meaning in Motion and Morphology," *Psychological Science* 16 (2005): 890–897.
- R. Kurzban, J. Tooby, and L. Cosmides, "Can Race be Erased? Coalitional Computation and Social Categorization," *Proceedings of the National Academy of Sciences of the United States of America* 98 (2001): 15387–15392.
- R. Lippa, "Sex Typing and the Perception of Body Outlines," *Journal of Personality* 51 (1983): 667–682.
- K. A. Quinn and C. N. Macrae, "Categorizing Others: They Dynamics of Person Construal," *Journal of Personality and Social Psychology* 88 (2005): 467–479.
- Ruble, D. N., Martin, C. L., & Berenbaum, S. A. (2006). Gender devel-

opment. In W. Damon (Ed.), *Handbook of Child Psychology* (6<sup>th</sup> Edition, Vol. 3, pp. 858 - 932). New York: J. Wiley.

J. T. Spence and R. L. Helmreich, "Masculine Instrumentality and Feminine Expressiveness: Their Relationships with Sex Role Attitudes and Behaviors," *Psychology of Women Quarterly* 5 (1980): 147-163.

C. Stangor, L. Lynch, C. Duan and B. Glass, "Categorization of Individuals on the Basis of Multiple Social Features," *Journal of Personality and Social Psychology* 62 (1992): 207-281.