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Signs of social class: The experience of economic inequality in everyday life

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Signs of Social Class: The Experience of Economic Inequality in Everyday Life

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Abstract
By some accounts, global economic inequality is at its highest point on record. The pernicious effects of this broad societal trend are striking: Rising inequality is linked to poorer health and well-being across countries, continents, and cultures. The economic and psychological forces that perpetuate inequality continue to be studied, and in this theoretical review, we examine the role of daily experiences of economic inequality—the communication of social class signals between interaction partners—in this process. We theorize that social class signals activate social comparison processes that strengthen group boundaries between the haves and have nots in society. In particular, we argue that class signals are a frequent, rapid, and accurate component of person perception, and we provide new data and analyses demonstrating the accuracy of class signaling in 60-s interactions, Facebook photographs, and isolated recordings of brief speech. We suggest that barriers to the reduction of economic inequality in society arise directly from this class signaling process through the augmentation of class boundaries and the elicitation of beliefs and behaviors that favor the economic status quo.

Keywords
social class, socioeconomic status, economic inequality, person perception, intergroup relations

Broad global trends suggest that economic inequality, at its historic peak according to some metrics (Organisation for Economic Co-operation and Development, 2014; Piketty & Saez, 2014), is a pressing societal problem impacting the health and well-being of individuals: In roughly 70% of studies examining the health impacts of economic inequality, data indicate that societal health worsens as economic inequality intensifies (Wilkinson & Pickett, 2006, 2009). When economic inequality deepens on a societal scale, the evidence suggests that it is both societies and individuals that suffer.

In addition to its apparent relationship to well-being, the way in which economic inequality shapes the psychological experiences of individuals is a topic of growing interest in the social and economic sciences, where research examines how people explain or justify inequality (Kraus, Piff, & Keltner, 2009; Shariff, Wiwad, & Aknin, 2016), whether people are aware of its magnitude (Davidai & Gilovich, 2015; Norton & Ariely, 2011), and if inequality influences behavior (DeCelles & Norton, 2016). In this article, we take a unique approach in that we examine economic inequality as it is experienced by individuals in their everyday interactions with others. Integrating insights from research on social comparison processes (Fiske, Cuddy, Glick, & Xu, 2002; Taylor & Lobel, 1989) and on status signaling (Ambady & Rosenthal, 1993; Sapolsky, 2005), we suggest that economic inequality is experienced daily as the communication of *social class signals*—behaviors that provide information about a person's income, educational attainment, or occupation status (Bourdieu, 1984; Kraus & Keltner, 2009; Veblen, 1899/1973)—perceived and expressed in everyday interactions. In this article, we consolidate findings from the psychological and economic sciences to derive three basic predictions about social class signaling and the experience of inequality. Specifically, we theorize that class signals (a) occur frequently, rapidly, and accurately in the social perception process; (b) augment group boundaries between the haves and have nots in society; and (c) elicit psychological processes and behaviors that justify and maintain the current economic system (see

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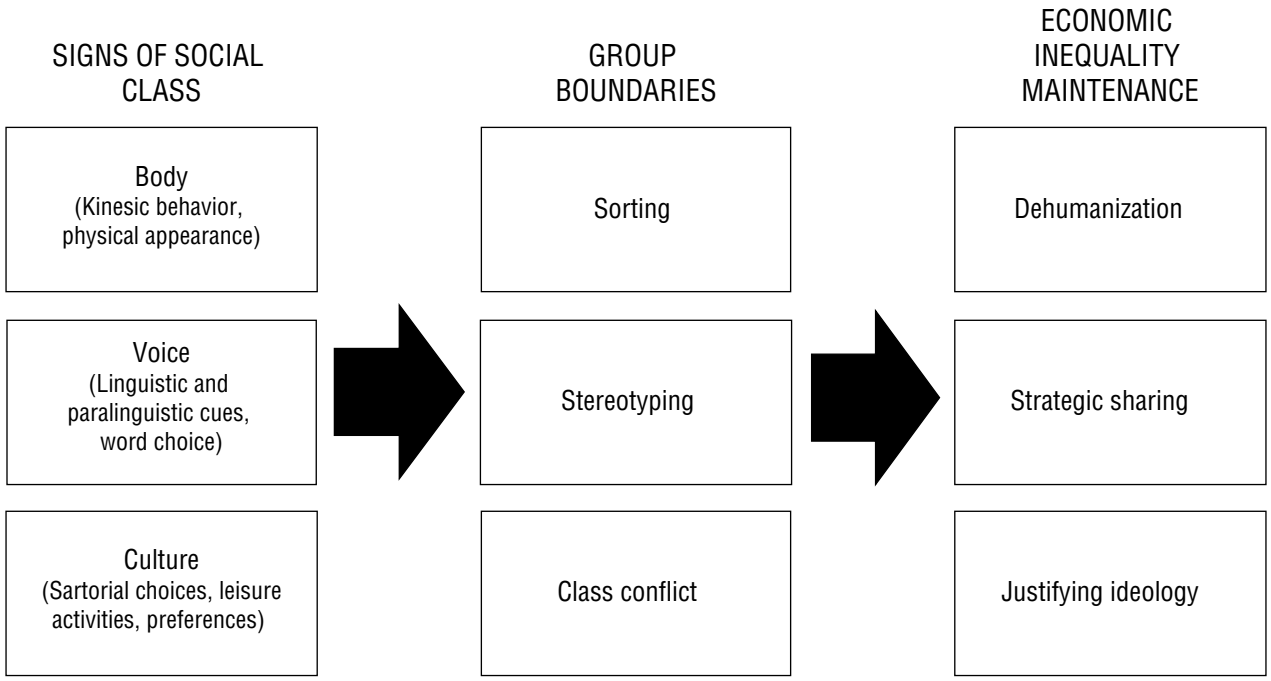

Fig. 1. A theoretical model detailing the modes of social class signaling and their influence on the augmentation of group boundaries between the haves and have nots in society and, in turn, on social judgments and behaviors that perpetuate economic inequality on a societal scale.

Fig. 1). Throughout, we detail existing evidence for each of these predictions and chart the future directions they suggest.

For the purpose of this article, it is important to dwell on the definition of *social class*, which we and others have defined in the past as one's position in the economic hierarchy in society that arises from a combination of annual income, educational attainment, and occupation prestige (Adler et al., 1994; Oakes & Rossi, 2003). Though the experience of social class is shaped by this economic positioning, the actual impact of the construct on social and psychological experience is wide-ranging and multifaceted: Social class shapes behavior through cultural learning, such as socialization processes occurring within a family whose members share a similar socioeconomic background, and through social-cognitive mechanisms, which include habitual response patterns to an experience that is unique to a particular social class (e.g., Fiske & Markus, 2012). Social class can also determine the groups an individual interacts with and belongs to (Lareau & Conley, 2008). Because of its many facets, it is helpful to conceptualize social class (like race) as a "bundle of sticks" that can be disaggregated and studied based on its specific elements (i.e., Sen & Wasow, 2016). Signaling is the specific element of social class we examine in this article, with an eye toward better understanding how class signals might shape processes related to the creation of class boundaries, perceptions and experiences of class mobility, and self-perceptions of an individual's own socioeconomic position in society.

We believe our approach in this article represents a significant advance in how researchers examine economic inequality. Prior studies have examined economic inequality through the lens of a global economy (e.g., Piketty, 2015); as an economic trend perceived by individuals (e.g., Kluegel & Smith, 1986); or indirectly through an examination of the association between social class position and emotion, cognition, or behavior (e.g., Kohn, 1963; Kraus, Tan, & Tannenbaum, 2013). Moving forward from this prior work, we examine economic inequality as the daily process of comparing one's own socioeconomic standing to that of others based on the dynamic observation of observable behaviors that signal social class. Such an approach has several direct benefits: This approach expands our understanding of the experience of economic inequality beyond the economic realm to include the dynamic social signaling processes it informs, it allows for a fuller understanding of the process by which people come to accurately perceive their own social class position in society relative to others (e.g., Goodman et al., 2001; Hout, 2008), and it provides a framework for understanding the processes by which economic inequality might perpetuate itself over time.

Signs of Social Class

From primates to fiddler crabs, individuals across species signal their broadly defined social status with nonverbal behaviors (Hall, Coats, & LeBeau, 2005; Sapolsky, 2005; Sergio et al., 2011), vocalizations (Dunbar & Burgoon,

Table 1. Summary of Prior Studies Investigating Accuracy in Perceptions of Social Class From Observations of Cultural Objects, Physical Appearance, Behavior, and Speech

Study reference	Stimuli for observer judgments	Domains of signaling accuracy
Davis (1956)	Living room photographs	Cultural objects
Giles and Sassoon (1983)	UK college students mimicking Cockney or standard English accents	Speech
Schmid Mast and Hall (2004)	U.S. University employee photographs	Physical appearance Cultural objects
Kraus and Keltner (2009)	60 s interactions between USA University students	Physical appearance Cultural objects Thin slices of behavior
Gillath, Bahns, Ge, and Crandall (2012)	Shoe photographs	Cultural objects
Becker, Kraus, and Rheinschmidt-Same (2017)	U.S. Facebook profile photographs	Physical appearance Cultural objects
Bjornsdottir and Rule (2016)	Standard facial photographs	Physical appearance
Kraus, Park, and Tan (this manuscript)	Seven spoken words	Speech

2005; Gregory & Webster, 1996; Ko, Sadler, & Galinsky, 2015), and social symbols (Veblen, 1899/1973). These status symbols assist individuals in avoiding costly aggressive encounters or in aligning with others who have the material resources necessary to facilitate group living (e.g., Ambady & Rosenthal, 1993; Zahavi & Zahavi, 1999). In humans, symbols of status are used in a variety of contexts—for instance, to signal physical dominance (Kraus & Chen, 2013) or as cues of achieved success (Tracy & Matsumoto, 2008). Aligning directly with this past research, we assert that social class is a form of societal social status that is signaled and perceived accurately in interactions with others (e.g., Kraus & Keltner, 2009).

Our first prediction that social class signaling occurs during social perception is supported by two separate lines of research. First, research on social comparison, or the process of comparing oneself to other people on social characteristics and outcomes (Festinger, 1954; Taylor & Lobel, 1989), indicates that people compare themselves to others frequently on economic dimensions. Social comparison is often referred to as an unavoidable aspect of perception during social interactions (Brickman & Bulman, 1977; Brown, Ferris, Heller, & Keeping, 2007), and it functions as a means by which individuals gather information about the self, regulate their emotions and goals, manage uncertainty, and judge the normalcy of personal life events (e.g., Taylor & Lobel, 1989). Though comparisons occur on many dimensions in social relationships, evidence indicates that these comparisons are frequently tuned to economic outcomes: For instance, reward regions of the brain (e.g., the left ventral striatum) were activated when engaging in comparison with an experiment partner who received a relatively lower monetary reward rather than an equal reward (Fliessbach et al., 2007). In another study, the tendency for nurses to have a high social comparison orientation—was positively associated with reports of relative deprivation or feelings of reduced resources relative to others (Buunk, Zurriaga, Gonzalez-Roma, & Subirats, 2003).

Second, studies of social class signaling indicate that perceivers can rapidly and accurately judge the social class of others based on only small amounts of information. Theoretical accounts of social class suggest that it shapes people's lives in persistent and enduring ways by constraining or expanding access via levels of economic resources or by shaping behavior through cultural and psychological means (Bourdieu, 1984; Fiske & Markus, 2012; Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012). Studies generally support this assertion: Class determines the foods people eat (Monisaivis & Drewnowski, 2009), the music and art they enjoy (DiMaggio & Useem, 1978; Peterson & Kern, 1996; Snibbe & Markus, 2005; Van Eijck, 2001), the leisure activities people engage in (Veblen, 1899/1973), the linguistic patterns they employ (Labov, 1964, 1990, 2006), and the clothing they wear (Gillath, Bahns, Ge, & Crandall, 2012). This analysis suggests that when people engage in social interactions, some of their behaviors and cultural practices are infused with social class and, as a result, accurately communicate social class position to observers.

Although several studies indicate class differences in behavior (e.g., Bernstein, 1962; Lizardo & Skiles, 2015) and language use (e.g., Labov, 2006) and inform this work a great deal, relatively few examine the social class signaling accuracy of these behaviors (see Table 1). For instance, early work by Davis (1956) found that photographs of living rooms allowed observers to accurately judge the occupation status and education of individuals. In the realm of appearance, researchers found that social class can be accurately perceived by strangers based on

such static appearance cues as shoes worn by participants (Gillath et al., 2012), employee photographs (Schmid Mast & Hall, 2004), and standard facial images (Bjornsdottir & Rule, 2016). Two additional studies conducted by an author of this manuscript also bear out this signaling prediction: In the first, 50 university student dyads (n = 100) were recruited to a laboratory setting where they had a 5-min "get acquainted" interaction with a stranger (Kraus & Keltner, 2009). In the second, a study of cultural practices online, the 20 most recent Facebook photographs were collected from a sample of 113 university students and adults from an online crowdsourcing platform (i.e., MTurk; Becker, Kraus, & Rheinschmidt-Same, 2017). In both studies, participants provided information about their own family social class by reporting their annual income, parental educational attainment, and self-perceived position on a 10-rung ladder representing ascending levels of income, education, and occupation status (Adler, Epel, Castellazzo, & Ickovics, 2000). A separate sample of observers then watched the first 60 s of the "get acquainted" interaction or viewed the Facebook photographs and estimated participant social class on the same 10-rung society ladder. Across both studies, an overall composite metric of social class computed by averaging the z-scored index of each individual social class item was significantly positively correlated with perceptions of social class made by observers based only on 60 s of recorded behavior, $r(98) = .28$, $p = .005$, or on viewing 20 Facebook photographs, $r(111) = .27$, $p = .005$. Moreover these associations held after accounting for the race and gender of participants.

For the purpose of this article, we reanalyzed the data from these prior studies to determine how well observers performed in estimating social class above chance guessing. For this analysis, observer estimates were divided into four quartiles and two halves based on prior research indicating that the United States is divided into four social class categories (i.e., lower, working, middle, and upper class), but that about 90% of people identify with the two middle categories (Hout, 2008). The overall metric of participant social class was also divided into quartiles and halves. We then compared observer estimates to participant overall social class. The observer estimates were considered to be correct if the quartile or half chosen by observers matched that of participants, whereas mismatches were incorrect (e.g., Hertenstein, Holmes, McCullough, & Keltner, 2009). The results of this analysis are shown in Figure 2: When compared to chance guessing (i.e., 25% for quartiles, and 50% for halves), observers performed significantly better than chance when estimating the correct social class quartile, $x^2(1)_{\text{Behavior}} = 5.33$, $p = .02$; $x^2(1)_{\text{Facebook}} = 5.45$, $p = .02$, and half, $x^2(1)_{\text{Behavior}} = 4.00$, $p = .046$; $x^2(1)_{\text{Facebook}} = 4.68$, $p = .03$, of participants using 60s of recorded behavior or Facebook photographs. Short dynamic bursts of behavior and cultural practices shared through photographs on Facebook are sufficient to accurately signal social class.

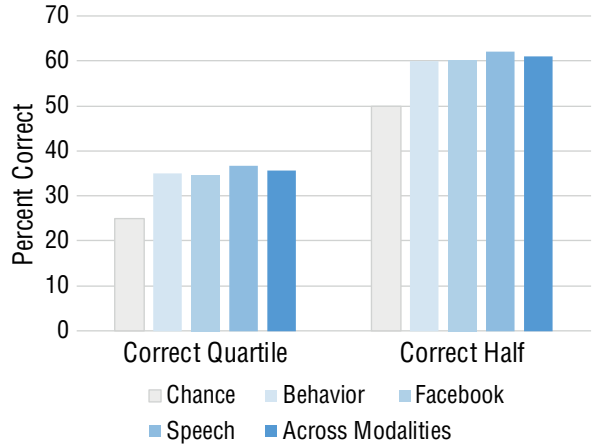

Fig. 2. The tendency for observers to guess the correct social class quartile (left) and half (right) of participants based on observing 60 s of behavior, 20 Facebook photographs, listening to seven isolated spoken words, or across all signaling modalities. The light grey bars indicate percentages expected if observers are guessing at rates indistinguishable from chance. In all cases, observers showed above chance accuracy in perceiving social class.

One of the most pervasive domains of person perception is the voice, and much research supports the utility of aspects of speech—including word choice and linguistic and paralinguistic vocal patterns—in signaling various forms of social status. For instance, people modulate their vocal pitch to make it more consistent with that of high status individuals (Gregory & Webster, 1996), and powerful people use lowered pitch along with other vocal cues to suggest their physical dominance and authority (Hall et al., 2005; Ko et al., 2015). We predict that speech style, even the linguistic and paralinguistic content of speech, is of considerable utility for perceiving the social class of others (Bugental, Henker, & Whalen, 1976; Ellis, 1967; Labov, 2006; Wolfram & Schilling-Estes, 2006). Though speech style varies by region and cultural background, it is also determined by social class: For instance, studies find that students from lower social class backgrounds are more likely to speak using nonstandard dialects than relatively upper class individuals (Fogel & Ehri, 2000). As well, discrimination occurs more often against individuals in the United States with nonstandard dialects (Gluszek & Dovidio, 2010), and people from traditionally low status groups in society sometimes code switch away from nonstandard speech to more standard forms in order to blend in while in high status contexts (Brannon & Markus, 2013; Labov, 1972, 2006). At the other end of the social class spectrum, the material resources and opportunities afforded by high social class (Kraus et al., 2012; Oishi & Talhelm, 2012) allow individuals to travel and to interact with others who are well traveled, thereby contributing to less locally defined and more standard patterns of speech.

In one example of the social stratification of linguistic cues, Labov (1972) found that New York City department store clerks used different pronunciations for the "r" in words like "floor" and "fourth" based on social class measured in terms of the prestige of each of the stores. Upon being asked to repeat their pronunciations, all clerks tended to emphasize the "r" sound in the words more than they did in spontaneous speech—a behavior indicating conscious awareness of the class signaling implications of their speech (Labov, 1972). In other direct evidence for signaling of social class through speech, Giles and Sassoon (1983) asked participants to mimic a Cockney or standard English accent, finding that Cockney accents were judged lower in social class than standard English ones.

The above analysis suggests that speech style is an accurate signal of social class even when the semantic content of speech is held constant. In a new study, we sought to test the very limits of this assertion by exposing the brief speech of individuals (i.e., seven words spoken out of context) to a separate panel of observers with the prediction that observers would accurately judge social class based solely on speech style.

To test this hypothesis we used a sample of individual speakers from across the United States recorded reading one of two literary passages by the International Dialects of English Archive (http://dialectsarchive.com). Of the 246 speakers collected by the archive across 48 of the 50 states in the United States, 213 reported their educational attainment and occupation status, and these speakers comprised our sample for the signaling analysis. We then created isolated speech recordings for seven spoken words—(i.e., "and," "from," "thought," "beautiful," "imagine," "yellow," and "the") chosen because they occurred in both read passages—for each of the speakers and presented these recordings to a separate U.S. panel sample of observers recruited as part of Qualtrics panels (n = 568). Just as in the prior studies, our observer sample estimated speaker social class using a 10-rung ladder representing ascending levels of social class in society (M = 5.85, SD = 0.68). We then compared averaged observer estimates of social class to a standard composite (M = −0.02, SD = 0.87) of speaker educational attainment, coded based on four ascending categories (1 = *did not finish high school*, 2 = *high school graduation or some college*, 3 = *four-year college graduation*, 4 = *advanced degree*), and occupation status, coded using an established four digit occupation status coding scheme (Ganzeboom, De Graaf, & Treiman, 1992). See the online Supplemental Material for more detail on the samples, stimuli, and analyses.

The results support our prediction that speech style is a social class signal. Observers provided judgments of speaker social class that were significantly positively correlated with speaker social class, $r(211) = .22$, $p = .002$. Moreover, this association held after accounting for speaker characteristics—race, gender, and vocal pitch—as well as geographic region characteristics—zip code level population density, median income, and high school graduation rates, $\beta = .14$, $t(192) = 2.12$, $p = .036$. Perceptions of social class were also significantly positively associated with actual speaker social class in three of the four Census defined regions of the United States (all but in the Midwest), region effect $F(3, 1632) = 46.78$, $p < .001$).

We also examined how observer estimates of social class performed relative to chance using the prior quartile and half analysis. Splitting the sample for this analysis appeared to be valid: For instance, the bottom half of speakers had an average educational attainment of 1.83, roughly equivalent to an education of high school graduation and some college, and an occupation code of 4209.54, similar to the occupation status of sales (4000) and service workers (5000). The top half of the speaker sample had an average educational attainment of 3.38, consistent with obtaining a four-year college degree, and an occupation score of 1477.33, similar to the occupation status of professional athletes and journalists (1500). As Figure 2 illustrates, observers showed above chance accuracy in judging the correct quartile, $x^2(1) = 15.38$, $p < .001$, and half, $x^2(1) = 12.21$, $p < .001$, of speaker social class based only on their speaking style—evident upon listening to just seven words spoken out of context. Moreover, the overall chance accuracy estimate across the modalities of social class signaling (see Fig. 2, rightmost bars) was significant, $x^2(1)_{\text{Quartile}} = 25.92$, $p < .001$; $x^2(1)_{\text{Half}} = 20.74$, $p < .001$.

Overall, these studies across diverse domains of speech and behavior provide some preliminary yet promising evidence suggesting that social class is rapidly and accurately perceived in the early stages of social perception. Several future directions are suggested by this research: For instance, does accuracy of social class perception improve linearly with the addition of more behavioral information about social class? Based on prior research, it is possible that diminishing returns in social perception accuracy occur for social class due to the onset of confirmation biases (Nickerson, 1998). Likewise, though we demonstrate that the information passed on in the initial stages of impression formation is sufficient for class signaling, data using more sensitive time measurements might be able to determine precisely when accuracy in class signaling emerges in the social perception process (e.g., at the level of seconds or milliseconds). It is also interesting to speculate about the other modalities of social perception where class signals are communicated. Given health disparities between high and low social class individuals (Adler et al., 1994), perhaps physical features that reveal health are also a reliable indicator

of social class as preliminary work suggests (Bjornsdottir & Rule, 2016).

Social class signals are also the result of two processes—perceiver judgments and target behaviors—and thus far studies have only started to examine the specific contribution of each process to accurate class signaling. Experiments that systematically constrain target behavior, by for instance, carefully controlling the context and conditions for speech (Labov, 1972), can better tease apart both the specific behaviors that elicit class signals and the minimal conditions necessary for perceivers to judge social class. In this vein, signal detection theory methods are needed to determine how sensitive social class perceptions are to variations in class signals (McNicol, 2005; Swets, 2014). Lastly, one of the central claims of this analysis is that people experience economic inequality principally through this process of sending and perceiving social class signals in daily interactions and comparatively less in terms of macroeconomic societal shifts in wealth and markets. One implication of this logic is that in countries or cultures where societal economic inequality is lower, signals of social class might actually be harder to discern than in countries like the United States where inequality is heightened (e.g., Côté, House, & Willer, 2015).

Social Class Signals Augment Group Boundaries

Having detailed evidence suggesting that social class is perceived early on in the social perception process, we now turn to the potential consequences of the accuracy of social class perceptions for groups in society. We make three specific predictions for how class signals augment group boundaries—by facilitating the sorting of individuals into social class groups, activating social class stereotypes, and enhancing conflict between the haves and have nots in society.

Signals of social class create group boundaries by sorting individuals into social class categories. The sorting of people in society based on social class is readily apparent from a cursory examination of social life. Schools and neighborhoods are often segregated in terms of social class, with many explicit home lending policies favoring neighborhood separation based on social classes (Desmond, 2016). People's romantic preferences also seem to follow along social class lines, as the educational attainment, annual income, and occupational prestige of romantic partners tends to be highly positively correlated (Schwartz, 2013). Social class sorting is also supported by low levels of economic mobility in places like the United States, where the chances of moving up or down in the social class hierarchy are constrained, particularly relative to people's lay estimates (Davidai & Gilovich, 2015; Kraus & Tan, 2015). This sorting is one of the likely reasons why people from differing social class backgrounds develop unique norms and cultural models for behavior and self-expression discussed earlier (Stephens, Markus, & Fryberg, 2012; Weininger & Lareau, 2009).

In addition to the historical structural barriers that contribute to the sorting of social class in society (Desmond, 2016), we contend that social class signals expressed and perceived in interactions with others facilitate this sorting process. Specifically, we assert that social class signals are causal in the maintenance of structural social class boundaries because they reduce class mobility and limit cross-class contact. Several lines of evidence are suggestive of this prediction: The notion that similarity enhances liking and relationship formation is a core principle in relationship science (Bergeron & Zanna, 1973; Montoya, Horton, & Kirchner, 2008). When individuals accurately signal and perceive social class in interactions with others, signals that communicate differences in social class are likely to create barriers for relationship formation across class boundaries. In this fashion, class signals are particularly strong in determining the likelihood of relationship formation and in constraining access to networks of influence and opportunity and to individuals of similar (higher) social class upbringing.

The first work directly assessing this prediction was conducted by Bergeron and Zanna (1973). In their study, Peruvian university students read opinion pieces that were manipulated to be written by someone who shared their social class (i.e., attended their same university, an elite social club, or a neighboring university) or who did not (i.e., a member of the Peruvian indigenous population not attending college). Participants reported desiring to form a relationship with opinion writers who shared their social class far more than they did the relatively lower class indigenous writers not attending college, and this effect was independent of participants' level of agreement with the arguments in the opinion piece (Bergeron & Zanna, 1973). In more recent experimental evidence, describing a potential interaction partner using upper class signals (e.g., plans to travel to Europe during the summer) led to greater affiliation motivation among upper class participants, whereas describing a partner using lower class signals (e.g., plans to get a job over the summer to help with family bills) led to greater affiliation motivation among lower class participants (Côté, Kraus, Piff, Beerman, & Keltner, 2014). Aligning with this research, several correlational studies find that first generation college students report feeling more alienated from university environments than do their continuing generation counterparts—a finding that suggests that signals of social class on college campuses, which are predominantly populated by people from highly educated families, reduce feelings of belonging among relatively lower class individuals (e.g., Bufton, 2003; Ostrove &

Long, 2007; Reay, Crozier, & Clayton, 2009). Other work on job hiring finds a similar pattern: Interviews reveal that top-tier business firms rely on social class information in extracurricular activities and club memberships to seek out higher social class applicants (Rivera, 2016), and experiments find that men described as working class were less likely to receive a hypothetical job offer for a higher class managerial position relative to middle-class men (Rivera & Tilcsik, 2016).

Class signals also create group boundaries through stereotyping—that is, social class signals activate unique stereotypes about people from distinct ends of the economic spectrum. Though the accuracy of stereotypes is a matter of some controversy (McCauley, Jussim, & Lee, 1995), several converging lines of evidence suggest that the use of stereotypes in person perception aid in the formation of group boundaries and the expression of prejudice and discrimination (Fiske, 2005; Fiske et al., 2002). Studies also indicate that signals of social class are used as a basis for activating stereotypes. In the original studies of the stereotype content model by Fiske and colleagues (2002), participants rated 23 groups in society based on how others in society view the groups on warmth and competence. The studies found that social class was a reliable predictor of stereotype content across studies and samples—the rich were viewed typically as low in warmth but high in competence, whereas the poor were viewed as both low in warmth and competence (Fiske et al., 2002). It is important to note that the stereotype content association of high competence to high social class has been replicated across 37 cultures (Durante et al., 2013) and, in particular, when assessing the stereotypes using social class signals: In one example, signals of wealth in Italian print media were associated with ratings of individuals as higher in competence (Durante, Volpato, & Fiske, 2010). In other research, more or less expensive houses were used to judge the competence of occupants (Oldmeadow & Fiske, 2012).

Just as class signals separate individuals from different class backgrounds and activate stereotypes, they are also the tinder for class conflict. Specifically, signals of social class increase conflict between individuals of different social class groups because they make salient that resources are unequally shared between individuals in society. Though people across countries and cultures have different expectations for the ways in which resources are shared, visible inequalities such as those that are made apparent by social class signals violate assumptions about the generosity of neighbors and the fairness of current economic systems. For instance, prior research indicates that residents of poor neighborhoods are impacted psychologically by visible class signals—experiencing worse health outcomes when they live adjacent to rich neighborhoods than they do living adjacent to poor neighborhoods (Pellowski, Kalichman, Matthews, & Adler, 2013). To the extent health is related to group conflict (e.g., Gallo & Matthews, 2003), this research is suggestive of the possibility that social class signals have the capacity to increase conflict between the classes.

Several studies support the notion that the presence of class signals contribute to rises in class conflict. On airplanes, the odds of *air rage*, defined as extreme antisocial behavior reported during commercial airline flights, increase when class signals are visible—through the presence versus absence of a first class cabin, or through boarding the plane at the front of the aircraft where the first class cabin is located versus boarding at the rear where it is not (DeCelles & Norton, 2016). In laboratory research, class signals were directly manipulated during a competitive real estate negotiation, where two strangers role-played as a buyer or seller of a biotechnology plant (Kraus & Mendes, 2014). Prior to the negotiation, one of the two participants was assigned to upper class clothing (i.e., a business suit), lower class clothing (i.e., sweats and t-shirt), or their own neutral clothing before engaging in the negotiation with a neutrally clothed participant unaware of the clothing change (Kraus & Mendes, 2014). In the study, negotiation pairs where signals of social class were manipulated experienced significant differences in profits, concessions, and physiological states associated with threat vigilance between players whereas no differences emerged in pairs where class signals were not manipulated (Kraus & Mendes, 2014). In a more direct experimental test of this conflict hypothesis, participants were exposed to pictures of high or low wealth before answering questions about their aggressive tendencies. Participants exposed to high wealth signals in pictures felt temporarily lower in social class and were more likely to feel aggressive in general—particularly toward a relatively upper-class PhD student who ostensibly designed the wealth stimuli (Greitemeyer & Sagioglou, 2016). Though much of this research does not involve specific interclass conflicts, the findings themselves are suggestive of the role of signals of social class in provoking aggressive states for individuals and potentially for social groups around class lines.

Taken together, we have amassed some initial evidence supporting our second prediction that class signals create group boundaries between the haves and have nots in society by sorting people into social classes, activating stereotype content, and enhancing class conflicts. These early findings are supportive of our theoretical predictions and suggest several avenues of future research. For instance, in many of the reviewed experiments, participants are exposed to class signals in controlled laboratory settings (e.g., reading about a hypothetical job candidate)—it will be instructive to

determine whether perception of class signals during more naturalistic social perception elicits the same group processes. As well, some of the prior research indicates that signals of higher social class are particularly strong in eliciting conflict between social classes (DeCelles & Norton, 2016; Kraus & Mendes, 2014). It will be interesting in future research to examine if symbols of wealth and poverty exert asymmetric influences on class boundaries.

People perceive others on a variety of group dimensions, including social categories like race and gender that have clear physical characteristics (e.g., skin color, secondary sexual characteristics) that individuals use during social perception. How social class group boundaries and stereotypes inform, and are informed by, perceptions of other categories is an important area of future research (e.g., Fiske & Dupree, 2014; Gilens, 1999). In this regard, the potential permeability of social class groups is a domain where social class may differ from other categories: Aspirational motivations of relatively lower class individuals might lead these individuals to identify less with their social class group or even to strategically adjust their behavior to signal the social class to which they aspire. More broadly, thinking of group boundaries in terms of social class has the potential to inform theories of intergroup relations by both adding a social category upon which individuals define their social groups and by highlighting the intersections of these categories. For instance, research on stereotype content suggests that the valence of racial stereotypes depends on social class (e.g., Fiske & Dupree, 2014).

Would people desiring upward mobility benefit from modifying their own signals to appear as if they belong to the class they aspire to—as is attempted by the character Eliza Doolittle in the play *Pygmalion* by George Bernard Shaw (1913/2012)? Several studies are suggestive of this possibility. For instance, the aforementioned research on stereotyping suggests that shifting one's social class signals to be more in line with higher social class individuals will elicit others' judgments of heightened competence (e.g., Fiske et al., 2002). In the aforementioned sartorial symbols manipulation study, people who were assigned a business suit earned higher profits, made fewer concessions, and were perceived as more powerful in a dyadic negotiation relative to their interaction partner, who was unaware of the clothing assignment (Kraus & Mendes, 2014). These data suggest that modifying one's class signals in aspirational ways has immediate benefits; however, the sustainability of these modifications is a matter of future empirical inquiry (Fussell, 1992; Labov, 2006). For instance, several studies indicate that awareness of one's lower status relative to others is cognitively demanding (Johnson, Richeson, & Finkel, 2011) or likely to elicit stereotype threat (Croizet & Claire, 1998; Steele & Aronson, 1995), and these studies suggest that conscious modification of class signals will disrupt individual cognitive performance at least until the behaviors become habitual.

Class Signals Perpetuate Economic Inequality

The evidence we have reviewed thus far suggests that class signals are accurately perceived in brief social behavior and facilitate the creation of class boundaries. In this final section, we detail the ways in which class signaling processes have the potential to actually perpetuate the economic conditions they arise from. We predict that class signals increase economic inequality maintenance by eliciting dehumanizing judgments of those at the bottom of the class hierarchy and strategic sharing patterns that favor sharing resources with those who already have resources over those without, as well as justifying ideologies that elicit perceptions of economic structures as fair, legitimate, mobile, and merit-based.

Beliefs about people who occupy the lowest positions on the social class hierarchy include that these individuals are both untrustworthy in social relationships and incapable of changing their own states (Fiske et al., 2002). Thus, class signals that elicit judgments that one is at the bottom of the economic hierarchy are likely to elicit patterns of social perception suggesting that individuals are simultaneously incapable of achieving desired life outcomes and more likely to harm others. This mix of social judgments leads perceivers to scorn extremely low status groups in society (Fiske, 2011) and to discount their mental states and human characteristics (Cikara, Bruneau, & Saxe, 2011)—a pattern we and others refer to as *dehumanization* (Haslam, 2006).

In one illustrative study of this dehumanizing process directed at the poor, Harris and Fiske (2006) showed photographs of people from various groups in society. Pictures of homeless and drug-addicted individuals, those at the very bottom of the economic spectrum elicited self-reports of disgust—an emotion associated with intense dislike and avoidance of outgroups (Harris & Fiske, 2006). In a study with similar methods, photographs of the poor were less likely to activate the medial prefrontal cortex of perceivers, a brain region associated with considering the mental states of others (Harris, Cikara, & Fiske, 2008). Signals of lower social class appear to reduce the extent that we consider the minds of the poor.

Aligning with this dehumanization perspective, social class signals are likely to elicit strategic patterns of resource sharing. Part of the utility of signaling status in interpersonal life is the capacity to weigh the costs and benefits of cooperation (Ambady & Rosenthal, 1993; Kraus & Keltner, 2009). In this vein, sharing resources

with a person with low economic standing may be perceived as risky behavior because such a sharing relationship has few direct economic benefits for the sharer. Based on this analysis, one possible consequence is that visible class signals perpetuate inequality in society by discouraging resource sharing with those that have less in favor of sharing with others of similar class standing.

Several lines of evidence support this assertion. In an experiment directly testing whether visible class signals influence strategic sharing, researchers created miniature societies in an experimental economic game where participants shared resources with each other across time (Nishi, Shirado, Rand, & Christakis, 2015). In the study, some societies were manipulated to have individuals with visible resources whereas in other societies resources were invisible. When resources were visible, participants shared their resources with other resource-rich individuals, thereby perpetuating economic inequality. In contrast, when resources were invisible, participants shared regardless of the resources of their partners, thereby reducing economic inequality (Nishi et al., 2015). These findings suggest that visible class signals perpetuate economic inequality by eliciting strategic resource sharing patterns. In other research, higher income individuals gave less in a single trial dictator game to an anonymous other when living in states that were more unequal or when exposed to high levels of economic inequality (Côté, House, & Willer, 2015). These results suggest that awareness of social class differences elicits lower levels of resource sharing among the wealthy.

Finally, we assert that signals of social class can also activate basic dissonance processes that perpetuate economic inequality. Cognitive dissonance occurs when people are forced to reconcile conflicting attitudes or behaviors (Festinger & Carlsmith, 1959; Kunda, 1990), and economic inequality is an economic state that frequently elicits dissonance processes (Kraus & Tan, 2015; Shariff et al., 2016; c.f., Jost, Banaji, & Nosek, 2004; Jost, Pelham, & Carvallo, 2002). In essence, when levels of economic inequality widen, beliefs that society is fair and just are directly challenged. These dissonance processes associated with economic inequality, in part, explain why people underestimate levels of economic inequality (Norton & Ariely, 2011), class mobility (Davidai & Gilovich, 2015), and CEO pay relative to the average worker (Kiatpongsan & Norton, 2014).

Evidence we have reviewed thus far indicates that class signals are perceived rapidly and accurately, activate class stereotypes, and augment class boundaries. Many of these psychological consequences of class signaling are likely to elicit uncomfortable social comparisons about one's standing in society relative to others (Buunk et al., 2003). Through this process, we suggest that class signals are also likely to elicit economic dissonance processes that lead to the justification of economic inequality—particularly for those at the top of the economic hierarchy who stand to gain the most from the current economic system. Though no study to date has examined the role of class signals in particular in eliciting specific justifying ideologies, several studies indirectly illustrate this in laboratory settings. In one set of studies, temporarily manipulating an individual's relative standing to be higher than other people in an economic game led to seeing the economic game itself as fairer (Brown-Iannuzi, Lundberg, Kay, & Payne, 2015). In another study, asking participants to think of someone way below them on a social class ladder in society elicited beliefs that social class mobility was higher in society than it actually was (Kraus & Tan, 2015). To the extent that class signals activate these same comparison processes, we expect these signals to elicit similar judgments of unequal economic systems as more fair, mobile, merit-based, and justified.

The above evidence suggests that class signals activate individual and group processes that perpetuate economic inequality. Several lines of future research are necessary to more rigorously test this theoretical prediction. For instance, much of this work relies on laboratory studies in which class signals are artificially made visible (Nishi et al., 2015) or brought to mind (Brown-Iannuzi et al., 2015). How actual class signals activate these same processes as they are expressed in everyday social interactions remains a promising area of future research. For instance, the concealment of visible social class is a reason used to justify school uniform policies in more than 20% of schools in the United States (Ball, Bowe, & Gewirtz, 1996). Do uniforms reduce social class signaling and class conflict, or alternatively, do the myriad and subtle ways in which behaviors signal social class render such uniform policies ineffective in concealing social class?

Also, little is known about the mechanisms that might counteract the ways that class signaling perpetuates economic inequality. It is possible, for instance, that elevating compassionate responses to the needy, such as by eliciting judgments of high self–other similarity with lower class others (Oveis, Horberg, & Keltner, 2009), will countervail the psychological processes related to economic inequality maintenance. However, the evidence we have reviewed thus far suggests that barriers to the experience of compassion across social classes are significant: People of higher social class standing view lower social class others as outgroup members who are less human, less warm, and less competent than their same class counterparts and each of these perceptions is likely to create a compassion barrier. Given these patterns, policies that aim to improve the lives of the poor by relying on wealthy individuals and corporations to act compassionately, with the best interests of lower class individuals

in mind, do not rest on the available empirical evidence (e.g., Bresnahan & Rogers, 2016).

Class Signals as Everyday Inequality

In this review, we argue that the global rising tide of economic inequality is experienced at the interpersonal level. We contend that subtle differences in the ways in which people behave toward and even speak about the haves and have nots of society are perceived rapidly and accurately and that, as a consequence of these perceptions, social class divides sectors of society and economic inequality is perpetuated. We support this theoretical position with basic research studies from the psychological and economic sciences that examine class signaling in the context of observational studies of visible economic inequality (DeCelles & Norton, 2016), as well as controlled laboratory experiments (Nishi et al., 2015).

If our theoretical predictions are accurate, how might social class signals shape society? One prediction derives from the daily experience of relatively lower class individuals who, according to our theory, will see themselves as chronically lower in societal status relative to others across the domains of their lives. A consequence of these chronic perceptions might be widespread disengagement from politics as lower class individuals come to distrust a political system that ignores their own daily economic struggles. We see some evidence for these political trends currently in the United States where lower class individuals participate less in general elections than their relatively upper class counterparts (Census.gov; Laurison, 2016; McElwee, 2016) and where both members of Congress and current Presidential candidates have the highest disapproval ratings on record (Enten, 2016). To the extent that social class signals contribute to these trends in politics is an empirical question worthy of further research.

For relatively lower class Whites, daily perceptions of subordinate societal status are also likely to sow intergroup conflict, particularly with respect to other traditionally disadvantaged groups (cf., Gilens, 1999): When new immigrants, refugees, women, or ethnic minorities receive (or are simply perceived to receive) benefits from the government that are not explicitly shared by lower class Whites, these benefits have the potential to create realistic group conflict (e.g., Bobo, 1983) because government policies seem to respond to one kind of injustice (e.g., racial discrimination) and not another (e.g., conditions of poverty). One example of this dynamic is the belief among Whites that Blacks are the sole and illegitimate beneficiaries of welfare (Gilens, 1999). Widespread concern about taking on Syrian refugees across the United States and Europe and the existence of a current U.S. President who has openly expressed racism and white supremacy (Kharakh & Primack, 2016) are also both potential examples of realistic conflict playing out in current events. To the extent that these broad societal trends are influenced by everyday signals of social class is an empirical question worth scrutiny.

The reviewed evidence suggests a few additional future empirical directions of note. In particular, there are several implications for the process of class mobility highlighted by our theory: The evidence for class signaling suggests that one possible barrier to upward social class mobility is that social class is perceived rapidly and accurately in basic person perception and that these judgments may elicit assessments of one's lower competence that could impact promotion and hiring decisions (Rivera & Tilcsik, 2016) or feelings of belonging at a university that are so crucial for academic achievement and striving (Stephens, Hamedani, & Destin, 2014). As such, perhaps individual differences in code switching aptitude, the ability to switch between group contexts and to blend in with others (Labov, 2006; Steele, 2011), predict an individual's capacity to move up the class hierarchy. How societal institutions—like schools and employers—can reduce the impact of class signaling, or alternatively, weigh those signals in admission and hiring decisions is also a crucial area of future inquiry.

Related to this point, the theoretical model we advocate for here relates to past research examining the psychological experience of individuals at the bottom of the class hierarchy. This research indicates that lower social class individuals are more vigilant of threats in their environments (Gallo & Matthews, 2003), exhibit reduced executive functioning (Mullainathan & Shafir, 2013), and experience poorer health and well-being outcomes relative to their more advantaged counterparts (Adler et al., 1994; for a review, see Kraus et al., 2012). Future research could uncover the extent that class signals are causal in eliciting these patterns, and some research is suggestive of this possibility: As we mentioned previously, environments where inequality is more visible elicit greater threat-related aggressive tendencies (DeCelles & Norton, 2016; Greitemeyer & Sagioglou, 2016) and more negative health outcomes for the poor (Pellowski et al., 2013).

Overall then, the impact of economic inequality is both significant and widespread. Significant because it predicts the health and well-being of members of society, and widespread because of the ways in which people can experience inequality in the briefest of social interactions with strangers, while boarding airplanes, and in travel between schools and neighborhoods. Although societal economic inequality has received growing empirical and public attention, the everyday experience of that inequality is a largely unexamined phenomenon in need of greater scrutiny: Macro-economic policy changes may not receive widespread public support, regardless of their

benefits, if those policies do not also articulate the ways in which they contend with social class dynamics in daily social interactions. To wit, passage of the UK referendum to leave the European Union occurred with the support of relatively lower class individuals whose concerns centered more on the importance of allocating resources to national programs, and less on the impact that leaving might have on the economic fortunes of banks and multinational corporations (Barr, 2016). How nations, cultures, and societies respond to economic inequality is a contentious and complex issue with significant social and economic implications for societies and, as we have argued, the daily social and psychological experiences of individuals who populate them.

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Supplemental Material

Additional supporting information may be found online.

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