12-2010

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[http://dx.doi.org/10.1086/655445](http://dx.doi.org/10.1086/655445)

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Abstract
The notion of conspicuous consumption (Veblen 1899) suggests that consumers spend lavishly on goods to that symbolize status and visibly communicate wealth and status to others. Analysis of multiple product categories, however, indicates an inverted-U relationship between price and the presence of logos or brand names: High-end products are actually less likely to contain such clear brand markers. Further, experimental studies show that high-end products which use more subtle markers are harder for observers to recognize, more likely to be perceived as cheaper generic equivalents, and less likely to be perceived as status symbols. This research explains this seeming inconsistency through social identity and distinction. Mainstream consumers prefer explicitly marked products which are widely recognizable symbols of prestige. Consequently, insiders prefer subtle markers that differentiate them from the mainstream and thus facilitate communication with others in the know. The authors discuss the implications of these findings for the communication of identity, brand management, and the success of cultural products.

Keywords
conspicuous consumption, identity-signaling, social influence, conformity, branding

Disciplines
Business | Marketing

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Subtle Signals of Inconspicuous Consumption

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Four experiments demonstrate that while products with obvious brand identifiers (i.e., brand names or logos) are more effective signals in general, some consumers prefer subtly marked goods. Though less explicit branding increases the likelihood of misidentification (e.g., observers confusing a high-end purchase for a cheaper alternative), people with more cultural capital in a particular domain prefer subtle signals because they provide differentiation from the mainstream. Such insiders have the necessary connoisseurship to decode their meaning, and such undercover markers facilitate communication with others in the know. Consistent with the notion that these effects are driven by outward communication, they are stronger in identity-relevant product domains and situations where consumption is more public.
“In fact, we don’t have logos.” –Designer Tom Ford (Menkes 2007)

Conspicuous consumption is one of the oldest ideas in consumer behavior. Since Veblen (1899), researchers have suggested that people choose products to communicate desired identities and characteristics (Belk 1988; Douglas and Isherwood 1979; Holt 1995; 1998; Solomon 1983). Brands assist the signaling process through visible logos and explicit patterns. Nike’s swoosh, Burberry’s plaid, and the Apple logo all facilitate communication and allow others to make desired inferences about the wearer.

Such explicit identifiers are common, but one might expect less overt signals for lower-priced goods. Consumers may want others to know if they bought an Armani shirt, but might not want to broadcast if they bought a cheaper item from Wal-Mart. Thus one might expect more explicit branding, such as visible brand names or large logos, on more expensive goods. This would lead to a positive, or at least a monotonically increasing, relationship between price and brand signal explicitness: cheaper goods have few brand markers but as price increases, signals become more explicit.

A brief analysis of two product categories, however, shows a distinctly different pattern. We randomly selected 120 pairs of sunglasses from major sunglass websites, gave coders an image of each pair, and asked them to record whether the sunglasses explicitly identified the brand (i.e., a brand name or logo appeared). As figure 1 indicates, there was an inverted U relationship between price and brand identification. Regressing brand identification on price and price squared indicates that while brand identification increased with price \((B = .0088, \text{ S.E.} = .0034, p = .008)\), it was negatively related to price squared \((B = -.0014, \text{ S.E.} = .0005, p = .006)\). While only 21% of sunglasses under $50 contained a brand name or logo, for example, this increased to 84% among sunglasses
between $100 and $300. But as price increased further, explicit branding decreased: Among sunglasses priced more than $500, for example, only 30% displayed a brand name or logo. A similar analysis of handbags (see Appendix for full methods) found the same pattern of results. While cheaper bags (i.e., those under $100) had few logos or brand-related patterns, and mid-priced bags (i.e., $200-$300) often contained such brand identifiers, signal explicitness decreased among higher-priced bags. Bags more than $600, for example, had comparable values of signal explicitness to the cheapest bags.

Taken together, these results suggest that high-end products tend not to contain explicit markers. But why would consumers pay more for products which are presumably less-effective signals (i.e., harder for observers to identify)? Do some people just dislike logos (Klein 1999) or might these results suggest something deeper about how people communicate identity?

To address these questions, this paper investigates subtle signals. Though some product are explicitly marked (i.e., large brand logos or patterns), others have more understated ways of identifying themselves (i.e., discreet patterns or detailing, see Figure 2). We show that while subtly marked products are misrecognized by most observers, and thus seem like less effective signals in general, people with domain-specific cultural capital (i.e., insiders) actually prefer them because they provide differentiation from the mainstream and should facilitate interaction with others ‘in the know’.

This work also makes a number of additional contributions. First, we empirically demonstrate and deepen understanding around a particular type of inconspicuous consumption—the use of subtle signals that are only observable to people with the requisite knowledge to decode their meaning. While the idea of conspicuous consumption
is pervasive, other perspectives might suggest that consumers avoid products with explicit brand identifiers because they reject ostentatious status symbols (Brooks 2001; Davis 1992; Weber 1904/2001) or feel guilty about being conspicuous consumers (Seabrook 2001). Building on research regarding cultural capital, taste, and distinction (e.g., Bourdieu 1984; Douglas and Isherwood 1978; Hebdige 1978; Simmel 1904/1957), however, we take a broader perspective. Rather than just avoiding logos, we show that insiders may be comfortable with them or even prefer them in certain situations, as long as those markers are somewhat invisible to the mainstream. Second, consistent with the notion that they are driven by identity-signaling and outward communication, we show that insiders’ preferences for subtle signals are stronger in (a) identity-relevant product domains and (b) situations where consumption is public. Third, we demonstrate situations in which consumers prefer signals that are arguably more costly (also see Donath forthcoming). Many signaling perspectives would suggest widely recognizable markers will be preferred (Fisman 2008), but we demonstrate instances where consumers choose in ways that forgo widespread identification, and thus incur an identification cost. Fourth, while we do not test this directly, we extend signaling theory by considering when subtle signals may be more effective. Most perspectives suggest that louder, more easily identifiable markers will be better signals (e.g., Veblen 1899; Wernerfelt 1990). In situations where outsiders poach ingroup signals, however, subtle signals may actually be better at conveying certain desired meanings. Finally, our results shed light on how social distinction dynamics may play out in a multi-group context. Recent work on divergence shows that consumers sometimes avoid products associated with certain outgroups (Berger and Heath 2007; 2008; White and Dahl 2006; 2007), but our results suggest
instances where one group may actually behave similarly to another group to avoid imitation by a third group.

**SIGNAL VISIBILITY AND THE COMMUNICATION OF IDENTITY**

Possessions and behaviors can act as signals of identity (Berger and Heath 2007; 2008; Douglas and Isherwood 1979; Goffman 1959; Holt 1998; Veblen, 1899; Weber 1968/1978; Wernerfelt, 1990) and this marking function has important implications for interpersonal interaction. Consumption is not only driven by function, but also by symbolic value (Levy 1959). People consume to classify themselves as well as communicate with others (Douglas and Isherwood 1979; Holt 1995) and use consumption to form inferences about others’ social identities, preferences, and social class (Belk, Bahn, and Mayer 1982; Burroughs, Drews, and Hallman 1991; Holt 1998; Fussell 1983). Consequently, consumption can act as a fence or bridge (Douglas and Isherwood 1979), helping to construct and maintain symbolic borders between groups (Bourdieu 1984; Lamont 1992; Weber 1968/1978) and to provide access to social networks and organizations (Kanter 1977).

Visibility plays an important role in this communication process. Consumption alone does not ensure desired recognition and the more visible consumption is, the easier it should be for others to make desired inferences. Indeed, Veblen (1899) noted that to communicate particular characteristics to others, people sometimes consume in conspicuous ways. Consistent with this suggestion, people tend to communicate identity in publicly visible domains (Belk 1988; Berger and Heath 2007) and wealthier
households spend a larger share of their income on visible goods (e.g., cars and clothes as opposed to underwear and laundry, Heffetz 2007). Other work finds that people only spend more on visible goods when it could favorably distinguish them from others in their community (Charles, Hurst, and Roussanov 2007).

This suggests that easily visible markers, such as products adorned with large logos or brand names, should facilitate desired identification. Products vary in how explicitly branded they are: Some shirts scream the brand name across the chest or proclaim their makers through loud patterns, while others are more discreet (e.g., trench coats with plain exteriors but distinctive patterns under the collar). Explicit markers should be more effective signals to the general public, since more obvious brand names and logos should be easier for the majority of observers to see and identify. This, in turn, increases the likelihood that observers make desired inferences about the target consumer. As Fisman (2008) notes: “for a signal to be effective, it needs to be easily observed by the people we're trying to impress. This includes not just those near and dear to us, but also the person we pass on the street.”

In contrast, subtle signals will likely be missed. Subtle detailing such as extra buttons, particular stitching, or covert marking has been described as “dog-whistle” fashion (Twitchell 2002) because it flies beneath the radar and fails to be decoded by most observers. This leads to our first hypothesis

H1: While everyone should be able to make reasonably correct inferences about explicitly marked goods, subtle signals are more likely to be misperceived.
MEANING AND DIFFERENTIATION

But explicit signals also have downsides. Products and consumption behaviors more generally gain signal value based on the groups or types of people who engage in them (Douglas and Isherwood 1978; McCracken 1988; Muniz and O’Guinn 2001). If many similar people wear the same brand or say the same phrase, it imbues that cultural item with symbolic value. If popular athletes (i.e., the “jocks”) at a given high school are the only people who wear Abercrombie and Fitch clothes, for example, then people will associate Abercrombie and Fitch with that social group.

People sometimes adopt products or consumption behaviors associated with other groups, however, in an attempt, to gain the signal value associated with them. People often aspire to be like particular outgroups (Englis and Solomon 1995). Consequently, they may adopt the preferences and tastes of aspiration groups to construct a desired social identity, or to be treated like a member of that group (Simmel, 1904/1957). If the jocks wear Abercrombie, for example, and less popular students (e.g., the “geeks”) want to be treated like jocks, then the geeks may start buying Abercrombie shirts hoping that others start treating them like jocks.

These dynamics are particularly likely for explicit signals. More visible brand logos make it easier to identify someone (e.g., as a jock), but also make it easier for others to determine which brand is the aspiration group’s symbol and adopt it themselves. More recognizable symbols should also be more desirable for outsiders to adopt because they increase the likelihood of desired treatment; the more people who know what the
symbol means, the more likely an outsider who poaches it will be treated like an aspiration group member.

Moreover, particularly in the case of status goods, various historical and cultural factors that have eroded their signal value, flattening distinctions between social groups. Wealth alone has never been enough to define social class (Fussell 1983) and individuals have used distinct signals (e.g. products, language, preferences) to indicate to others where they fall in the social hierarchy (Bourdieu 1984; Veblen 1899; Brooks 2001). But the ability of various markers to signal class has shifted over time. Restrictions once prescribed particular dress styles for different classes, but as these regulations disappeared, the one-to-one mapping between styles and group membership began to weaken (Simmel 1904). More recently, innovations in manufacturing have made it possible to produce high-quality items at any price point, reducing the ability of quality to provide distinction and signal status (Holt 1998; Seabrook 2001). Similarly, while styles used to take years to diffuse, the advent of cheap travel and the evolution of media has made it easier for lower-tier brands to be fast followers, copying high-end or popular styles soon after they are released. The fact that high-end designers now also create pieces for mass retailers like Walmart has only further reduced the distinction between high and mass or low culture (Seabrook 2001). Changes have also occurred in consumer buying power. Wealth used to be relatively static, but increases in economic mobility have reduced the importance of wealth-based hierarchies (Heath and Potter 2004). Income levels have also increased across the board in ways that allow even non-wealthy people to buy things they could not have previously (e.g. luxury cars or large homes). This, combined with the proliferation of credit, means that while a $4,000 handbag is still
expensive, more people can afford such an extravagance, which decreases the good’s
signal value (New York Times 2005; Seabrook 2001). Integrating these cultural changes
with the motivations noted above have led to a situation where, as Holt (1998) notes, “it
is increasingly difficult to infer status directly from consumption objects,” (pg. 5).

CULTURAL CAPITAL AND THE VALUE OF SUBTLE SIGNALS

We argue for the communication value of subtle signals. While subtle signals are
likely harder for most people to recognize, they should be observable to insiders who
have the necessary connoisseurship to decode their meaning. Cultural capital is described
as the non-financial social assets such as cultural knowledge that people have in a
particular domain (Bourdieu and Passeron 1973; also see Thorton 1996). Such insider
knowledge allows group members to recognize even inconspicuous ingroup markers
which outsiders might miss (see McCracken 1988’s discussion of “invisible ink”).
Hebdige (1979), for example, discusses how the dress style of the Mods, a British hipster
subculture, “concealed as much as it stated,” (p. 52). Most adults could not distinguish
them from typical office workers, but the exact shape of their shoes, or angle of their
collar, provided subtle markers that only people with the right cultural capital could
observe. Along these lines, Douglas and Isherwood (1978) suggest that compared to the
higher-consumption classes, poorer people not only are restricted in what they can buy,
but also in their ability to discern between various goods. Thus cultural capital allows
people to gain the respect of, and coordinate with, similar others because it allows them
to consume things that only people who have acquired certain abilities can actually consume (Bourdieu 1984; also see Holt 1998).

More broadly, we suggest that individuals with domain specific cultural capital may prefer subtle signals because they provide distinction. In the class context, Fussell (1983) argues that the middle class need reassurance in status-related endeavors (also see Bourdieu 1984) and Holt (1998) suggests that individuals with less cultural capital want objects that indicate luxury and material abundance. Either of these aspects should lead such individuals to choose products with overt brand markings. More broadly, to the degree that a consumption domain is valued, outsiders may adopt explicit signals in an attempt to pass as insiders. Weekend warriors may deck themselves out in technical athletic gear, for example, in an effort to show everyone that they are true athletes.

But products are not good symbols of a specific social identity if multiple different social groups are using them. The meaning of consumption (e.g., brands, products, and cultural tastes) is not static and it can shift based on the social identity of the individuals that hold those tastes (Holt 1997; Simmel 1904/1957; see Berger and Rand 2008 for an empirical investigation). Returning the prior example, if both jocks and geeks wear Abercrombie, then wearing that brand will not be a particularly good signal of either social group. Observers will not know if the wearer is a jock or a geek, and as a result, may end up mistreating people who use that signal (e.g., treating an Abercrombie wearing jock like an unpopular geek, something the jock might want to avoid).

Consequently, if outsiders or mainstream individuals prefer explicit signals, insiders may steer clear of overt symbols to avoid looking like (or being treated like) members of these other groups (Berger and Heath 2007; 2008; Escalas and Bettman
By diverging, and choosing subtle signals instead, insiders can differentiate themselves, facilitating the expression of identity and desired interactions with similar others. Selecting subtle signals may even be a deliberate strategy to restrict imitation by outsiders by making ingroup tastes hard to copy (see Hebdige 1978). More formally, we predict

**H2**: Preferences for signal explicitness vary based on cultural capital, such that insiders (i.e., people with domain specific interest and knowledge) are more likely to prefer subtle signals (e.g., products with less obvious logos).

**H3**: Preferences for subtly marked goods are mediated by desires for distinction from the mainstream.

Further, if insiders’ preferences for subtle signals are driven by identity signaling and outward communication, as we suggest, they should be stronger in (a) identity-relevant product domains and (b) situations where consumption is public.

**H4a**: High-cultural capital individuals’ relative preference for subtle signals should be stronger in product domains that are identity-relevant.

**H5**: High-cultural capital individuals’ relative preference for subtle signals will be stronger in public (vs. private) consumption situations

Four experiments test these hypotheses. Specifically, we examine how signal explicitness influences consumer preferences and inference-making. We focus on the moderating role of cultural knowledge, and investigate how differentiation motives and desires to communicate social identities leads consumers with domain-specific cultural capital to sometimes prefer more subtle signals, even though they may be less effective markers more generally. A pilot study first examines how signal explicitness affects perception and whether certain types of consumers able to decode subtle signals more effectively. The next three experiments examine how signal visibility affects consumer preferences, how such preferences vary based on cultural capital, and how identity-
signaling and outward communication shapes these effects. Importantly, though the sociological literature focuses on wealth and class, we are interested in the role that cultural capital plays in distinction processes more broadly, regardless of whether the differentiation is vertical (e.g., status-based) or horizontal. Consequently, while we use price as an objective measure of identification in the pilot study, we use equivalently priced options when setting up choice pairs in the rest of the studies. We close with a discussion of the implications of these results for distinction processes, signaling, and the persistence of cultural tastes and practices.

Before turning to our studies, however, it is worth noting that the subtle signals we focus on differ from other types of inconspicuous consumption in some important ways. First, some authors have argued that certain people may just avoid logos. Brooks (2001), for example, suggests that the educated elites engage in “one-downmanship,” rejecting traditional status symbols to avoid becoming materialists, and Davis (1992) argues that the rich dress modestly to differentiate themselves from the nouveau riche who are prone to opulent displays (also see Bourdieu’s [1994] discussion of bourgeois discretion, and Weber 1904/2001). Subtle signals, however, are more than just the absence of logos. As we demonstrate below, while some products may not use explicit brand identification, their design, shape, and other aspects may allow insiders to recognize the brand. Further, while desires for distinction may lead people to prefer versions of some products that do not contain logos, this does not mean they dislike logos per se. In fact, as we show in Study 3, insiders may actually prefer options with logos in some instances as long as those logos are not readily understood by the mainstream.
Second, others have argued that the proliferation of counterfeit luxury goods means that owners of genuine products are engaging in inconspicuous consumption in that only they, and a few others, know that they have the real thing (Seabrook 2001). We also focus on the ability of those in the know to recognize signals, but we examine cases where different types of people make choices that look vastly different (i.e., subtle vs. explicit signals) rather than almost identical. As we show below, while most people prefer products with explicit brand markers, insiders prefer more subtle signals. Further, we demonstrate that self-signaling alone is often not enough (Study 3); people choose subtle signals in part to communicate with others around them.

Third, some game theoretic work on countersignaling suggest that when multiple signaling dimensions are available, one group of people may choose not to signal in a particular domain, or even adopt a similar signal to another group in order to avoid looking like a third group (Feltovich, Harbaugh, and To 2002). This perspective, however, depends on the presence of multiple signals to distinguish between groups (e.g., some rich people may drive a car associated with poorer people, but can still be recognized by their expensive clothes). In contrast, the subtle markers we focus on gain their value as signals based on differential knowledge across groups. They do not require information from other domains to disambiguate them, but are relatively indecipherable without the proper cultural capital. For example, even though the Mods’ shoes were differentiated by only slight variations in shape, other Mods could recognize them even without knowing their preferences in other domains.
PILOT STUDY: HOW SUBTLE SIGNALS AFFECT PERCEPTION

Although our primary focus is to investigate when and why consumers prefer subtle signals, it was important to first examine how signal subtlety impacts communication. Are subtle signals more likely to be misperceived, and if so, by whom?

One case of signal misperception may occur with high-end goods. As the inverted U relationship between price and signal explicitness documented in the introduction illustrates, both cheap and high-end goods often have no explicit brand markers (e.g., logos or brand patterns). Does the lack of explicit brand identification have potentially negative consequences for selecting such high-end brands? In the absence of being able to decode the subtle signals given off by some high-end products, might most observers think a subtly marked high-end item is really a cheaper alternative? To test this possibility, participants were shown handbags that varied in both their actual price and explicitness of brand identification (e.g., size and presence of brand logos or patterns), and were asked to estimate the cost of each bag (see Appendix for full methods and results). One reason people buy expensive things is to seem wealthy, so price perception is a good measure of whether an item conveys desired characteristics to observers.

As expected, signal subtlety affected perception: Consistent with hypothesis 1, products that used subtle brand identifiers were more likely to be misidentified, figure 3. When regular participants were shown products with explicit brand signals, they were able to correctly identify that higher-priced products were more expensive than the lower-priced ones. But this ability to discriminate true prices disappeared when products were subtly marked. Among products with more subtle brand signals, regular participants
could not distinguish between more and less expensive products. They thought the high-priced options were no more expensive than their cheap alternatives.

To examine signal perception among people with cultural capital in the domain, we also showed the same stimuli to fashion school students. In contrast to regular students, these insiders were able to decipher the subtle signals. They correctly discriminated between the actual bag prices regardless of signal explicitness. They distinguished between high and low-end items which used explicit brand identification, but could also correctly distinguish prices even when the items used subtle brand signals.

These results have a number of important implications. First, they illustrate the potential downside of using subtle signals. While explicitly marked items facilitate desired identification (i.e., everyone correctly perceived their prices), subtly marked goods were more easily misidentified. Regular observers, for example, confused high-end subtly marked goods for much cheaper alternatives. This has obvious implications for interpersonal inferences: individuals donning subtly marked items may not receive desired recognition. Indeed, in a related study we asked participants to make inferences about someone’s wealth based on whether they wore a (1) cheap generic shirt, (2) expensive explicitly branded shirt, or (3) expensive subtly branded shirt. Consistent with the results of the pilot study, people who wore the expensive subtly branded shirt were not seen as any wealthier than those who bought the cheaper generic option. Thus more explicit signals are more likely to facilitate desired identification.

Second, the results illustrate that the communication value of subtle signals depends on the audience; insiders were able to decode subtle signals. Fashion students were able to distinguish between handbags from different price tiers even when the bags
used more subtle brand identifiers. This mirrors findings of another study in which we manipulated whether participants were given the brand name below the product image. Whereas regular participants need to be told the brand name to accurately predict the price of subtly marked goods, insiders could reliably decode that information from just the product itself. These findings demonstrate the value of cultural capital (in this case, fashion knowledge) in decoding subtle signals.

Third, the results demonstrate that subtle signals differ from just no signal at all. If subtle signals provided no information at all, fashion insiders should not have been able to use them to differentiate high-end options for the cheaper alternatives. Even when brands do not use obvious logos or blatant patterns, however, those “in the know” use the design, shape, and other aspects to recognize them. In another study we conducted, for example, we showed participants pictures of handbags and asked them to (a) try to identify the brand and (b) report what cues they used to guess. While only 12% of participants correctly recognized the brand of the subtly marked products, consistent with our suggestion, most people who did reported using the design, shape or other style features to do so. Thus, branding which seems non-existent to some may actually be quite visible to others.

**STUDY 1: DO SOME CONSUMERS PREFER SUBTLE SIGNALS, AND IF SO, WHY?**

Even though they are less likely to facilitate desired recognition among most observers, Study 1 examines whether some people might still prefer subtle signals. As in
the pilot, we operationalized signal subtlety through the prominence of brand identification. To gain insight into the mechanism behind this effect, we also measured consumers’ desire to be distinguished from the general population to see whether this drives preferences for subtle signals.

Method

Forty-eight female undergraduates from a large southern university completed a short survey as part of a larger group of questionnaires. To collect a mix of both regular participants and people with cultural capital in a particular domain, we recruited both regular undergraduates and fashion majors. While these two groups should be similar on other dimensions, fashion majors have more knowledgeable and interest in fashion.

Participants were shown pairs of high-end handbags from the same manufacturer (e.g., two bags from Louis Vuitton or Coach) and used 7-point scales to rate which option they would be more likely to purchase. The key independent variable was signal explicitness. For the target choice pairs, we manipulated brand identification across the two options. One used an explicit logo (e.g., visible Coach or Chanel pattern) while the other did not (e.g., plain colors or brand-unrelated pattern). We controlled for as many other differences between the options as possible. All pairs contained two equivalently priced products (which participants were made aware of), from the same brand, made of the same material, and photographed from the same angle. We also included filler control pairs which used two bags of equal brand identification (e.g., both logoed or both non-logoed) but different colors.
After providing their preferences, participants noted their desire to appear differentiated from the mainstream (“When purchasing clothing and apparel, how important is it to you to choose items that differentiate you from mainstream consumers?” and “How important is it for you to avoid things that typical mainstream consumers would buy?” 1 = Not at all, 7 = Extremely). The items were highly correlated \(r = .80, p < .001\) and averaged.

Results and Discussion

For the target pairs, we recoded the dependent variable so that higher scores indicated greater preference for subtly branded options, and averaged across the pairs.

**Product Preferences.** Supporting hypothesis 2, insiders preferred products that used subtle brand signals. Compared to regular students, fashion students preferred more subtly marked bags \(M = 5.00\) vs. \(3.90; F(1, 46) = 5.19, p < .03\), Figure 4. The two groups did not differ in their preferences for any of the control pairs \(Fs < .85, ps > .35\).

**Desires for Distinction from Mainstream.** As expected, the groups also varied in their preferences to be differentiated from mainstream consumers. Fashion students cared more about appearing differentiated from the mainstream than regular students \(M = 5.36\) vs. \(4.18; F(1, 46) = 6.23, p < .02\).

**Mediation Analysis.** Supporting hypothesis 3, a mediational analysis (Baron and Kenny 1986) demonstrated that preferences for signal explicitness were driven by desires for differentiation from the general population. As noted above, compared to regular students, fashion students preferred more subtly marked bags \(B = 1.10, S.E. = .48, t(47)\)
= 2.28, \( p < .03 \)) and cared more about appearing differentiated from the mainstream \( (B = 1.18, S.E. = .47, t(47) = 2.50, p < .02) \). Further, when both category of chooser and preferences for distinction were included in a regression predicting preference for products with subtle signals, preferences for distinction remained significant \( (B = .46, S.E. = .14, t(47) = 3.39, p < .001) \) while the effect of being an insider was reduced to non-significance \( (B = .56, S.E. = .47, t(47) = 1.20, p > .20) \). A Sobel test revealed that this decrease was significant \( (z = 2.01, p < .05) \).

These results demonstrate how subtle signals affect preferences while also shedding light on the mechanism behind this effect. Even though they are more likely to be misperceived, insiders preferred more subtly marked products. This occurred even when comparing options that were equivalently priced and made by the same brand. Further mediational results indicate that this difference is driven by desires for distinction: insiders prefer subtle signals because it separates them from the mainstream.

The next two studies examine whether these effects are driven by identity-signaling and outward communication by testing whether they are stronger in (a) identity-relevant product domains and (b) situations where consumption is public.

**STUDY 2: THE ROLE OF DOMAIN IDENTITY RELEVANCE**

Study 2 examines how insiders’ preference for subtle signals varies across different product domains. People tend to use certain domains (e.g., cars and clothes rather than bike lights and dish soap) to express and infer identity (Belk 1981; Berger and Heath 2007; Shavitt 1990). Consequently, if insiders’ preference for subtle signals is
driven by desires to communicate identity, as we suggest, it should be moderated by domain identity-relevance.

In addition, while the mediational evidence in Study 1 suggests that desires for distinction drive preferences for subtle signals, looking across domains further examines whether these effects could just be driven by the desire to avoid ostentation. If some people simply dislike logos then they should avoid them across domains. If preferences for subtle signals vary with domain identity-relevance, however, this suggests that something beyond distaste for logos is driving preferences.

Method

Fifty-six female undergraduates from a large southern university completed a short consumer-behavior survey. We again recruited both regular and fashion students.

The methodology was similar to Study 1, but we varied whether choice pairs were from product domains that were more or less identity-relevant (e.g., handbags vs. sock and underwear) as identified in a pre-test. Participants (N = 20) were asked how much various domains are used to express and infer identity (on 1-7 scales, then averaged to form an identity relevance index, see Berger and Heath 2007). Handbags were rated as more identity-relevant than socks and underwear (M = 5.75 vs. 3.64, t(19) = 8.27, p < .001), so we chose these as more and less identity relevant domains.

Participants in the main study were shown pairs of high-end products from a given domain (e.g., two handbags or two pairs of socks) and used 7-point scales to rate which option they would be most likely to purchase. As in Study 1, the target pairs
differed on the explicitness of brand identification. We also included control pairs in which the options used equally explicit signals but varied on an irrelevant dimension like color. Responses to target pairs were again recoded so that higher scores indicated greater preference for subtly branded options, and preferences were averaged across pairs.

Results and Discussion

Product preferences were analyzed using a 2 (Chooser Type: Insider vs. Control) x 2 (Domain Identity-Relevance: Low vs. High) Mixed ANOVA. In addition to a theoretically irrelevant main effect of Domain Identity-Relevance ($F(1, 54) = 15.20, p < .001$), supporting hypothesis 4a, analyses revealed the predicted Chooser Type x Domain Identity Relevance Interaction ($F(1, 54) = 3.97, p = .05$), figure 4. In domains closely tied to identity, insiders again preferred more subtly marked products than regular participants ($M = 5.30$ vs. $4.49; F(1, 54) = 4.11, p < .05$). In less identity-relevant domains, however, there was no difference in the two groups’ preferences for subtle signals ($M = 3.91$ vs. $4.04; F < 0.2, p > .7$).

These two groups also had similar preferences on choice pairs where the two options did not differ in signal subtlety (i.e. control pairs), either in identity-relevant ($F < 0.3, p > .6$) or less identity-relevant domains ($F < 0.9, p > .35$). Given that there is no subtler signal option in these pairs, it does not make sense to analyze the target and control pairs together, but if they are combined the results are identical to those reported above. There is a significant 3-way Chooser Type x Domain Identity-Relevance x Signal Explicitness interaction ($F(1, 54) = 5.87, p = .02$), where insiders’ preferences only
differed from regular participants (1) in identity-relevant domains in (2) choice pairs where one option was more subtly marked than the other.

Results of Study 2 bolster the findings of Study 1 while also shedding light on the role of identity-signaling in these effects. Insiders again preferred subtly branded products, but consistent with our theorizing, this effect was stronger in identity-relevant domains. Further, these results cast doubt on the possibility that preferences for subtle signals are solely driven by a dislike of logos. While certain individuals may avoid products with logos because they find them ostentatious or gaudy, that cannot explain why the relative preference of insiders for subtle signals disappeared in less identity-relevant domains.

**STUDY 3: THE ROLE OF PUBLIC CONSUMPTION**

Study 3 had a number of goals. First, we investigate the role of public versus private consumption. Compared to private consumption, what people do in public is driven more by the goal to appeal to, or communicate with, observers (Goffman 1959). People select more variety in public, for example, due to goals of impression management (Ratner and Kahn 2002). While the domains used in Study 2 varied somewhat in their publicness, Study 3 directly examines the moderating role of outward communication by taking the same domain and manipulating whether consumption is public (i.e., easily viewed by others) or private.

Second, the studies so far have operationalized signal subtlety through the explicitness of brand identification, but this is not the only way that signals can be subtle.
In other cases, information can be in plain sight, but impossible to read without the correct decoder. A product might be covered with brand logos for example, but the true meaning may remain obscured unless the viewer has the requisite cultural capital to decode what those logos communicate (i.e., which brand it is). As a result, domain-specific knowledge should also affect preferences for products with these types of signals. Insiders may prefer such options while mainstream consumers avoid them because they have little signal value to the broader population. Consequently, we also examined preferences among products where signal subtlety comes from brand knowledge rather than logo prominence or brand identification.

Third, to examine the generalizability of our effects, we used a broader population of participants and a different method of determining insiders. We conducted the study with a diverse group of regular consumers and identified insiders by using a continuous measure of fashion knowledge.

We predicted insiders’ relative preferences for subtle signals would be moderated by the consumption situation (hypothesis 5). Consistent with our suggestion that these effects are driven by signaling, they should be stronger when consumption is public.

Method

To capture a diverse group of respondents, we recruited participants through online subject pools and fashion discussion boards. This method allowed us to recruit a number of real consumers with high fashion knowledge. One-hundred and twelve women from across the United States and varying educational backgrounds (mean age = 38;
mean reported household income $78k) completed the survey. Similar to the prior studies they were shown pairs of handbags and used 7-point scales to rate which options they would be more likely to use.

We used three types of product pairs. The first two were identical to the products used in Study 1. One type (Target pairs) differed in the explicitness of the brand logo (i.e., a product with a subtle brand signal and a product with an explicit brand signal) and the other (Control pairs) differed only in color but not signal explicitness. In addition, we introduced new product pairs pretested such that one option was from a brand that almost everyone knows (e.g., Coach or Gucci) while the other was from a designer only known to people with the “right” cultural capital (e.g., L.A.M.B. or Tory Burch). The two options were equivalently priced and both had visible logos, but we selected the options so that the option from the less recognizable brand actually had more explicit logos. This provides a stronger test of our theory because it further teases our explanation apart from the more simplistic notion than insiders just dislike prominent logos.

We also manipulated whether consumption was public or private. Participants in the public condition were asked which bag they would use “if you were going out with a bunch of your peers and all of them would see your bag.” Participants in the private condition were asked which bag they would use “if you were going out to run some errands in your car and no one else would see your bag.” To emphasize this privacy, participants in the private condition were also reminded that their responses were completely anonymous. A pretest (N = 20) confirmed that people thought observers would be more likely to see the person’s bag in the public condition (M = 5.65) compared to the private condition (M = 2.65, t(19) = 7.82, p < .001).
Finally, we measured participants’ interest and involvement in fashion (e.g., “I am knowledgeable and know a lot about fashion,” “I think about fashion often”, $\alpha = .94$, averaged to form a fashion index). Ancillary data shows this measure is reasonably linked to actual fashion. In addition to completing the fashion index, participants ($N = 120$) were shown pictures of six handbags and asked to identify the brand. Participants who said they knew more about fashion correctly identified more handbags ($r = .47, p < .001$).

Results and Discussion

Whether participants were exposed to the public or private scenario did not affect their reported fashion knowledge ($F < .9, p > .34$). We used regressions to examine how fashion knowledge, the usage situation (public or private), and the interaction of those terms influenced which bags participants preferred, both within the two types of subtle signal pairs, as well as in the control pairs. As expected, there were no effects on the control product pairs (all $t$s $< 1.53$, $ps > .13$), so they are not mentioned further.

First, consistent with hypothesis 5, examining product pairs which varied in logo prominence revealed the predicted fashion knowledge x usage situation interaction ($B = 0.32, S.E. = 0.10, t(111) = 5.08, p < .005$), figure 5A. Decomposition of this interaction one standard deviation above and below the mean level of fashion knowledge (see Aiken and West 1991 for more details on this method) revealed a significant effect of usage situation among high fashion knowledge participants ($B = 0.86, S.E. = 0.25, t(111) = 3.42, p < .001$). Public (vs. private) consumption led high fashion knowledge participants (i.e., one standard deviation above the mean) to prefer more subtly marked products
Low fashion knowledge participants, however, had similar preferences for signal explicitness in public and private ($t < 1, p > .35$). Looked at another way, when consumption was public, fashion knowledge was linked to preferences for subtly marked options ($M_{High \, Fashion \, Knowledge} = 5.14$ vs. $M_{Low \, Fashion \, Knowledge} = 4.25; B = 0.39, S.E. = 0.13, t(111) = 2.97, p < .005$). This relationship was weaker and non-significant when consumption was private ($t < 1.50, p > .12$).

We found similar effects on preferences for well-recognized and insider brands. A main effect of fashion knowledge ($B = 0.45, S.E. = 0.11, t(111) = 3.94, p < .001$), was qualified by the predicted fashion knowledge x usage situation interaction ($B = 0.25, S.E. = 0.11, t(111) = 2.18, p < .05$), figure 5B. Decomposition of this interaction one standard deviation above and below the mean level of fashion knowledge revealed a significant effect of usage situation among high fashion knowledge participants ($B = 0.51, S.E. = 0.28, t(111) = 1.85, p = .07$) such that public consumption led them to prefer options from brands whose logos were less recognizable among the general population ($M_{Public} = 5.60$ vs. $M_{Private} = 4.93$). Low fashion knowledge participants, however, had similar preferences in public and private ($t < 1.3, p > .21$). Looked at another way, when consumption was public, the higher participants’ fashion knowledge, the more they preferred such subtly marked options ($B = 0.69, S.E. = 0.15, t(111) = 4.77, p < .001$). Compared to participants with low fashion knowledge ($M = 3.61$) those high fashion knowledge preferred products with more subtle signals ($M = 5.60$). Though this relationship remained in the same direction, it was weaker when consumption was private ($t < 1.2, p > .25$).
Experiment 3 underscores the findings of the prior studies while extending them in a number of important ways. First, using a diverse group of real consumers and a continuous measure of fashion knowledge, the findings indicate that insiders prefer products that are subtly marked. Second, we generalize the findings to other types of subtle signals. In addition to using subtly marked products, insiders can also differentiate themselves by using brands that are only recognizable to others in the know, and we found that insiders were also more likely to prefer this alternative type of subtle signal. Third, the fact that these effects were stronger when consumption was public further illustrates the important role of social signaling in these effects.

GENERAL DISCUSSION

Notions of conspicuous consumption pervade both academic theory and marketing practice. Researchers have examined how publicly visible consumption communicates social identities and marketers adorn their products with logos to enable the signaling process and fuel consumers’ desire to keep up with the Joneses. In contrast, building on notions of cultural capital, taste, and distinction, we argue for the communication value of subtle signals.

In particular, the current research shows how signal subtlety affects consumer preferences and inference making. Not surprisingly, subtler signals are more likely to be misperceived. When high-end products use less explicit brand identification, for example, most people thought they were equivalent to much cheaper low-end alternatives (Pilot Study). Even though they were harder to identify, however, insiders preferred more
subtle signals (studies 1-3). This was driven by their desire to distinguish themselves from mainstream consumers (Study 1) who prefer products with explicit brand identification that are more readily identifiable by most observers. Insiders, however, preferred subtler options that are only decodable by others in the know. Further, underscoring the notion that these effects are driven by identity signaling and outward communication, they were stronger in identity-relevant product domains (Study 2) and when consumption was publicly visible (Study 3). These moderations shed light on the mechanisms behind the effects as well as illustrating relevant boundary conditions.

While some consumers may simply want to avoid ostentation, our results demonstrate another form of inconspicuous consumption based on subtle signals. The mediation by desires for distinction from the mainstream (Study 1) as well as the moderation by product domain (Study 2) and public consumption (Study 3) all cast doubt on the notion that our effects are driven by the fact that some people just dislike logos (Klein 2000). Further, such explanations have difficulty explaining why insiders preferred more subtle signals even when these products had prominent logos (Study 3).

Understanding Identity-Signaling

Our perspective helps shed light on distinction and signaling dynamics in a multi-group context. Groups often diverge and behave differently from other groups (Berger and Heath 2007; White and Dahl 2006; 2007). In some cases, however, one group may actually behave similarly to another group to avoid imitation by a third group. Brooks (2001) suggests that while the moneyed elite go after items the lower classes could never
purchase (e.g., yachts and caviar), educated elites often select the same items that the working class buys, but in rarefied form (e.g., free range chicken legs or heirloom potatoes from France). In doing so, the educated elite not only distinguish themselves from the moneyed elite, but do so in ways that the moneyed elite are unlikely to copy. Given the moneyed elite want to distinguish themselves from the lower classes, they are unlikely to do something similar, so behaving like the lower classes in certain respects is a good way for the educated elite to discourage the moneyed elite from poaching their signals. This pattern is similar to what we observed in the cross-category analyses of handbags and sunglasses. While low-end items tend not to display brand names or logos, middle-tier options often do, which distinguishes them from cheaper alternatives. High-end options, however, distinguish themselves from the middle tier by their absence of logos, which also makes them resemble low-end options. People in the know, however, are able to use subtle signals to distinguish them. Similar behavior can also be seen more generally in situations where high-status individuals behave similarly to low-status individuals on certain dimensions to avoid looking like middle-status individuals, who themselves want to avoid looking low status (Feltovich, et al. 2002).

These findings also shed light on how signal cost affects signal fidelity or reliability (also see Donath forthcoming). Cost is not only determined by the resources required to acquire a signal (e.g., money, time, or effort) but also by whether that signal facilitates desired identification. Given that being seen in a desired way is one benefit of signaling, forgoing desired identification among a set of observers can be seen as a cost. Fussell (1983), for example, argues that while the middle class cares a lot about what others think, people who have higher status can afford not to be recognized. While
economists often suggest that widely recognizable markers will be preferred (e.g., Fisman 2008), we demonstrate that by selecting subtle signals, certain consumers will forgo widespread identification to facilitate interaction with others in the know. By choosing items that are more likely to be unrecognized, or misidentified as cheaper alternatives by the general population, insiders incur an interaction cost. But in doing so, they also select a more reliable signal of their desired characteristics. Because most consumers want to be correctly identified by most observers, they will be unwilling to select subtle signals that decrease recognition. This is consistent with Seabrook’s (2001) suggestion that the middle class have gotten so good at appropriating the styles of the rich that the rich have started to choose ugly things that no one would want to copy. Given that most people prefer to consume attractive rather than ugly things, choosing ugly things generates a cost that discourages outsiders from poaching the signal. Similarly, Hebdige (1979) suggests that African-American jazz musicians in the 1950s produced music that was hard to listen to or imitate in an attempt to restrict interest by whites.

Costs should also increase the likelihood that signals persist. Original taste holders tend to diverge and abandon identity-relevant products that are adopted by outsiders (Berger and Heath 2007). Consequently, if costs reduce outsiders’ interest in poaching signals, current users will be less likely to abandon those signals or tastes. This suggests that subtle signals will turn over less quickly and be more likely to maintain their meaning over time. Discretely marked products, subtle but distinct styles, or high-end brands that fly beneath the radar should all last longer than their more blatant counterparts. Given that many cultural tastes require particular cultural capital to consume, cultural capital itself also acts as a cost, restricting the ability of individuals to
both consume certain cultural tastes, as well as do so in a way that gains the respect of desired others (Bourdieu 1984; also see Holt 1998).

This has important implications for brand management. Explicit status symbols may generate large sales in the short term, but this will only persist if enough of the buyers are truly wealthy. If not, the symbolic value will shift towards being a marker of the wannabe rich, and sales will decline as consumers search for the next aspirational symbol. Brands that are willing to frequently update can take advantage of this turnover by introducing new goods. Less flexible brands, however, may get caught in the cycles and end up becoming fads. Extremely popular one minute, but discarded the next.

It is also worth noting that technological changes may have reduced the cultural capital necessary to consume subtle signals. Prior to the advent of the Internet, for example, finding out about the next hot indie band required knowing the right people and spending time hanging out in the right clubs. The advent of music blogs, however, has made it easier for people who are not part of these communities to more easily acquire at least some of the insider knowledge. This, in turn, may lead to more rapid cultural change. Importantly though, access to information and fully comprehending that information may be two different things. Technology certainly makes it easier for outsiders to acquire information, but they may not have the relevant cultural capital to understand or use it. Outsiders may be able to find a new hipster phrase mentioned online, for example, but unless they are actually connected to people that use that phrase, they may misuse it or pronounce it wrong and signal their ignorance rather than their group membership. Consequently, at least some of the value of such group-specific capital should persist even in the face of technological change.
Implications, Limitations, and Extensions

Our findings support perspectives on the changing role of wealth in consumption and status hierarchies. Wealth used to be closely linked to consumption, and heavily determined status, but some have argued that knowledge or cultural capital may now play a larger role (Heath and Potter 2004). Though we cannot speak to this directly, the relationship between wealth and preferences for subtle signals in Study 3 are at least consistent with this suggestion. Though income was somewhat correlated with reported fashion knowledge ($r = .25, p = .01$), it was not related to preferences for subtle signals ($t < 1.23, p > .21$) and this relationship was no stronger in public than in private ($t < 1.19, p > .23$). Combined with the results of Study 3, this suggests that cultural capital, rather than wealth, was driving preferences.

While signaling is often considered in terms of vertical differentiation, these issues also extend to horizontal differentiation. Just as high-status individuals want to distinguish themselves from lower-status others (vertical differentiation) to facilitate desired recognition and interaction, people also want to distinguish themselves from outgroups of similar status (horizontal differentiation). The jocks may want to distinguish themselves from the geeks, but even within the jocks, football players want to distinguish themselves from swimmers and vice versa. Subtle signals should help provide differentiation from both lower-status groups, but also those of similar status.

Along these lines, subtle signals are not only useful for maintaining status but also for coordinating without being discriminated against by the mainstream. Rubinstein (1995), for example, notes that before the 1980s, most gay men felt pressure to remain
invisible to mainstream culture. Consequently, they had to come up with subtle signals that could be identified by other gay men but not by outsiders. To do so, they adopted what has been termed the Old Clone look, wearing “jeans, lumber shirts, jackets, and heavy boots and sporting a mustache and sunglasses…instantly recognizable by other gay men, the look would not offend at work, for most non-gay colleagues would miss its significance” (p. 215). By selecting subtle signals, they were able to signal only to other group members and avoid unwanted attention from the mainstream (see Wooten 2006 for other strategies to avoid ridicule).

Signals may also be subtle in terms of effort. Communication depends not only on the signal itself, but how much effort someone put into communicating it. Castiglione (1903/1976) discusses sprezzatura, or how courtiers perform their roles without any semblance of effort or thought. Some people may vacation in the Hamptons, or have attended an Ivy League school, but they also choose how much effort they put into mentioning that information (e.g., blatantly telling everyone versus causally dropping it in conversation). Trying too hard to signal a particular identity may actually provide information that one is not a true member.

One limitation of our studies was the usage of fashion students as a proxy for cultural capital. While our measure was strong enough to capture differences in ability to pick up subtle signals, cultural capital has multiple components (Holt 1998) and merely being a fashion student is certainly a crude proxy. There are also limitations around how we presented the product stimuli. Participants (and coders) were only given a single photo of each product, but actually holding the product and viewing it from every angle would certainly provide more depth. That said, we used a single photo because we
believe it best reflects what happens in everyday life. While people’s best friends may be able to hold their handbag, for example, most people will only get a fleeting glimpse of what someone is carrying as the walk by. Consequently, we felt that having people look at photos was a fair representation of the way people often encounter brand signals.

We focused on the visibility of brand markers, but signal explicitness influences communication in a host of other domains. Gift giving is one example. When choosing what wine to order on a first date, or bring to a new colleague’s dinner party, connoisseurs often face a trade-off between selecting a widely recognized, good option versus something that is less well known, but would be more appreciated by others in the know. Similar subtlety trade-offs occur in brand choice. A Rolex is a widely recognized status symbol, but might be looked down upon by true watch enthusiasts. A Vacheron Constantin, on the other hand, will be invisible to most people, but respected by aficionados. In both cases, what people choose will likely depend on who they want to signal to and the importance of the domain to their identity.

In conclusion, the current research explores the value of subtle signals. Consumption practices are only reliable identity signals when they are restricted to similar people. Consequently, groups may sacrifice universal recognition to ensure signal fidelity. Though conspicuous consumption is more recognizable in general, in some cases subtle signals may be more useful in sending the right information to the desired receiver.
REFERENCES


Klein, Naomi (1999), No Logo, New York: Picador.


FIGURE 1: RELATIONSHIP BETWEEN SUNGLASSES PRICE AND PRESENCE OF A BRAND LOGO

- Actual Average Values
- Regression Fit to Data

Price:
- < $100
- $100 - $200
- $200 - $300
- $300 - $400
- > $400

Brand Logo Presence:
- 0
- 0.2
- 0.4
- 0.6
- 0.8
- 1
- 1.2

$0 $100 $200 $300 $400 $500 $600
FIGURE 2: EXAMPLES OF PRODUCTS WITH MORE EXPLICIT AND SUBTLE MARKS

<table>
<thead>
<tr>
<th>More Explicit Signal</th>
<th>Subtle Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Gucci bag</td>
<td>(2)</td>
</tr>
<tr>
<td>(3) Louis Vuitton, “Speedy 30” bag</td>
<td>(4) Hermes “Birkin Bag”</td>
</tr>
<tr>
<td>(5) Burberry Shoes</td>
<td>(6) Christian Louboutin pump</td>
</tr>
</tbody>
</table>

FIGURE 3: EFFECT OF BRAND SIGNAL EXPLICITNESS, PRODUCT PRICE, AND DOMAIN KNOWLEDGE ON PRICE ESTIMATION (PILOT STUDY)
FIGURE 4: PREFERENCES FOR SUBTLE SIGNALS IN MORE AND LESS IDENTITY-RELEVANT PRODUCT DOMAINS (STUDY 2)

- **Identity-Relevant Product Domains**
  - Regular Students: preference for subtle signals
  - Insiders (Fashion Students): preference for subtle signals

- **Less Identity-Relevant Product Domains**
  - Regular Students: preference for subtle signals
  - Insiders (Fashion Students): preference for subtle signals
FIGURE 5A: PREFERENCES FOR SUBTLY MARKED GOODS WHEN CONSUMPTION IS PUBLIC VERSUS PRIVATE (STUDY 3)

Private Consumption  |  Public Consumption

Low Fashion Knowledge (-1 SD)  |  High Fashion Knowledge (+1 SD)

FIGURE 5B: PREFERENCES FOR BRANDS REQUIRING CULTURAL CAPITAL WHEN CONSUMPTION IS PUBLIC VERSUS PRIVATE (STUDY 3)

Private Consumption  |  Public Consumption

Low Fashion Knowledge (-1 SD)  |  High Fashion Knowledge (+1 SD)
APPENDIX

Handbags Category Analysis Method

Product Selection. To amass a cross-section of handbags at different price points, we randomly selected every fourth shoulder bag from the websites of Macy’s, Nordstrom’s, and Saks (identical results were found when we also included bags from low-end retailers like Wal-Mart and Target). This provided a set of 110 bags ($5 to $9,590, $M = $697, median = $140). We collected an image of each bag and its price.

Coding. Two coders received an image of each bag and coded the presence of the brand name (0 = not present, 1 = present but small, 2 = present and large) as well as the presence of a brand logo or pattern (e.g., Burberry’s plaid; 0 = no logo or pattern, 1 = small logo or pattern, 2 = large logo or pattern). The coders had high reliability (r = .88). These two items were then summed to create a brand signal explicitness score (range: 0-4).

Not surprisingly, the prices were highly skewed (skewness = 5.94) so we used log(price) for our regression analysis (for visualization purposes, we use price in the figure). We examined brand signal explicitness as a function of log price and log price squared.

Results

Analyses revealed an inverted U relationship between price and brand signal explicitness. While signal explicitness was low for bags under $100 ($M = .25), it increased for bags between $100 and $200 ($M = .75), and peaked for bags between $200 and $300 ($M = 1.42). As the bags became more expensive, however, brand signal explicitness began to decrease (i.e., bags $400-$500, $M = .57 and bags $500-600, $M = .40) and bags above $600 had comparable values of signal explicitness ($M = .20) to the cheapest bags. The regression revealed that while signal explicitness increased with price ($B = 1.47, S.E. = 0.55, t(109) = 2.64, p = .01), there was a negative relationship between explicitness and price squared ($B = -0.32, S.E. = 0.05, t(109) = 2.87, p = .005).

PERCENTAGE OF DIFFERENT BRAND SIGNAL TYPES AT DIFFERENT PRICE QUINTILES
Pilot Study Methods

Forty undergraduates from a large southern university completed a short survey. They were recruited either through a regular business program or the fashion school. Participants were shown color images of 30 different handbags and asked to estimate each bag’s price. We used low, middle, and high-priced bags and within each tier, used a few bags that contained large logos or patterns, smaller logos or patterns, or no obvious logo or pattern. This allowed us to examine the influence of actual price on perceived price for bags that used explicit, moderate, and subtle brand signals.

Results

We examined perceived price using a 3(Signal Explicitness: Subtle vs. Moderate vs. Explicit) x 3(Actual Price: Low vs. Mid vs. High) x 2(Observer Type: Regular vs. Insider) Mixed ANOVA. Analysis revealed main effects of Signal Explicitness \( (F(2, 34) = 17.61, p < .001) \), Actual Price \( (F(2, 34) = 10.49, p < .001) \), and Observer Type \( (F(1, 35) = 4.27, p < .05) \) as well as a two-way interaction of Actual Price x Observer Type \( (F(4, 32) = 2.72, p < .05) \).

More importantly, the analysis revealed the predicted Signal Explicitness x Actual Price x Observer Type interaction \( (F(4, 32) = 3.07, p = .03) \), figure 3. To clarify this effect, we examined the influence of Signal Explicitness and Actual Price separately for insiders and regular students. Overall, regular participants had trouble distinguishing between differentially priced bags (Actual Price main effect: \( F(2, 19) < 2.0, p > .20 \)), and their ability depended on Signal Explicitness (Signal Explicitness x Actual Price interaction: \( F(4, 17) = 5.06, p = .007 \)). Among bags that used explicit signals there was an effect of Actual Price on price perceptions \( (F(2, 19) = 6.47, p = .007) \), such that participants correctly believed that the higher-priced bags cost more than the lower-priced bags. For bags using more subtle signals, however, regular participants could not distinguish between more and less expensive bags (either subtle signal bags, \( F(2, 19) < 1.4, p > .25 \) or moderate signal bags, \( F(2, 19) < .60, p > .55 \)). Among bags using...
moderate brand signals, for example, regular participants actually believed that the high-priced bags ($M = $166) were no more expensive than the cheap ones ($M = $165).

As expected, fashion school participants did not have such trouble; they were able to distinguish between actual bag prices regardless of Signal Explicitness. Analysis revealed only a main effect of Actual Price ($F(2, 14) = 14.00, p < .001$). Insiders were able to correctly distinguish between price tiers regardless of whether the bags used explicit ($F(2, 14) = 6.99, p = .008$), moderate ($F(2, 14) = 12.12, p = .001$), or subtle signals ($F(2, 14) = 7.25, p = .007$).