HANDBOOK OF RESEARCH ON IDENTITY THEORY IN MARKETING

3. An evolutionary approach to identity research

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This chapter uses the lens of evolution to examine the concept of identity. We explore how considering the time course of human evolutionary history and the adaptive function of behavior can uncover new knowledge of the processes behind identity. The aim of this chapter is to illustrate how an evolutionary approach to identity research can generate novel predictions and a deeper understanding of identity salience. Very few, if any, scholars of past work have applied an evolutionary lens to identity theory. Thus, we hope that this chapter spurs further future exploration and empirical work of identity-related phenomena.

We start with a brief overview of what it means to take an evolutionary approach to the study of behavior. We then explore these concepts in terms of evolutionary history (that is, the evolutionary time course for the emergence of human identities) and adaptive design (in other words, the function of identity categorization and signaling in ancestral environments). We discuss how an evolutionary approach can inform identity research by considering: (1) the evolutionary age of different identities; and (2) how variation in the environment and social worlds of our ancestors during the time of human brain evolution influences identity categorization and signaling. We conclude each subsection by suggesting new research predictions generated from an evolutionary-informed view of identity and identity-driven consumer behavior.

AN EVOLUTIONARY APPROACH TO THE STUDY OF HUMAN BEHAVIOR

Through decades of his own detective work trying to understand the puzzle of the vast variation in characteristics and behaviors of living organisms, Charles Darwin formulated the theory of natural selection (Darwin 1859). Natural selection is the progression of biologically influenced characteristics becoming either more or less frequent in a population over time. An evolutionary approach to the study of human behavior

starts from a fundamental observation that, on an evolutionary timescale, selection sifts through variations in traits or behaviors, favoring those that maximize fitness on average. By fitness, we mean the passing on of genes to future generations.

Niko Tinbergen (1963) cast the relation between evolutionary biology and psychology in terms of four questions. He argued that a complete understanding of a behavior or feature requires four levels of explanation, each of which addresses a distinct type of question:

- Proximate mechanism: What are the immediate causes and triggers of the behavior?
- Development: How does the behavior develop throughout a person's lifetime?
- Evolutionary history: When and how did the behavior arise in the course of the species' history?
- Adaptive function: How does this behavior solve an adaptive problem?

The first two levels address psychological explanations that occur within an individual's lifetime. These levels of explanation answer questions such as: What are the causal processes operating in current circumstances that produce the feature? What are the developmental processes that lead to its emergence? Factors in this category explain human behavior by considering environmental cues, physical states, hormones and neurological firing; all of which fluctuate in a person's day-to-day, year-to-year life. For these reasons, both the proximate mechanism and development levels of explanation reveal proximate explanations.

The other two levels are ultimate levels because these explanations reside within the realm of evolutionary biology. What is the evolutionary history of the feature from a historical standpoint? When did it originate within a phylogeny (an evolutionary lineage) and how did it change over time? What forces maintained the feature? The primary force maintaining most behaviors, features and modifications is natural selection. Natural selection maintains these features within an organism (thereby shaping it and producing its "design") because the feature has or once had fitness benefits (see Griskevicius and Durante 2015 for a detailed list of theories of selection).

It is important to note that evolutionary theory at ultimate levels typically cannot provide psychological explanations. This is because ultimate explanations speak solely to the function of a behavior or trait, and usually not to the underlying psychology that motivates it. Occasionally, the ultimate and proximate reason for a behavior are closely linked. Usually,

however, the connection between proximate and ultimate reasons may not be that clear. Consider why birds migrate every year. The proximate reason for bird migration is because day length shortens; the shift in day length is an immediate cue that activates a motivation to begin the bird's passage. But the ultimate reason that birds migrate is unrelated to day length. The ultimate reason behind migration is because the sites of the best food locations and the best mating places shift with the seasons (Cocker and Mabey 2005; Somveille et al. 2015).

Like other species, human beings need not consciously know the relationship between the proximate causes of their behaviors and the ultimate purpose behind those behaviors. As a matter of fact, people are especially poor at identifying the ultimate motives for their actions (Barrett and Kurzban 2006; Kenrick et al. 2010; Tooby and Cosmides 2005). A person can be consciously driven to purchase a luxurious car because its classy design makes him feel excited (a proximate reason). At the same time, he may be subconsciously driven to buy that vehicle because owning it can increase his attractiveness as a prospective mate and thereby improve his reproductive fitness (an ultimate reason) (Griskevicius et al. 2007; Sundie et al. 2011).

Once scholars formulate an ultimate explanation by considering evolutionary history or adaptive function, they can then use the explanation to test conditions that can enhance or reduce people's motivations and behaviors, as well as the evolutionary-based psychological mechanisms that prompt them (for example, the ease of attracting a partner in the case of desire for an expensive sports car). Evolutionary researchers rely on ultimate explanations to create hypotheses about psychological causal mechanisms. In the remainder of the chapter, we consider what an evolutionary-inspired investigation might look like when applied to the study of identity.

AN EVOLUTIONARY APPROACH TO IDENTITY

Reed et al. (2012, p. 312) defined identity as "any category label to which a consumer self-associates either by choice or endowment" and stated that it invokes "a mental representation (i.e., a clear picture) of what that 'kind' of person looks like, thinks, feels, and does." People think of themselves in terms of the different groups to which they belong (for example, their family, their community) and the different roles that they play (for example, mother, mentor). Importantly, the concept of identity salience – defined by the same authors as "the salience of a particular identity within a person's self-concept" (Reed et al. 2012, p. 313) – posits that all of the identities an

individual holds within their self-concept are not always mentally accessible, but rather become accessible (that is, salient) depending on the context. This section focuses on the concept of identity salience and considers what it means to take an evolutionary approach to understanding how, why and when a particular identity influences attitudes and behaviors.

An evolutionary approach conceptualizes identity based on Tinbergen's ultimate-level explanations: evolutionary history and adaptive function. These two levels of explanations enable a consideration of modern identity and identity-driven behavior in light of the early environments of our ancestors. You might be asking yourself what environments that existed millions of years ago have to do with modern identity. Keep in mind that adaptations forged by natural selection occur slowly over time in response to pressures that compromise survival and reproduction, and current environmental conditions only recently changed from that of our ancestors. The dawn of agriculture 10,000 years ago marked the very start of what would enable and become modern mass civilizations; a time span too short to motivate vast changes in complex adaptations (Braidwood 1960). This means that modern humans exist in a world vastly different from that of our ancestors, but we still retain the same Stone Age brain architecture designed for ancestral, pre-agriculture environments – not our current environments.

In what follows, we take an evolutionary-informed look at identity by considering: (1) the evolutionary age of different identities; and (2) variation in the environment and social worlds of our ancestors during the time of human brain evolution (roughly 200,000 years ago with the emergence of modern *Homo sapiens*) (Balter 2011). Examining these evolutionary forces is important because they provide information regarding which identities may be more or less mentally accessible, whether individuals are most likely to adopt a specific identity, and how environmental conditions enhance or mute certain identity categorizations.

Evolutionary History: The Evolutionary Age of an Identity

Although extant research categorizes identities by type of referent (for a review, see Reed et al. 2012, Figure 3), identities can also be classified by whether they are fixed or malleable. Some identities are fixed, meaning that humans reliably use these identities to classify others regardless of other salient markers of in-group affiliation. Other identities are malleable, meaning that humans are more likely to erase (in other words, ignore) these identity markers in favor of another salient identity marker.

The evolutionary age of an identity refers to the amount of time an identity has existed across human history. The evolutionary age of an

identity is important because it suggests whether an identity is likely to be fixed or malleable. In illuminating this concept further, let us consider the following set of identities that differ in their tenure across human history: gender, race, health and political ideology. Our early human ancestors would have inhabited a world in which registering the sex and health of an individual enabled many useful inferences, such as whether the individual is a potential mate. An inability to identify a male from a female, or a healthy person from a diseased person, would have resulted in markedly diminished survival and reproductive potential. For instance, a person who came in contact with a sick person whom they believed to be healthy would risk catching the disease themselves and lower their likelihood of reproducing. Likewise, a male who repeatedly categorized females as males would struggle to identify mating opportunities. Thus, natural selection would have favored rapid and accurate categorization of these identities, making health and gender easily accessible identity markers.

Modern identities such as race and political ideology (for example, Democrat versus Republican in the United States) are not likely candidates for quick and unyielding categorization. When it comes to race, our ancestors would not have encountered individuals of different skin color because our ancestors would have traveled primarily by foot, rendering moves of great distance, and subsequent encounters with difference races, extremely rare (Kurzban et al. 2001). Perhaps more importantly, variation in skin color emerged later in evolutionary history (post migration out of Africa) (Jablonski 2004). Similarly, political affiliations as we distinguish them today arose in the 1800s, a mere 200 years ago (Witcover 2003). Thus, there was no strong selection pressure to accurately categorize individuals of different races and political ideologies at the time of human brain evolution. Adaptations designed specifically to categorize race and political affiliations are unlikely to exist.

This is not to say that people fail to categorize others based on race or politics. A skim of newspaper headlines suggests that people are quite good at identifying across racial and political lines. However, categorization along these lines is most likely a by-product of a cognitive mechanism designed by natural selection to identify in-group and out-group members (Gil-White 2001; Kurzban et al. 2001). A by-product is an artifact without adaptive value that persists because it is inherently coupled with an adaptation (for example, fear of poisonous snakes is an adaptation, and fear of harmless snakes is a by-product of this adaptation).

Our ancestors were unlikely to encounter individuals of different races, but they were likely to encounter individuals of different affiliations or alliances that could impact their livelihood. It was important for our ancestors to be able to identify coalition or clan members accurately

because neighboring bands frequently came into conflict with one another (McDonald et al. 2012; Moffett 2013). Thus, the quicker our ancestors could identify an approaching individual as within or outside of their coalition, the more likely they were to survive. Successfully navigating one's social world would thus involve correctly identifying individuals who posed a threat, not just between, but also within groups (Chagnon 1992). For example, people competed with members of their own group for leadership positions that enhanced status and access to resources within the group (Maner and Mead 2010).

Because alliances and markers of social categories tended to shift and were not static, our ancestors had to regularly track and adjust for shifts in alliances. Ethnographically well-known examples of coalition markers include dress, language, gait, behavior and coalitional badges, and our ancestors relied on these markers, dependent on whether they were accurate signals of group membership in a given time period and environment (Berger and Heath 2007; Berger and Rand 2008; Callahan and Ledgerwood 2016; Moffett 2013; Stevenage et al. 1999). Thus, although natural selection shaped humans to search for cues that signal coalition membership, the specific cues that humans use to categorize coalition membership appear to be flexible. In our modern world, the human brain uses racial cues to categorize in-group versus out-group membership (in other words, who is a friend versus foe), but human reliance on race as an indicator for group membership can be easily erased and replaced with a new marker of in-group affiliation.

Supporting this idea, research in the evolutionary tradition has found that perceivers automatically attend to and encode evolutionarily ancient social identity categories in a fast and fixed pattern because of hardwired (adaptive) neurocognitive mechanisms (Gil-White 2001; Ito and Urland 2003; Kurzban et al. 2001). For example, humans appear to have a neurocognitive mechanism designed to detect biological sex (whether an individual is male or female) that is difficult to override; the same is not true for race (Kurzban et al. 2001; Pietraszewski et al. 2014). Although both sex and race are encoded quickly (Ito and Urland 2003), only racial encoding can be overridden. When people attune toward alternative cues to coalitional affiliation unrelated to race (such as team membership demarcated by an athletic jersey), they cease to categorize along racial lines (Cosmides et al. 2003; Kurzban et al. 2001). For example, a person who encounters an African American man in a grocery store would likely recall the man in terms of his race and gender. However, the individual may classify the same man encountered at a sporting event as an athlete, be less likely to recall his race, yet equally as likely to classify him as male. This lends support to the idea that there is likely no human cognitive architec-

ture designed specifically to encode race; a trait that is evolutionarily more recent. Rather, the automatic encoding of race (as well as political affiliation) is likely a by-product of adaptations that evolved for the alternative function of detecting coalitions and alliances.

Implications for identity salience

If evolutionarily ancient social identities are more difficult to erase, this may have important implications for the salience of identities such as sex, age or health that are non-conforming (for example, a person who does not identify with their biological sex). Since observers are strongly sensitive to cues that suggest one's membership in these categories, an individual who possesses cues to these identity categories, but does not conform to them, must overwhelm the categorization system in order to be identified correctly. This would be true for individuals who are older but identify as young, female but identify as male, or disabled but identify as healthy (for example, a Special Olympics athlete).

Let us consider this proposition more closely. Take, for instance, an individual who is gender non-conforming, such as a trans woman (that is, a person biologically male who identifies as female). Individuals like herself are fighting against an ancient categorization system – gender – that is inflexible and quick. Her identity as a female is likely to be constantly salient in her mind to help her monitor how her behavior aligns with her intended signal. Thus, a trans woman may be more cognizant as to how engaging in activities such as contact sports or cooking classes affirms or challenges her identity as a female.

Conversely, for an individual who is gender conforming, such as a cisgender woman (that is, a person biologically female who also identifies as female), the salience of a female identity is likely to be weaker in comparison to a trans woman. Since human brains readily identify and process sex cues (for example, facial shape, waist-to-hip ratio or breasts) (Jasienska et al. 2004; Oh et al. 2016; Redouté et al. 2000), a cisgender woman would likely be less cognizant of her gender identity. Regardless of whether she is playing contact sports or taking cooking classes, others are likely to classify her as female. In sum, the salience of identities that do not conform to one's biology is likely stronger.

Predictions for identity-related consumer behavior

From an evolutionary theoretical perspective, consumers counter-signaling an ancient social identity may align more strongly with that identity (that is, have a strong identity salience) to facilitate accurate categorization. This may impact how they respond to brands and various marketing tactics. Compared to cisgender women, trans women may exhibit stronger loyalty

toward and willingness to pay for products from brands that are undeniably feminine, such as L'Oréal Paris. This may also translate into less brand loyalty when brands signal that they are unlikely to assist the consumer in meeting signaling desires. For instance, in 2016, CoverGirl hired male spokesmodel James Charles to represent its products (Jones 2016). Rather than expanding sales reach to include the trans community, CoverGirl's use of a male representing its products may have the reverse effect. A male spokesperson could lead trans women – and quite possibly some cisgender women – to perceive that CoverGirl's products cannot effectively enhance femininity and challenge the ancient categorization mechanisms that others use to assess gender and attractiveness.

The Adaptive Function of Identity: Adaptations to Early Life Environments

One theory of natural selection that can enlighten our understanding of identity is life history theory (Kaplan and Gangestad 2005; Roff 2002; Stearns 1992). Life history theory is a theory of adaptive individual differences. The theory posits that people possess adaptations that crystalize certain individual differences in behavior based on one's early life environment (Ellis et al. 2009; Griskevicius et al. 2013). While research has shown that an individual's childhood environment is an adaptive critical period for acquiring a language, an individual's childhood environment is also an adaptive critical period for calibrating a life history strategy (Belsky et al. 2012; Simpson et al. 2011).

Life history strategies vary on a fast–slow continuum, with some individuals following faster strategies and others following slower strategies (Griskevicius et al. 2011a). A slow life history strategy involves delayed maturation and a focus on long-term planning. Individuals who experience childhood environments that are safer, stable, and predictable (for example, higher socio-economic environments) develop an expectation that their future environments are also likely to be stable, which calibrates them toward a slower strategy. A slow strategy is adaptive in these environments because an individual can reliably plan for the future. A fast life history strategy, on the other hand, involves accelerated maturation and less long-term planning. Individuals who experience a resource-deprived childhood environment (for example, lower socio-economic environments) expect their future environments to be harsh and unpredictable, which calibrates them toward a faster strategy. A fast strategy is adaptive in such constantly fluctuating environments because it is difficult to anticipate what the future will bring or even if it will come at all (Griskevicius et al. 2011a).

Fast strategists tend to expedite mating effort, as indicated by early initiation of sexual behavior and more sexual partners. By contrast, slow

strategists tend to inhibit mating effort, as indicated by later initiation of sexual behavior, fewer sexual partners, and preference for monogamous relationships (Belsky et al. 2012; Griskevicius et al. 2011a). People's childhood environments also affect their self-control. Whereas fast strategists are often short-term opportunists with lower self-control and a strong desire for instant benefits, slow strategists tend to possess a long-term perspective with higher self-control and a desire for increased future payoffs at the expense of immediate gratification (Griskevicius et al. 2011b; Griskevicius et al. 2013; Hill et al. 2016). In a predictable environment, it is often beneficial to delay immediate gratification for a larger outcome that will be available in the future. However, when the environment is unpredictable, it is difficult to forecast whether opportunities will be available in the future. Thus, it is advantageous to seize opportunities as they come. Note that this concept of how life history strategies relate to self-control differs from other theories of self-control. For instance, Bartels and Urminsky (2011) posit that whether a person decides to exert self-control depends in part on the perceived discrepancy between who they are now and who they will be in the future. Life history strategies, however, posit that a person's self-control depends on their perception of their future environment, not their perception of their future self.

Implications for identity salience

A person's fast or slow life history strategy may influence which identity is more likely to be salient. For example, fast strategists – those sensitized to navigate a harsh and unpredictable world – take more risks and are open to new experiences (Griskevicius et al. 2011b; Griskevicius et al. 2013; Kim et al. 2018). Thus, when it comes to identity, individuals who grow up in harsh and unpredictable environments (a fast strategist) may align with identities considered rebellious, eccentric or novel. They may also be more likely to endorse bizarre beliefs and fringe ideas (Miller 2009; Nettle 2006). Likewise, they may consider themselves liberal and cosmopolitan (Grinstein and Wathieu 2012; Thornhill and Fincher 2007). Slow strategists, on the other hand, are more conservative. A person who grew up in a safe, predictable environment (a slow strategist) may align with identities considered normative, traditional and cautious. Unlike fast strategists, slow strategists may be more likely to regard themselves as conservative and communal (Nettle 2006; Simpson et al. 2011).

Predictions for identity-related consumer behavior

The divergence of identity between those sensitized to a fast versus slow strategy may translate into predictable consumer behaviors. If fast strategists have a taste for risk and novelty, this would translate into consumer

choices that align with such traits (Miller 2009). For example, fast strategists would be more likely to be early adopter consumers and prefer brands or products that are not mainstream, such as movies by Quentin Tarantino and music by Wu-Tang Clan. They would be more likely to have tattoos and piercings, enjoy extreme sports, attend grunge music festivals, travel to foreign lands and use drugs. They may also be more likely to endorse astrology and other religions, and steer away from high maintenance products and pets.

Slow strategists tend to be more conservative and long-term focused. Thus, slow strategist consumers would likely be late adopter consumers. They may thus prefer safer, predictable consumer choices, such as cars by Buick, movies by Ron Howard, and music by Billy Joel. They would most likely prefer clothing by brands such as Tommy Bahama and Ralph Lauren, and enjoy mainstream sports such as golf or baseball. Unlike fast strategists, they are long-term planners. Thus, they may be drawn to high-maintenance or fragile products that require care, and be more likely to own a pet (Miller 2009).

The Adaptive Function of Identity: Adaptations for Group Living

Humans are social animals. All living humans are descendants of hunter-gather ancestors who lived in roving bands of 50–150 individuals (Buss 2012). Because predators, disease and access to valued resources were recurrent problems for our ancestors, cooperating with others in a group-living context helped to solve those problems (Alexander 1974). People depended on each other for protection, assistance and trade. Perhaps not surprisingly, then, people have come to value their social identity (for example, roles, reputation) within a group.

The value people place on their social identity relates to the costs associated with negative perceptions from others in the group (Kurzban and Leary 2001). Social exclusion – and thus loss of protection and resources from the group – is a valid concern given that group members were continuously trying to manage their own vulnerability to interpersonal violence, theft and infectious disease; a critical down-side of group living. Because interdependence makes cooperators susceptible to disease, free-riding and other forms of cheating, these threats imposed selection pressures that shaped the evolution of person perception. People who successfully and reliably identified others who posed fitness-relevant threats, and responded in ways that minimized those threats, were more likely to survive and reproduce (Moffett 2013; Schaller and Park 2011). The result is that people are highly motivated to correctly identify who they can cooperate with and who they should avoid. Thus, shifts in environmental conditions can influ-

ence the prejudice, discrimination and stigmatization of social identities (Neuberg and Schaller 2016).

Environmental conditions that alter prejudice and stigmatization include disease prevalence and resource scarcity (Krosch and Amodio 2014; Neuberg and Schaller 2016; Schaller and Park 2011). For example, when disease prevalence is high (as would be the case when news breaks of food and airborne illness), people are more prejudiced against others who are obese or disabled (Park et al. 2003; Park et al. 2007). Although obese and disabled people are no more or less likely to carry infectious disease, the neurocognitive mechanisms designed to identify cues of infectious disease become overly sensitive and (incorrectly) categorizes disability, obesity and age as linked to risk of pathogen transmission. As a result, disease prevalence or an individual's perception of their own vulnerability to disease enhances discriminatory behavior toward people who have a disability or are obese (Schaller and Park 2011).

Similarly, scarcity increases racial prejudice (Butz and Yogeeswaran 2011; Krosch and Amodio 2014; Rodeheffer et al. 2012). When resources are scarce, people are motivated to limit their sharing to in-group members. Functionally biased perceptual and cognitive mechanisms for categorizing in-group versus out-group identities are likely to accompany these behaviors. For example, white perceivers primed with resource scarcity were especially likely to categorize mixed-race targets as black (rather than white), to "see" African Americans as more "stereotypically Black," and to allocate fewer resources to them (Krosh and Amodio 2014). Economic abundance, on the other hand, lessened racial tension and discriminatory behavior.

Implications for identity salience

Variation in local environmental conditions should influence identity salience in predictable ways. For instance, people should experience an enhanced desire to be socially categorized as healthy or an athlete (which symbolizes superior health) when disease prevalence is salient. This should be particularly important for people who are older, overweight or disabled, because observers are more likely to categorize them as unhealthy during periods of heightened health salience. These individuals may be more aware that they are not signaling superior health and therefore more likely to adopt products that suggest that they are healthy individuals.

In line with this, people should hold stronger in-group identity salience during tough times. This may be particularly true for individuals who are not easily categorized into the majority on a particular trait or characteristic. For example, a Hispanic American may be more likely than a white American to showcase their United States (US) citizenship after a terrorist

attack on US soil. In this case, news of the attack would heighten the salience of their identity as an American, and since Hispanic Americans are less of a stereotypical exemplar of an American (compared to a white American), a Hispanic individual may experience an increase in attitudes, preferences or behaviors that align with an American identity.

Predictions for identity-related consumer behavior

Identity shifts in response to evolutionarily relevant variation in environmental contexts should lead to predictable shifts in consumer behavior. For instance, disease prevalence should increase salience of consumers' health-related identities (for example, "I am a health-conscious individual"). Since age is a symbol of one's health (Yashin et al. 2007), consumers may also be more likely to hold salient perceptions of themselves as young individuals. This shift in identity salience is likely to impact product preferences. Due to this heightened salience of health-related identities, disease prevalence may increase desires to purchase products from companies that advertise with messages of health consciousness, such as products that promote a message of finding an inner athlete.

Scarcity in environmental resources should lead to support for products and organizations that promote one's own in-group. This may translate into increased support for local brands (for example, domestic versus foreign) or a stronger desire to signal in-group identity through clothing and other insignias. Conversely, people may experience a more relaxed in-group identity salience when environmental resources are high. In this case, people may find themselves less supportive of local brands and – in comparison to periods of resource scarcity – feeling a lower desire to showcase their group-referent identity through their product choices.

CONCLUSION

An evolutionary-theoretical perspective considers the evolutionary history and adaptive function of behavior. This chapter illustrated some of the ways an evolutionary-informed view of identity can lead to a deeper and more nuanced understanding of how our evolved tendencies contribute to modern-day identity. In doing so, we considered how the evolutionary age of identities, adaptations to early life environments and adaptations for group living are likely to play a role in determining which identities individuals find most cognitively accessible, which may have profound influence on consumer behavior.

Charles Darwin (1859, p. 488) said, "In the distant future I see open fields for far more important researches. Psychology will be based on a

new foundation." It has been more than 150 years, but Darwin's prophecy is starting to actualize. The connection between the social and natural sciences has become clearer. With this, current and future generations of scholars are geared to push the envelope of innovation, incorporate ultimate-level thinking, and deepen the field's understanding of identity and why and how identity impacts consumer motivation and behavior.

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