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Running head: SOCIAL IDENTITY

Evolutionary Perspectives on Social Identity

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Abstract

A complete understanding of the psychology of social identity requires not only descriptions of how social identification processes work, but also an account of why the underlying psychological mechanisms have evolved. This chapter focuses on the evolution of coalitional (or “tribal”) social identity (i.e., the type of social identity associated with nationality, ethnicity, religion, and class). Coalitional social identity appears to involve a readiness to incur costs for the collective, which may yield cooperative benefits. However, it has not been obvious why reaping the benefits of intragroup cooperation would be facilitated by social identification processes. We suggest that social identity may be related to the signaling of coalitional membership and cooperative intent. Specifically, we argue that social identity may constitute a self-represented summary of the loyalty-signaling characteristics that one has acquired. Based on this hypothesized ultimate function of social identity, we derive predictions regarding the proximate psychology of social identity. We suggest that further research may examine whether social identity involves private social identities (for balancing costs and benefits of group membership) and public social identities (for strategically influencing the behavior of others).

Keywords: coalitions; cooperation; evolution; group; loyalty; reciprocity; signal; social identity; trust

Evolutionary Perspectives on Social Identity

1. Introduction

Here's a hypothetical conversation between two psychology students:

“What is identity?”

“I think an individual's identity is made up of their self-concept, which is like a list of attributes they associate with themselves.”

“OK. Does the self-concept have any form or structure? Can the list of attributes be organized in any way?”

“There seems to be some organization. Some attributes are related to individual characteristics, such as favorite foods and personality traits; other attributes are related to the groups an individual belongs to, such as nationality and occupation. I think the latter are what psychologists call *social* identity.”

“Alright, so what does an individual's social identity do? I mean, assuming that it results from the operation of psychological mechanisms, what do those mechanisms do? What would be their function? We know that we have eyes for seeing and a motor cortex for moving—what are the psychological mechanisms underlying social identity *for*?”

“I think you're asking two separate questions. Regarding what social identity *does*, we can try to answer this by investigating its effects on other psychological processes and behaviors. This is about *how* social identity works. I think we can learn about this by reading the social psychological literature. Your question about what social identity mechanisms are *for* is interesting. You're asking *why* we have social identity at all. I don't know. Let's ask our social psychology professor.”

(End of conversation.)

The scientific study of behavior and the mind took an important step forward with the recognition that complete explanations require not only investigations of how mental and

behavioral processes work, but also analyses of why they may have evolved. In the realm of human behavior, this approach—most vigorously advocated by evolutionary psychologists—has been highly fruitful, not only offering ultimate explanations for many behavioral tendencies, but also stimulating the generation of entirely new hypotheses (Barkow, Cosmides, & Tooby 1992; Buss, 2005; Dunbar & Barrett, 2007). In this chapter, we apply this perspective to the phenomenon of *social identity*, attempting to shed some light on how it works and, more crucially, *why it exists*. To give away the ending, we do not have definitive answers to the why question, but we aim to highlight the sorts of questions that must be asked and issues that must be considered in order for psychologists to move toward a complete account of the phenomenon. Let us begin with a quick overview of phenomena that seem related to social identity and that any good theory of social identity should be able to explain.

Most conspicuously, social identity plays a role in human conflict: Numerous wars and genocides throughout human history have focused on conquering or destroying some “other” people. Such conflicts may take place on the scale of nations, tribes, gangs, or families (e.g., Pinker, 2011). Analyses of deadly ethnic riots suggest that enraged individuals who are ready to commit atrocities may attend to identity and refrain from harming members of untargeted ethnic groups (Horowitz, 2001). Even between nations who are on friendly terms, simply being foreign usually entails restrictions on individuals, such as not being allowed to enter the country, not being allowed to work, not being entitled to the full set of social benefits, and not being allowed to vote in elections, to name only a few. As both authors of this chapter have experienced firsthand, foreignness imposes difficulties when interacting with formal institutions. For instance, not being able to provide standard documentation (e.g., tax return, utility bill) makes it difficult to secure accommodation, open a bank account, obtain health insurance, and sign contracts with utility providers. One can easily imagine the proverbial Martian observing the people of Earth and wondering why

people treat those born on one side of an imaginary line so differently from those born on the other side of the imaginary line.

Of course, social identity is not limited to geographical origin, ethnicity, and nationality because it can also be associated with religion, ideology, social status, and occupation. Furthermore, many social identities are associated with rituals—for example, Thanksgiving for North Americans, *Oktoberfest* for Bavarians, *Koningsdag* for non-republican Dutch, or pierced-and-barefooted mountain climbing for some Mauritian Hindus (Xygalatas et al., 2013). Social identity can engender feelings of pride (e.g., when your team wins) and anger (e.g., when a foreigner insults your nation) as well as efforts to retaliate against perceived wrongdoings or insults. In addition, people are very curious about other people's social identity. Most people who have migrated or traveled have been asked where they are from. While this may seem trivial, there are many other (probably more informative) idiosyncratic data (e.g., medical or psychiatric conditions, political preference) that seem to have lower priority or are not part of common inquiry at all. This intense interest in social identity can sometimes be problematic; at least anecdotally, many children of immigrants resent constantly being asked where they are from.

Finally, rudiments of social identity are evident across animal species. Many animals appear capable of distinguishing between kin and non-kin (e.g., Buchan, Alberts, Silk, & Altmann, 2003; Sherman, 1977; Todrank, Heth, & Johnston, 1998). And nonhuman primates display behaviors suggesting more advanced forms of social identity, distinguishing members of their own group from those of other groups. Observations of an island colony of rhesus macaques revealed that most of the copulations involved members of the same group, whereas between-group interactions were often agonistic (Boelkins & Wilson, 1972). Japanese macaques also seem capable of a sense of group membership. Although these monkeys tend to live in groups with overlapping nomadic ranges (i.e., the range of one group

overlaps with the range of another group), intergroup contact observed at feeding places frequently involved monkeys driving away members of other troops and responding to attacks on their troop members from other troops (Kawanaka, 1973). Similarly, male chimpanzees form coalitions, and they raid other coalitions and attack intruders (e.g., Boehm, 1999). As humans seem to possess a more elaborate psychology of social identity than do other primates, any good theory of social identity should be able to account for why human psychology is more—rather than less—entangled with social identity.

2. Psychological approaches to social identity

As noted above, there are many different kinds of social identity. This implies that people are capable of (and have a penchant for) carving up the social world in multiple ways. To account for the diverse instances of social identification, one approach is to prioritize parsimony and attempt to specify a common mechanism underlying all the varieties of social identity. This approach is epitomized by *social identity theory* (Tajfel & Turner, 1979, 1986), which invokes a stripped-down, all-purpose mechanism to explain the antecedents and consequences of social identification. This approach has conferred certain benefits, and it has propelled social psychological research on this important phenomenon. However, just as domain-general approaches to emotions can mask important nuances (e.g., not all “negative” emotions are alike), invoking a general social identity mechanism may mask important nuances as well. This is because the groups and categories that separate people in the real world are of many qualitatively different types which are often grounded in distinct evolutionary foundations (Park, 2012).

Consider the case of gender identity. In all known human cultures people divide themselves up into sex-based categories and have sex-based division of labor (Brown, 1991). While some aspects of gender identification are undoubtedly due to culture, it is likely that

heterosexual mating underlies much of the basic perceptions of the two sexes, and it is likely that sex differences in dispositions (e.g., aggressiveness, upper-body strength) give rise to different perceptions of men and women. For most humans, their gender identity may be the earliest developing, most robust, and longest lasting social identity (Martin & Ruble, 2004). At the same time, sex-based identity lacks some of the key characteristics of social identity described above, such as intergroup conflict and segregation (even the most sex-segregated societies are not interested in keeping men and women apart permanently—no society attempts to keep men and women on different sides of a guarded border). It is thus unlikely that psychological processes underlying gender identity overlap fully with those underlying identities based on nationality, ethnicity, religion, etc.

A similar argument might be made for age-based identity, which seems to be distinct from gender identity. Identification with an age group varies across life stages and cohorts (e.g., young vs. old, adult, born in the 60s). Like gender identity, age identity is not associated with intergroup conflict or total segregation. In contrast to gender identity, age identity necessarily changes over time. For the remainder of the chapter, we set aside gender and age identities (which have qualitatively distinct characteristics) and focus on the type of social identity associated with nationality, ethnicity, religion, and class—which has received the most attention in social psychology and which appears to be a manifestation of *coalitional* (or “tribal”) psychology (Cosmides, Tooby, & Kurzban, 2003).

Much social psychological research has attempted to understand *groups* (e.g., Reicher, Haslam, Spears, & Reynolds, 2012). Social psychologists have used this term somewhat loosely, and it is important to distinguish groups (a collective of individuals with a capacity for cooperating toward a common goal) from social categories (the categories or stereotypes individuals employ during person perception and impression formation, e.g., male vs. female, young vs. old, White vs. Black; Brubaker, 2002; Fiske & Neuberg, 1990; Kinzler,

Shutts, & Correll, 2010) and social identities (those parts of individuals' self-concepts derived from groups and social categories). Whereas most groups may be based on or give rise to social categories, most social categories are not groups (Brubaker, 2002). Furthermore, whereas all groups and social categories may give rise to social identities, not all social identities are based on actual groups or commonly employed social categories. Below we focus on the psychological mechanisms underlying an individual's social identity.

A useful tool afforded by an evolutionary psychological perspective is the “function-to-form” approach, which consists of “reverse engineering” a trait (e.g., Buss, 1995; Pinker, 1997; Tooby & Cosmides, 1992). Consider how the proverbial Martian would attempt to understand a human-engineered system, such as an automobile. One strategy would involve taking it apart and listing the properties of all of its parts (e.g., material, shape, location inside the automobile, and connections with other parts). Another strategy would be starting with a conjecture about the *function* of the automobile. For example, the Martian might conjecture that the function of an automobile is locomotion¹. The Martian may then combine this conjecture with other knowledge and assumptions to formulate hypotheses regarding the characteristics of the automobile and the mechanisms that make it move—its *form*. (For example, knowledge about aerodynamics might be used to formulate hypotheses about the external shape of the automobile, and knowledge of mechanics might be used to formulate hypotheses about the characteristics of those parts of the car touching the terrain.) Of course, during the process of investigating how the automobile moves, the function-to-form approach will benefit from a catalog of all the parts and their properties. However, in the absence of knowledge about function, even the most thorough cataloging is unlikely to lead to a proper understanding of the automobile.

¹ For some, it might seem obvious that the function of an automobile is locomotion. However, for a naïve observer, the function may not be obvious at all. The observer may note that an automobile burns fuel, disrupts air flow, makes noise, and sometimes causes accidents, and take any one of these to be its function. Obviously, different conjectures regarding function (e.g., locomotion vs. fuel burning) yield different hypotheses regarding form.

3. Conjecture about function: Tribal social identity may be for forging group loyalty

To the extent that social identification involves forming a representation of oneself as a member of a collective, what functions might be served by this process? This question touches on a broader question regarding what functions are served by possessing self-representations at all. Various views have been expressed on this issue, and one influential theory is that humans evolved to experience *symbolic self-awareness*, which allows humans to regulate their own behavior in accordance with expectations regarding the consequences of their actions (Sedikides & Skowronski, 1997). A key component of this argument is that symbolic self-awareness allows humans to anticipate how their behavior will impact their social standing—that is, how they are evaluated by others. Given the importance of social acceptance (Baumeister & Leary, 1995), it is indeed plausible that a sense of public self (the self as seen by others) became highly developed in humans, along with affective mechanisms—such as the sociometer (Leary, 2012)—designed to motivate context-specific adaptive behavior.

Of course, social identity, in its fully-fledged form, involves more than a motivation to be socially accepted—it involves a readiness to incur costs for the collective (Van Vugt & Hart, 2004). This phenomenon is readily observed in competitive intergroup contexts in which competition drives up both group identification and (potentially personally costly) intragroup cooperation (Van Vugt, De Cremer, & Janssen, 2007). The links between social identity, intergroup competition, and intragroup cooperation imply that a key driver of human social identity may be contexts involving competitive (and often hostile) intergroup encounters that have featured throughout human evolution (Bowles, 2009). We can thus begin to get a handle on why identification with “tribal” groups (or their contemporary analogues, such as national and ethnic groups) is associated with psychological processes that

are largely absent in identification with non-tribal social categories (such as genders and ages). In short, tribal social identity may serve the function of solidifying coalitional alliances, allowing members to reap the benefits of intragroup cooperation (and intergroup competition).

The finding *that* group identification is associated with a readiness to incur costs for the collective does not in itself explain *why* reaping the benefits of intragroup cooperation would be contingent on such identification. In other words, it is not obvious why reaping the benefits of intragroup cooperation is facilitated by solidifying alliances and, crucially, what role social identity plays in solidifying alliances. Could not a few individuals simply agree to cooperate on an ad hoc basis? No, because there is a key evolutionary problem: For each of those individuals, there is always a risk of cooperating with cheaters (i.e., non-reciprocators), such that unconditional cooperation is not an evolutionarily stable strategy (e.g., Cosmides & Tooby, 2013). A capacity to *signal* coalitional membership and cooperative intent would be beneficial, and social identity may serve this function.

Imagine three individuals, two of whom have already formed an alliance (say, the “Reds”). The third individual (X) might want to join the alliance and reap the benefits of cooperation. From the perspective of the Reds, cooperating with X may end up being costly (if X is a cheater). Therefore, X must do something to convince the Reds that she can be trusted to cooperate so that the Reds will allow her to join the alliance. As a start, X can signal to the Reds something like: “I am like you, and I will cooperate exclusively with you.” Is there any reason why the Reds would believe in the veracity of this signal? If X publicly signals that she is like the Reds and will cooperate with them, then an alliance that is in competition with the Reds—say, the “Blues”—will have all the more reason to distrust X and will likely exclude X from their alliance of Blues. Thus, by publicly signaling identification with the Reds, X forfeits any potential benefits of cooperating with the Blues. In other words,

in an environment of competing alliances, signaling membership (or loyalty) to one alliance carries inherent opportunity costs. That X incurs costs by proclaiming social identification with the Reds thus provides a reason for the Reds to start trusting X. The opportunity costs create an incentive for X to cooperate, as becoming excluded from the Reds may result in X not being part of any alliance. Therefore, social identification may both signal and motivate cooperation.

Importantly, the signaling of tribal social identity need not involve a verbal statement as in the example above. The signals may involve publicly observable characteristics that the individual can modify to some extent, such as dress, language, accent, rituals, and nonstandard beliefs and attitudes, to the extent that the signals entail (opportunity) costs that motivate the individual to remain in the alliance. Given the need to signal potentially shifting alliances, humans are unlikely to have evolved to perceive unchangeable characteristics—such as skin color—as reliable social identity signals, although they may serve as proxies under certain circumstances (Kurzban, Tooby, & Cosmides, 2001). Tribal social identity, then, may be a *self-represented summary of the loyalty-signaling characteristics that one has acquired*. The fact that signals work best when they are “honest” and genuinely internalized (e.g., Von Hippel & Trivers, 2011; Zahavi & Zahavi, 1997) helps explain why individuals possess social identity that simultaneously imposes costs and motivates behavior.

4. Predictions about form: The psychology of social identification

To the extent that tribal social identity serves the function of signaling and motivating cooperation, a number of hypotheses can be formulated regarding its psychological characteristics (i.e., its form). First, as signaling one’s loyalties is superfluous in a social environment in which intergroup competition is absent, and as signaling one’s loyalties may be especially likely to yield benefits in a social environment with intergroup competition,

tribal social identification may increase under conditions of intergroup competition. Second, tribal social identification is likely to lead to discriminatory behavior with regard to alternative groups—not only ingroup favoritism, but antipathy toward outgroups. As already mentioned, there is evidence that (perceived) intergroup competition/conflict increases social identification with familiar “tribal” groups (Van Vugt & Hart, 2004; Van Vugt & Park, 2010). There is also ample evidence that social identification results in discrimination—indeed, this is the focal phenomenon studied by researchers inspired by social identity theory (Brewer, 1999). An evolutionary perspective introduces additional nuances to these processes. Most notably, antipathies toward tribal outgroups are specific, characterized by psychological mechanisms that facilitate avoidance and exclusion (Kurzban & Leary, 2001; Schaller, Park, & Faulkner, 2003). More generally, perceived threats from outgroups lead to greater ingroup favoritism and xenophobia (Faulkner, Schaller, Park, & Duncan, 2004). Also, consistent with the *male warrior hypothesis* (i.e., males have historically been more highly involved in intergroup conflict and thus men’s psychology is relatively more specialized for intergroup conflict), the effect of intergroup competition on social identification is stronger in men than women (Van Vugt et al., 2007). We would also expect men to be more frequent targets of social identity–based discrimination, which has been empirically demonstrated (Navarrete, McDonald, Molina, & Sidanius, 2010).

More speculatively, because the risk of cooperating with cheaters is ever-present, there may have evolved psychological features that allow individuals to maximize their fitness gains in cooperative contexts: (a) sensitivity to other group members’ levels of loyalty, which can be used to calibrate one’s own level; (b) slightly exaggerated perceptions of one’s own level of loyalty and commitment, which is readily displayed to others; and (c) tactics intended to increase other group members’ levels of sacrifice. In other words, social

identification may be strategic, with individuals aiming for beneficial rather than disadvantageous memberships, and being highly sensitive to context.

The idea that individuals may strategically perceive and display exaggerated levels of group loyalty is consistent with recent theoretical perspectives suggesting that the self may be organized in a modular, functionally specialized manner, comprising a part of the mind whose key function is to represent the self in the best possible light, allowing individuals to more effectively persuade others (Kurzban & Aktipis, 2007). This perspective proposes that while there may be parts of the mind that represent true beliefs (and serve to influence one's own behavior), there may be parts that hold plausibly distorted beliefs (and serve to influence others' behavior). For example, recent research on social-welfare attitudes suggests that individuals may harbor seemingly contradictory motivations for the purposes of optimizing their own goal-directed behavior while attempting to strategically influence others' behavior to their own advantage. Aarøe and Petersen (2013) manipulated participants' blood glucose levels (with lower blood glucose levels serving as a physiological proxy for hunger) and assessed their attitudes toward social welfare (which are essentially attitudes about sharing) and their actual sharing behavior in an economic game. Hunger increased support for social welfare, but had no effect on sharing behavior (in fact, controlling for social welfare attitudes, hunger decreased sharing behavior). As such, the manipulation seems to have triggered two distinct psychological responses, one private (reduced intentions to share, consistent with the goal of obtaining resources for oneself) and one public (increased advocacy of sharing, presumably aimed at influencing others' behavior for one's own gain).

Likewise, in the realm of moral psychology, a distinction has been made between moral *conscience* (which regulates one's own behavior) and moral *condemnation* (which specializes in judging others in order to influence their behavior; DeScioli & Kurzban, 2013). We suggest that an analogous distinction might be usefully made between "private" social

identity (which regulates one's own behavior with respect to incurring costs for the group) and "public" social identity (which specializes in signaling one's commitments to others in order to persuade them to incur greater costs for the group).

A private social identity that motivates cooperation at the risk of incurring costs would be associated with at least three measurable aspects of how individuals *think* and *feel* about social identities. First, individuals should feel that some memberships are more important for them than other memberships, with group memberships that are more beneficial being perceived as more important. Second, individuals should feel greater loyalty toward the more beneficial groups, characterized by greater willingness to incur costs. Third, individuals should feel an increase in the importance of a particular social identity (and increase in willingness to incur costs) if the loss of that membership becomes more costly.

A public social identity specializing in signaling one's loyalties in order to persuade others to incur greater costs for the group would be associated with at least three observable aspects of how individuals *express* their social identity. First, signals of the importance of memberships (i.e., displays of loyalty) need not be highly correlated with the benefits associated with membership. Rather, the expression of loyalties should be a function of both identification with a group *and* whether the situation allows for signals of loyalty to persuade others to incur costs for the group. Second, similarly, contributions or sacrifice to the group should be contingent on both willingness to incur costs *and* the extent to which the situation allows that the sacrifice persuades others to sacrifice for the group as well. Third, increases in the expression of loyalties and publicly incurring costs for the group should be influenced by the costs of losing the membership for the individual as well as the costs that would be incurred by the individual if others left the coalition.

Furthermore, an important part of social identity may be inflated beliefs regarding the superiority of one's own group. Not only would such beliefs help to solidify private

commitment, but they would also be enthusiastically expressed to signal one's commitment to both ingroup members and competitors. As such proclamations may be used to influence other group members' behavior, publicly expressed social identity may be associated with especially exaggerated views concerning the superiority of the ingroup.

These conjectures point to some intriguing theoretical and empirical implications. Because self-reports of social identification are necessarily "public," previous findings relying on self-reports may have been focused specifically on aspects of social identification related mostly to exaggerated beliefs and persuasion of others. From this perspective, it is not surprising that social psychological investigations of social identity (focusing mostly on the public aspect) have recurrently highlighted positive ingroup distinctiveness as a central intergroup motive. It follows that investigations of "private" social identity may require measurements that circumvent self-presentation, such as assessment of anonymous costly behavior (e.g., Aarøe & Petersen, 2013).

As noted above, a good model of social identity should be able to explain social identity phenomena. Indeed, the perspective outlined above permits elaborations that explain several social identity phenomena. The conjecture that social identity is a (self-represented) summary of individuals' group loyalties seems compatible with the association between identity and intergroup conflict, institutional distrust toward members of outgroups, and individuals' curiosity about others' identity. In addition, the association of identity with traditions and rituals can be explained. Individuals in an alliance might use traditions and rituals as a way to place (opportunity) costs on group membership and thus increase or maintain loyalty and cooperation (Xygalatas et al., 2013). Because social identity plays a crucial role in cooperation, the observation that humans are more influenced by social identity than are less interdependent primates also makes sense (cf., Brewer, 1999).

5. Alternative perspectives on social identity phenomena

Are there alternative perspectives that better account for the phenomena associated with social identity? This is, ultimately, an empirical question. However, we would argue that the function-to-form approach delineated above has an important conceptual advantage over explanations that rely on “intra-psychic needs” (e.g., self-esteem that needs to be protected, maintained, or increased; cf. Tajfel & Turner, 1979). Invoking intra-psychic needs raises the more basic question of why humans possess such needs, thus pushing back the explanatory burden. We briefly discuss what we believe is currently the most important alternative theory of tribal social identity.²

Optimal distinctiveness theory (Brewer, 1999, 2003; Brewer & Caporael, 2006) starts from the premise that ingroup–outgroup distinctions do not always involve competition or conflict and thus aims to provide an explanation for group identification that does not invoke intergroup competition. As humans rely on cooperation for survival, individuals must rely on others for information, help, and resources, and individuals must be willing to share information, help, and resources with others. Such cooperation requires that individuals trust others to cooperate in return. However, trusting others indiscriminately is a suboptimal strategy, as this leaves one vulnerable to exploitation by cheaters. A more optimal strategy would be to trust others contingently on the probability that they will cooperate in return. Social differentiation and group boundaries might be a way for individuals to achieve cooperation, by limiting the costs of trusting indiscriminately. Optimal distinctiveness theory holds that for the purpose of creating cooperative groups through social differentiation,

² There are several influential perspectives that are relevant to social identity and intergroup psychology. One notable perspective is terror management theory (TMT), which explains many human psychological phenomena—including intergroup bias—as resulting from motivations to uphold cultural worldviews (which, in turn, exist to assuage anxieties about death). Interestingly, evolutionary psychologists have attempted to explain many of the TMT-related phenomena as manifestations of coalitional psychology (e.g., Navarrete & Fessler, 2005). Thus, this is another example of an explanation relying on intra-psychic needs being updated by a more contemporary evolutionary psychological perspective.

humans have evolved opposing needs for inclusion (assimilation in groups) and differentiation from other individuals:

When a person feels isolated or detached from any larger social collective, the drive for inclusion is aroused; on the other hand, immersion in an excessively large or undefined social collective activates the search for differentiation and distinctiveness. Equilibrium is achieved through identification with distinctive social groups that meet both needs simultaneously. (Brewer, 1999, p. 434)

Optimal distinctiveness theory shares certain assumptions with our arguments outlined above (e.g., that it would be maladaptive to trust indiscriminately, that a more optimal strategy would be to trust others contingently on the probability that they will cooperate in return). However, our perspective differs in the specification of how individuals may determine the probabilities that others will reciprocate. Optimal distinctiveness theory proposes that individuals may use a somewhat crude heuristic to lower the probability of providing benefits to someone who will not reciprocate—that by limiting cooperation to a subset of all available others, individuals may reduce the costs of cooperation and still enjoy the benefits of cooperation (Brewer, 1999, 2003). By contrast, our arguments outlined above entail more specific proposals regarding how individuals might signal cooperative intent and specify the reasons other individuals might have for responding favorably to such signals. The key difference between optimal distinctiveness and our perspective is that we see intergroup competition/conflict as providing a necessary footing for the evolution of motivations to cooperate with a particular group of individuals (see also Boyd & Richerson, 2009; Van Vugt & Park, 2010). Also, our perspective attempts to explain why individuals who consider themselves part of a group would be motivated to trust each other. Specifically, it attempts to explain why individuals seeking alliances might be motivated to

trust individuals who claim to be or are considered to be ingroup members. (In optimal distinctiveness theory, trust is a defining characteristic of ingroups, but it is not explained why this would be so.) Furthermore, the hypotheses regarding the distinction between private and public social identity (with each having a specific function in balancing group contributions and benefits) are novel and not predicted by optimal distinctiveness theory.

To support their perspective, Brewer and Caporael (2006) referred to the findings that ingroup positivity does not necessarily predict outgroup negativity and that ingroup favoritism is often observed in the absence of outgroup prejudice. We believe there are a couple of crucial points to note. First, social context matters. It is not the case that all possible “intergroup” situations will give rise to antipathy toward outgroups. Humans likely possess mechanisms allowing them to learn (via socialization in their ingroups) which outgroups are the most insidious and demand vigilance. Thus, even within ecological contexts with multiple coalitional social identities, some outgroups may be distrusted more than others. Second, to say that a key evolutionary cause of ingroup cooperation was intergroup conflict is not to imply that, at the level of proximate psychological mechanisms, one necessarily should observe a correlation between ingroup favoritism and outgroup prejudice. While intergroup conflict may sometimes lead to both outcomes, antipathy toward outgroups is expected to be functionally strategic and thus separable from ingroup favoritism.

6. Additional issues highlighted by an evolutionary perspective

A key assumption in evolutionary psychology is that the mind is functionally specialized (Barrett & Kurzban, 2006). From such a perspective, one would predict that the mechanisms underlying coalitional social identity would be programmed to develop and become calibrated around the time when they are most functional (as it would be suboptimal to invest in the development of these mechanisms when they are not yet useful and when

resources can be channeled toward processes more important for survival). Thus, the development of social identity and possible sensitive periods in identity development are topics that fall within the scope of evolutionary analyses of social identity. If the mechanisms underlying coalitional social identity serve to forge group loyalty, then one might predict that the mechanisms underlying coalitional social identity will involve sensitive periods that coincide with when children have their first interactions with peers in the absence of parents (which plausibly is a situation in which they would need to forge alliances themselves, rather than relying on their parents for resources or cooperative benefits). For example, sports fandom—identifying as a supporter of a sports team—seems to be an expression of coalitional social identity (Winegard & Deaner, 2010). At least anecdotally, it would appear that fandom develops and solidifies during adolescence (the period of heightened independence from parents). The sports teams that one becomes a supporter of during adolescence (e.g., the Red Sox for a teenager growing up in Boston) seem to be those that one supports later in life, even after moving to a different city. (Note that one could make a similar argument for gender identities developing during adolescence, as from that age individuals might engage in potentially reproductive romantic relationships. However, gender identities actually develop at a much younger age. As this chapter focuses on tribal identities, we only mention this puzzle.) The development of social identity and the presence of sensitive periods may be a fruitful topic for further research.

7. Conclusion

Psychological investigations of social identity might usefully make a distinction between social identities associated with coalitional (“tribal”) groups, such as ethnicity and social class, and identities associated with non-coalitional categories, such as sex and age, as the mechanisms underlying these different identities are unlikely to overlap completely. We

have described an evolutionary psychological perspective on coalitional social identity that started with a conjecture about an ultimate function of social identity. In a social ecology with intergroup competition, social identification may involve opportunity costs and, thus, both signal and motivate cooperation. Based on this conjecture about function, we derived predictions about form—the proximal psychology of social identification. Many questions remain. In particular, further research may examine whether social identity involves private social identities (for balancing costs and benefits of group membership) and public social identities (for strategically influencing the behaviors of others).

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