Social Construction and the Concept of Race

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Word count: 5800

Abstract

There has been little serious work to integrate the constructionist approach and the cognitive approach in the domain of race, although many researchers have paid lip service to this project. We believe that any satisfactory account of human beings' racialist cognition has to integrate both approaches. In this paper, we propose a step toward this integration. We present an evolutionary theory that rests on a distinction between various kinds of groups (kin-based groups, small-scale coalitions and ethnies). Following Gil-White (1999, 2001a, b), we propose that ethnies have raised specific evolutionary challenges that were solved by a specific evolved cognitive system. We suggest that the concept of race is a by-product of that mechanism. To integrate the social constructionists' and the cognitive theorists' insights, we rely on the psychology that underlies Boyd and Richerson's theory of cultural evolution (Boyd and Richerson 1985, forthcoming).

1. Introduction

A dominant view about races today is the so-called "social constructionist" view. Social constructionists propose that the concept of race, i.e., the belief that a classification based on skin color and other skin-deep properties like body shape or hair style maps onto meaningful, important biological kinds, is a pseudo-biological concept that has been used to justify and rationalize the unequal treatment of groups of people by others.ⁱ

Social constructionism became prevalent mainly because from the 70's on, it has been widely recognized that the biological concept of subspecies, that is, of populations of conspecifics that are genetically and morphologically different from each other, could not be applied to humans. However, it has been shown that there is more genetic variability within human racial groups than between them (Lewontin 1972; Brown and Armelagos 2001). Moreover, assigning an individual to a race does not buy the inferential power you are usually warranted to expect from a biological kind term. Finally, classifications based on different phenotypic traits (skin color, body shape, hair...) usually cross-cut each other (Brown and Armelagos 2001). Thus, the racialist tenet that skin color and other skin-deep properties (hair type, body shape...) pick up different subspecies is simply false.

Biology has thus fuelled the recent racial skepticism of social constructionists, that is, the view that races do not exist (Mallon, forthcoming).ⁱⁱⁱ But social constructionists about race are

not mere skeptics. They usually underscore the instability and diversity of human beings' concepts of races. For instance, Omi and Winant note that an "effort must be made to understand race as an unstable and 'decentered' complex of social meanings constantly being transformed by political struggle" (2002, 123, see also Root 2000). Others suggest that the notion is a modern invention, rooted in the 18th century taxonomies of Linnaeus and Blumenbach. For them, there were times or places where people did not have *any* concept of race (Banton 1970).

The constructionist view is not without qualities (for a critical review, see Machery and Faucher, forthcoming). It suggests rightly that human beings' concepts of race do not occur in a social vacuum: social environments are important to explain the content of humans' concepts. It emphasizes also correctly the cultural diversity of human beings' concepts of races. Any account of racialism has to be consistent with these facts. However, it is not without difficulties either. First, it does not explain why many cultures have developed some concept of race and some classification based on phenotypic features: why does the very idea of race invade so easily the human mind when physically different human groups meet? Besides, the social constructionist approach does not explain the commonalities between the culture-specific concepts of race, e.g., the concepts of race in contemporary North-America, in 19th century Europe, in the Nazi Germany. It does not explain why the content of human beings' folk concepts of race seems to be tightly constrained (Hirschfeld 1996). Since these

questions have not been addressed by leading social constructionists, the social constructionist explanation of racialism is incomplete.

There is a growing literature in evolutionary psychology and evolutionary anthropology that tries to address these very questions. Although no consensus has yet emerged, several proposals have been recently put forward that attempt to describe the underlying cognitive mechanisms responsible for the production of racial concepts (e.g., Hirschfeld 1995, 1996, 1997, 2001; Kurzban et al. 2001; Cosmides et al. 2003; Gil-White 1999, 2001a, b; Machery and Faucher forthcoming). Researchers agree that racialism has not been selected for: it is a byproduct of an evolved cognitive system, which was selected for another function. However, they disagree on the nature of this competence. We will draw on some of their theories to develop our own proposal. Prima facie, evolutionary theorists face a challenge that is symmetric to the one that is faced by social constructionists. Since they posit a species-typical cognitive system to explain racial categorization, the explanation of the cultural diversity of the concepts of race does not fall immediately out of their approach. It has to be shown that the claim that a species-specific human cognitive system underlies racialism is consistent with the evidence that racial concepts vary across cultures and times and are influenced by culturespecific beliefs. iv

Thus, we are confronted with two explanatory approaches of racial categorization that are symmetrically incomplete. This point has been recognized by several evolutionary-minded researchers. Indeed, they have paid lip service to the project of integrating the constructionist

approach and the cognitive/evolutionary approach in the domain of race (e.g., Hirschfeld 1996). However, in the domain of race, little has been concretely done to move toward this integration.

In this paper, we purport to move toward this integration. We propose that what having a race means for each individual, i.e., her concept of race, is determined by several factors. Among them, following Gil-White (1999, 2001a, b), we emphasize the importance of an evolved disposition to think about ethnies in a biological way. However, appealing to Boyd and Richerson's views about the psychological basis of cultural transmission, we propose that whether this disposition determines the way we think about race depends on other factors as well. We argue that our proposal accounts for the similarity between culture-specific concepts of race as well as for their differences.

Our strategy is the following. In section 2, we distinguish three kinds of groups, kin-based groups, small-scale coalitions and ethnies. Following Gil-White (1999, 2001a, b), we propose that ethnies have raised specific evolutionary challenges that were solved by a specific evolved cognitive system. People's concept of race is often a by-product of that mechanism. We thereby meet the challenge faced by the social constructionist view: we account for the similarities among the concepts of race. In section 3, we build on Boyd and Richerson's theory of cultural evolution (Boyd and Richerson 1985, forthcoming) in order to integrate the social constructionists' insights and the cognitive/evolutionary theorists' insights. We thereby meet

the challenge faced by the cognitive/evolutionary approach: we account for the differences between concepts of race.

2. Ethnic Cognition and Racialism

2.1. The Ethnic Cognition Hypothesis

There is now a large body of evidence that small-scale coalitions were not the only important human kinds during human evolution (Bettinger 1991, 203-205; Rodseth et al. 1991; Richerson and Boyd 1998, 1999, 2001; Richerson et al. 2003, 369). Beside their kin-based groups and small coalitional groups, our ancestors belonged also to larger groups, called "tribes" or "ethnies".

Ethnies are large groups that can be made from 500 to some thousands of people. The Nuer and the Dinka in Sudan and the Iroquois in North America illustrate this form of social organization. Ethnies are divided into smaller units, often called "bands". Various properties (social stratification, accumulation of wealth etc.) have been put forward by anthropologists to distinguish the ethnic level of human social organization from the band level. Very few properties are common to all ethnies (Knauft 1991, 418). However, Boyd and Richerson underscore that ethnies form cultural units. Many culturally-transmitted norms, including norms of cooperation, are recognized by all the members of a given ethnie and these norms differ from the norms that prevail in other ethnies (Richerson and Boyd 1998, 1999). This level of social organization is specifically human. The first ethnies appear in the

archaeological record 50 000 years ago (Klein 1999) and may have existed earlier (but see Knauft 1991, 392).

We are aware that the notion of ethnie is quite controversial in some anthropological circles. Some social constructionists believe that ethnies were a by-product of colonialism. Other anthropologists downplay the importance of ethnies, insisting that people manipulate freely their ethnic identification. We agree that the traditional notion of ethnie, as an encompassing and coherent group that differs linguistically and culturally in toto from other groups, is problematic. Some norms are specific to sub-ethnic groups while others are shared by several ethnies. We agree also that ethnic membership may have been more or less important in defining one's identity. But it remains that the notion of relatively large groups that are characterized by specific norms is coherent and describes plausibly the social life of our ancestors (Richerson and Boyd 2001).

We follow Boyd, Richerson and colleagues in hypothesizing that this level of social organization has created *sui generis* adaptative pressures. According to them, beside the cognitive mechanisms that evolved to deal with kin and small-scale coalitions, Mother Nature has endowed us with specific cognitive mechanisms whose function is to commit us to respect the norms of our own ethnie (particularly, the group-beneficial norms). More generally, it is plausible that this social organization put enough selective pressures on humans that we evolved a cognitive system dedicated to various dimensions of the ethnic life. With Gil-White, we would like to suggest that this is the key for understanding racialist cognition.

2.2. An Adaptive Scenario: Ethnic Cognition and the Exaptation of Human Folk Biology

On the basis of the picture presented above, Gil-White has suggested the following adaptive story (Gil-White 1999, 2001 a, b). Vi Humans are disposed by evolutionary design to perceive ethnies as biological species. They apply their evolved folk biology system to them. Vii This system contains the innate knowledge about biological species and the reasoning heuristics that are generally applied to them (Atran 1990; Medin and Atran 1999). Essentialism, that is, the belief that categories are defined by essences, is supposed to be an important element of this module (Atran 1990; Gil-White 2001a; but see Machery and Faucher, forthcoming). We are thus disposed to believe that ethnic membership is an essential property, that it is transmitted at birth from one's parents and that it determines people's behavior.

During human evolution, folk biology was applied to ethnies because ethnies and species shared several important characteristics (Gil-White 2001a, 518-519). Ethnies are characterized by clusters of stable, culturally transmitted behavioral norms and different ethnies have often different norms. Thus, like conspecifics, coethnics behave similarly, and members of different ethnies behave differently. Besides, when members of two different ethnies interact, the interactions whose success requires shared behavioral norms remain fruitless. Humans are sensitive to such costs. Hence, norm boundaries tended to coincide with many social interactions. This is particularly true of mating. Finally, ethnies are often distinguished by external markers (McElreath et al. 2003). Our ancestors tended to broadcast their ethnic

membership and to pay attention to these signals (dress, body marks etc.). Parents and children usually display the same markers. To summarize, ethnies share the following characteristics with species: coethnics have a distinctive morphology (dress etc.), coethnics behave in a characteristic way, ethnic membership is based on descent, and reproduction is endogamous.

Our folk biology has been exapted to be applied to ethnies (Gil-White 2001a, 518, 530-532): that is, thinking about ethnies biologically was adaptive and was selected for. For this may be good epistemology – though it is certainly bad science: this way of thinking justifies inductive generalizations on the basis of limited contacts. Since members of other ethnies have many behaviors in common because they share the same norms, such wild generalizations may tend to be true. More important, a species view of the ethnic world plausibly reduces the frequency of fruitless interactions across ethnic boundaries – particularly mating across ethnic boundaries. It may underlie a preference for interactions with coethnics and a reluctance to interact with members of other ethnies.

2.3. Racialism: The Misfiring of our Ethnic Cognitive System

Races trigger by mistake our folk biology/ethnic module. That is, humans tend to assume erroneously that humans with a given skin color form or a given phenotype form an ethnie. For, the physical properties that define race membership are similar to ethnic markers. And, like ethnic markers, they are shared by parents and children. Thus skin color is taken for an

ethnic marker. We emphasize that this is a by-product of our ethnic cognitive system. For, races are not ethnies – although they may be ethnicized.

2.4. Folk Biology and Cultural Transmission

Although we endorse most of Gil-White's ideas, we disagree on several points. We focus here on the problems that are the most relevant for the problem at hand (see Machery and Faucher forthcoming). First, we propose that the evolved content of our folk biology is in fact relatively poor. There is some convincing evidence that we are disposed to think of species in a hierarchical way (Atran, 1990; Medin and Atran, 1999) and to reason inductively about them in a peculiar way (Gelman and Markman 1986). Gil-White (2001a, 524 sq.) agrees that most of our folk biological beliefs are learned or culturally transmitted. But he claims that we are predisposed by design to acquire some specific beliefs. We disagree (Machery and Faucher, forthcoming). Many folk biological beliefs vary across cultures. For example, in some cultures, people seem to believe in the possibility of cross-specific fertile reproduction (Atran, personal communication). It is true that some folk biological beliefs appear to be universal. However, this may be because those beliefs are true and easily learned. Moreover, beliefs about ethnic and racial memberships vary substantially across individuals. Finally, we do not see which adaptive advantage could be provided by an evolved predisposition to learn many folk biological beliefs. Consider, for example, the beliefs that conspecifics naturally mate with each other and that they engender conspecifics. Certainly, once animal domestication was

included in humans' behavioral repertoire, these beliefs were useful. However, animal domestication is a very late phenomenon in human evolution. And outside domestic breeding, we do not see what adaptive advantage could be conferred by them. Thus, it is unlikely that we have evolved to entertain them. As we will see, the claim that most of our folk biology is culturally transmitted is important to explain the cultural diversity of concepts of race.

Second, we disagree with the way Gil-White characterizes the relation of the evolved biological conceptualization of ethnic membership with learned non biological conceptualizations. Gil-White (2001a) proposes that the biological conceptualization lies beneath learned non biological conceptualizations. Deep down, everybody tends to think of ethnic membership in a biological way, even though some may be committed to non biological conceptualizations. We present below an alternative view.

3. Culture and Evolved Cognition: Toward an Integrated Account of Racialism

On the basis of Gil-White's evolutionary scenario, we hypothesize various components of our evolved ethnic cognition. We mention briefly some evidence that supports these hypotheses. We argue that this system shapes the cultural transmission of the concept of race. This explains which aspects of the concept of race tend to be universal and which aspects tend to vary across cultures.

3.1. Elements of the Evolved Ethnic Cognitive System

We focus on the aspects of the ethnic cognitive system that matter for the problem at hand. The evolutionary importance of ethnics suggests that Mother Nature has predisposed us to pay attention to people's ethnic membership (Gil-White 2001a; McElreath et al. 2003). Hence, ethnic membership should be a primitive of our encoding of people's characteristics (with gender and age, for example). This is indirectly supported by the evidence found in the literature about race categorization. Race is often encoded by adults even when this information is utterly irrelevant (but see Kurzban et al. 2001). Notice that this does not imply that humans are always paying attention to ethnic membership to the same degree. Ethnicity's salience may vary from context to context. Given that ethnic information may be important early in life, for example to determine which individuals to imitate during childhood or youth, this disposition should be on quite early. Hirschfeld (1996) shows indeed that young children encode spontaneously race information (particularly, when it is presented verbally).

In order to determine people's ethnic membership, one has to pay attention to the physical cues that signal it, i.e., ethnic markers. Thus, one should be disposed to learn which ethnic markers are relevant in one's environments and to look for these markers in others. Gil-White (2001a, 548-549) suggests also that children are predisposed to pay attention to specific ethnic markers, like clothes or body marks. Skin color is taken to be one of those cues.

We should also be endowed by design with a domain-specific mechanism to learn concepts of ethnies, that is, beliefs about their characteristic ethnic markers and generalizations about their members. Clearly, we are not predisposed to entertain any specific ethnic concept, say TORGUUD: there was no Torguud when humans faced ethnic evolutionary pressures. But we may be predisposed to learn ethnic concepts in a specific way. Let's call the hypothetical domain-specific mechanisms through which we learn concepts of ethnics the ethnic concepts acquisition device (ECAD).

Gil-White's evolutionary argument suggests that this learning mechanism is based on our folk biology. Now, concepts that are learned by a domain-specific cognitive system have a default content. When they are acquired, some aspects of their content do not have to be explicitly taught or transmitted. The domain-specific system completes the aspects of their content that are not taught with default values. This idea has been used by Boyer to explain some aspects of human beings' concepts of gods. No culture has developed a concept of a god that exists only Sunday, although this is not explicitly taught (Boyer 2001). He suggests that the cognitive system(s) that creates these concepts fills them in with the default assumption that, as any other individual, gods exist continuously. The same is plausibly true of our ethnic concepts. That is, when our folk biology forms an ethnic concept, it fills it in with some default assumptions. Hence, by default, ethnic concepts should be similar to animal species concepts. This idea is supported by Hirschfeld's developmental studies and by Gil-White's cross-cultural data. From an early age on, and in several cultures, children reason about ethnies in a biological manner, whether or not they have been taught to do so. That is, in several respects, they reason about ethnies/races as if they were species: they believe that some racial properties are transmitted at birth and constant over life. Thus, they seem to have filled in their ethnic concepts with some biological assumptions.

Hirschfeld's studies cast some light on this mechanism (Hirschfeld 1996). Particularly, they show that this system is on very early. Moreover, its inputs are not necessarily, and maybe not primarily, visual. Linguistic inputs, for example names, say "Torguud", may be sufficient to acquire an ethnic concept. McElreath et al.'s and Gil-White's arguments about the importance of ethnic markers suggest that visual cues, for example bodily and behavioral characteristics, are likely to trigger the ECAD too. Other perceptual cues, for example auditory cues like a foreign language or a specific accent, may also be important. We propose that we are sensitive to physical cues that could be markers for new ethnies or to names that could refer to new ethnies. When this happens, we create a new ethnic concept.

Finally, since races are mistaken for ethnies, what we said in the previous paragraphs is true of our racial concepts. We pay attention to race via what we take to be their markers, skin color, body shape etc. We create racialist concepts on the basis of physical cues, e.g., skin color, or of new names. We fill these concepts in with biological assumptions. We call this disposition "biologism".

3.2. How Children learn Racial Concepts?

We propose that our ethnic cognition creates a cognitive track for the cultural transmission of racial concepts. That is, it favors the retention of concepts of race that are consistent with the

default assumptions provided by our folk biology. Concepts of race that are not consistent with these views, for example non biological concepts of race, are less easily memorized, more easily forgotten etc.^x

Indeed, since skin color (or other racial characteristics) is taken for an ethnic marker, it triggers the ethnic concepts acquisition device. As a result, a concept is created, that refers to the class of individuals that display this alleged marker. This class is taken to be an ethnic and default beliefs, based on the individual's folk biology, are assumed to be true of this class. If names for races are part of a language, they may trigger the ECAD as well. We thus see that by default, humans tend to think of groups of individuals that share these superficial properties biologically.

The story is however more complicate. Boyd, Richerson and their colleagues emphasize that several forces determine which information is culturally transmitted (Boyd and Richerson 1985, forthcoming; Henrich and McElreath 2003). Human beings' minds are disposed, by evolved design, to acquire beliefs, values etc., from others, their cultural parents—which are not necessarily their biological parents. This cultural transmission is shaped by various biases. Two kinds of biases can be distinguished, the content biases and the context biases (Henrich and McElreath 2003). The content biases correspond to the psychological systems that favor the transmission of a specific kind of beliefs/concepts instead of others ("attractor" in Sperber's terminology, "cognitive track" in Boyer's, see also Boyd and Richerson 1985, chap.

parents. For example, cultural transmission is conformist: people tend to acquire the beliefs that are common among their models (Boyd and Richerson 1985; Henrich and Boyd 1998). Cultural transmission is also prestige-dependent (Henrich and Gil-White 2001): people acquire the cultural variants that are held by prestigious individuals.

Obviously, the ECAD creates a strong context bias for a biological conception of race. Moreover, we propose that the two context forces affect the transmission of our concepts of races. Thus, someone will endorse a biological concept of race depending on whether most cultural parents, for instance peers for children, or successful individuals treat skin color as if it were a mark of an ethnie.

If all three forces select for biologism, it is obviously culturally transmitted. What if this is not the case? Cognitive theories of cultural transmission suggest tentatively the following points. When there is only one attractor in the racialist domain, i.e., the ECAD, people are likely to end up with biological concepts even if the two context forces select against essentialism. For the attractor swamps the context forces (Sperber 1996). But things might turn out to be different if there are two content biases, a biological one and a non biological one. This may be the case, for example, if a culture's moral values are inconsistent with treating skin color as an ethnic marker. In such cases, the attractors may not determine the outcome of the cultural transmission of cultural variants (Henrich and Boyd 2002). Conformity and prestige-dependent imitation determine what is culturally transmitted. Thus, cultural transmission could favor non-biological concepts of race, if beside the ECAD, an

aspect of our cognition favors non-biological concepts of race. There is some evidence for this claim (Allport 1979, chap. 20). The phenomenon of "prejudice with compunction" shows that the prejudiced individual can have a moral emotion, e.g., shame, which prevents him for endorsing completely his prejudice and from acting on it.

3.3. Solving the Integration Challenge

The psychological hypothesis about the learning of racial concepts will allow us to integrate the social constructionist approach and the evolutionary/cognitive approach. We have seen that our evolved ethnic cognition creates a psychological bias in favor of biological concepts of race. If this bias is not overridden by other psychological biases, it drives the cultural transmission of the concepts of race. This explains why biologism is culturally widespread.

If the attractor is counteracted by some learned psychological bias, the nature of our concept of race may depend on conformism and on the prestige-dependent bias. Thus, *pace* Gil-White, it is not the case that beneath non biological conceptualization of races, one finds the evolved biological concept. How we think about race depends on several factors. The ethnic system is only one of them.

What about those aspects vary widely across cultures and times? Social constructionists have rightly emphasized them. In order to explain them, we suggest that we have to take into account some acquired, culture-specific content biases. Not all content biases are innate. Some are culturally acquired. Our culture-specific folk theories select for some concepts of races

instead of others. That is, concepts of race that are consistent with the culture-specific folk-theories may be transmitted more easily than other concepts of race within the corresponding cultures. Particularly, we have rejected a content-rich evolved folk biology. Since out racial concepts are filled in with default values derived from folk biology, culture-specific folk biologies should favor different types of racial concepts. For example, a biological concept of race that fits with a child's culture-specific folk biology may be more easily culturally transmitted than a biological concept that is at odds with it. There is indeed some evidence that culture-specific concepts of race are influenced by the culture-specific theories of contamination and by the culture-specific aspects of folk biology (Hirschfeld 1996, chap. 2).

Conformism and prestige-dependent imitation affect also the transmission of our concepts of race. Suppose that there are two biological concepts of race that differ in some respects. The biological concept that is possessed by prestigious cultural parents may be more easily culturally transmitted than the other.

This explains why our concepts of race vary across cultures. More important, it explains why some aspects of our concepts of race vary while others do not. Biologism should tend to be cross-cultural. Aspects of our concepts that are not based on the evolved components of our folk biology should vary widely across cultures according to the cultural variation of folk biology.

4. Conclusion

Social constructionists and evolutionary-minded social scientists avoid interacting with each others. We believe that this has very negative consequences. Cognition is culturally informed and cultural transmission is an evolved aspect of our mind.

Racialism, that is, the belief that phenotypic classifications map into biological kinds, illustrates this point. Any good theory of racialism has to take into account the main points of the social constructionist approach, including the fact that people's concepts of race vary across cultures and how it does. However, without a cognitive cum evolutionary background, the social constructionist approach is incomplete.

Our position purports to account for the similarities and for the differences between culture-specific concepts of races. Instead of simply illustrating this diversity, as constructionists do, and instead of neglecting it, as many evolutionary/cognitive scientists do, we try to explain it. Concepts of race are culturally transmitted. The cultural transmission of these concepts is shaped by several biases. The most important one is an evolved ethnic cognitive system that is misapplied to races. This system, the ethnic concepts acquisition device, results from the exaptation of our folk biology for the ethnic domain. Cultural transmission is also biased by conformism and prestige-dependent imitation. These biases determine whether skin color and other superficial properties are treated as ethnic markers, and this whether biological concepts of race are transmitted. People's concepts of race vary culturally, because most of our folk biology is culturally transmitted.

People are just starting to study the yet poorly understood interaction between culture and our evolved cognition. We are conscious that our approach is just a small step in this direction. But many small steps may make a big leap...

REFERENCES

Allport, G. (1979), The Nature of Prejudice. Reading: Addison-Wesley.

Amodio, David M., Eddie Harmon-Jones, and Patricia G. Devine (2003), "Individual Differences in the Activation and Control of Affective Race Bias as Assessed by Startle Eyeblink Response and Self-Report", *Journal of Personality and Social Psychology* 84, 4: 738-753.

Atran, Scott (1990), *Cognitive Foundations of Natural History*. Cambridge: Cambridge University Press.

Banton, Michael (1970), "The Concept of Racism", in S. Zubaida (ed.), *Race and Racialism*. London: Tavistock Publications, 17-34.

Bettinger, R. L. (1991), *Hunter-gatherers: Archaeological and Evolutionary Theory*. New York: Plenum.

Boyd, Robert, and Peter J. Richerson (1985), *Culture and the Evolutionary Process*. Chicago: University of Chicago Press.

——— (forthcoming) *Not by Genes Alone: How Culture Transformed Human Evolution.*Chicago: University of Chicago Press.

Boyer, Pascal (2001). Religion Explained: The Evolutionary Origins of Religious Thought. New York: Basic Books.

Brown, R. A. and G. J. Amelagos (2001), "Apportionment of Racial Diversity: A Review", *Evolutionary Anthropology* 10: 34-40.

Cosmides, Leda, John Tooby and Robert Kurzban (2003), "Perceptions of Race", *Trends in Cognitive Science* 7, 4: 173-179.

Faucher, Luc (1999), "Emotions Fortes, Constructionnisme Faible et Eliminativisme", *Philosophiques* 25, 1: 3-35.

Gelman, Susan A., and Ellen Markman (1986), "Categories and induction in young children", *Cognition* 23: 183-209.

Gil-White, Francisco (1999), "How Thick is Blood? The Plot Thickens...: If Ethnic Actors are Primordialists, What Remains of the Circumstantialists/Primordialists Controversy?", *Ethnic and Racial Studies* 22, 5: 789-820.

——— (2001a), "Are Ethnic Groups Biological 'Species' to the Human Brain", *Current Anthropology* 42, 4: 515-554.

——— (2001b), "Sorting is not Categorization: A Critique of the Claim that Brazilians Have Fuzzy Racial Categories", *Cognition and Culture* 1, 3: 219-249.

Henrich, Joseph, and Robert Boyd (1998), "The Evolution of Conformist Transmission and the Emergence of Between-Group Differences", *Evolution and Human Behavior* 19: 215-241.

——— (2002), "On Modeling Culture and Cognition: Why Cultural Evolution Does Not Require Replication of Representations", *Culture and Cognition* 2, 2: 87-112.

Henrich, Joseph, and Francisco Gil-White (2001), "The Evolution of Prestige: Freely Conferred Deference as a Mechanism for Enhancing the Benefits of Cultural Transmission", *Evolution and Human Behavior* 22, 3: 165-196.

Henrich, Joseph, and Richard McElreath (2003), "The Evolution of Cultural Evolution", *Evolutionary anthropology* 12: 123-135.

Hirschfeld, Lawrence A. (1995), "Do Children have a Theory of Race?", *Cognition* 54: 209-252.

——— (1996), Race in Making: Cognition, Culture, and the Child's Construction of Human Kinds. Cambridge, MA: MIT Press.

——— (1997), "The Conceptual Politics of Race", *Ethos* 25, 1: 63-92.

——— (2001), "On a Folk Theory of Society: Children, Evolution, and Mental Representations of Social Groups" *Personality and Social Psychology Review* 5, 2: 107-117.

Klein, R. G. (1999), *The Human Career: Human Biological and Cultural Origins*, 2nd ed. Chicago: Chicago University Press.

Knauft, Bruce M. (1991), "Violence and Sociality in Human Evolution". *Current Anthropology* 32, 4: 391-428.

Kurzban, Robert, John Tooby, and Leda Cosmides (2001), "Can Race be Erased? Coalitional Computation and Social Categorization", *Proceeding of the National Academy of Science* 98, 26: 15387-15392.

Lewontin, Richard C. (1972), "The Apportionment of Human Diversity", *Evolutionary Biology* 6: 381-398.

Machery, Edouard, and Luc Faucher (forthcoming), "Why do we Think Racially? A Critical Journey in Culture and Evolution", in Henri Cohen and Claire Lefebvre (eds.), *Categorization in Cognitive Science*, Elsevier.

McElreath, Richard, Robert Boyd, R., and Peter J. Richerson (2001), "Shared Norms Can Lead to the Evolution of Ethnic Markers", *Current Anthropology* 44: 122-130.

Mallon, Ron (forthcoming), "Passing, Traveling and Reality: Social Construction and the Metaphysics of Race".

Mallon, Ron and Stephen P. Stich (2000), "The Odd Couple: The Compatibility of Social Construction and Evolutionary Psychology", *Philosophy of Science* 67: 133-154.

Medin, Douglas, and Scott Atran (1999), Folkbiology. Cambridge, MA: MIT Press.

Omi, M. and H. Wimant (1993), "On the Theoretical Status of the Concept of Race", in W. Crichlow and C. McCarthy (eds.), *Race, Identity, and Representation in Education*. New York: Routledge.

———— (2002), "Racial Formation", in P. Essed and D. T. Goldberg (eds.), *Race Critical Theories*. London: Blackwell, 123-145.

Richerson, Peter J., and Robert Boyd (1998), "The Evolution of Human Ultra-Sociality". In I. Eibl-Eibesfeldt and Frank K. Salter (eds.), *Indoctrinability, Ideology and Warfare*. New York: Berghahn Books, 71-96.

——— (2001), "The Evolution of Subjective Commitment to Groups: A Tribal Instincts Hypothesis", in R. M. Nesse (ed.), *The Evolution of Subjective Commitment*. Russell Sage Foundation.

Richerson, Peter J., Robert Boyd, and Joseph Henrich (2003), "Cultural Evolution of Human Cooperation". In Peter Hammerstein (ed.), *Genetic and Cultural Evolution of Cooperation*. Cambridge, MA: MIT Press, 357-388.

Rodseth, Lars, Richard W. Wrangham, Alisa M. Harrigan and Barbara B. Smuts (1991), "The Human Community as a Primate Society". *Current Anthropology* 32, 3: 221-254.

Root, M. (2000), "How We Divide the World", Philosophy of Science 67: S628-S639.

Sperber, Dan (1996), Explaining Culture: A Naturalistic Approach. London: Blackwell.

Vanman, E. J., B. Y. Paul, T. A. Ito, and N. Miller (1997), "The Modern Face of Prejudice and Structural Features that Moderate the Effect of Cooperation on Affect", *Journal of Personality and Social Psychology* 73: 941–959.

Footnotes

¹ Notice the following distinction. *Racialism* is the idea that classifications made on the basis of some visible physical features (skin color, height, hair, dialect, etc.) have a biological reality. It must be distinguished from *racism* that adds value judgments (mostly negative, but sometimes positive) to racialism (see Hirschfeld 1996, 3). In this paper, we will be focusing on racialism.

ⁱⁱ That is not to say that you are not getting any inferential power at all, but this power does not come from the fact that you have isolated a biological natural kind, but rather because the *concept* of race 'continues to play a fundamental role in structuring and representing the social world' (Omi and Winant 2002, 124).

iii We use the term "race" to refer to the groups that are identified as racial by some society.

Although there are no races – meaning that there are no groups that can be both be identified by a set of phenotypic properties, like skin color and hair appearance, and have a biological reality, there are groups that are identified as races, e.g., Blacks, Whites etc.

iv The same point can be made about various other aspects of our cognition (e.g., Sperber, 1996; Faucher 1999; Boyer 2001; Mallon and Stich 2000).

^v Our strategy could perhaps be applied fruitfully to other domains as well.

vi Machery and Faucher (forthcoming) discuss other evolutionary/cognitive hypotheses.

vii There is not many *stricto sensu* ethnies left. But many groups, particularly many political groups, e.g., nations, are similar to ethnies in that they are normative units.

viii Of course, migrations, cultural influences, and economic exchanges occur between ethnies.

However, exchanges across ethnic boundaries differ markedly from exchanges between coethnics.

^{ix} See note viii.

^x Boyer 2001 makes the same claim about our religious concepts.