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Theory and History in the Human and Social Sciences

Wolfgang Wagner
Cristina Moya *Editors*

Culture, Identity, and Essentialism

Anthropological and Psychological
Approaches

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 Springer

Theory and History in the Human and Social Sciences

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Theory and History in the Human and Social Sciences fills the gap in the existing coverage of links between new theoretical advancements in the social and human sciences and their historical roots. Making that linkage is crucial for interdisciplinary synthesis across the disciplines of psychology, anthropology, sociology, history, semiotics, and the political sciences. In contemporary human sciences of the 21st century, there exists increasing differentiation between neurosciences and all other sciences that are aimed at making sense of complex social, psychological, and political processes. This series serves the purpose of (1) coordinating such efforts across the borders of existing human and social sciences, (2) providing an arena for possible inter-disciplinary theoretical synthesis, (3) bringing to the attention of our contemporary scientific community innovative ideas that have been lost in the dustbin of history for no good reason, and (4) providing an arena for international communication between social and human scientists across the world.

Wolfgang Wagner · Cristina Moya
Editors

Culture, Identity, and Essentialism

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Anthropological and Psychological Approaches to Culture, Identity, and Essentialism



Cristina Moya and Wolfgang Wagner

1 Motivation

Nearly every social science is home to researchers asking why people form the social identities they do, how these are influenced by culture, and why these conceptions are sometimes essentialist. As disciplinary specialization has increased, these research areas have largely developed independently of each other since the mid-twentieth century leading to diverse definitions, methods, and understandings of how culture, identity, and essentialism are related to each other. This book represents an attempt to bring researchers across social science disciplines into conversation with each other and to provide an overview of contemporary understandings of how cognition and culture co-evolve in this domain. More specifically, we intend that the contributions to this book will help us build a more complete picture of how essentialist beliefs about social identities are shaped by genetically and culturally evolved cognitive mechanisms, and their interaction. Of course, to make progress on understanding such a complex system, authors will have carved out specific parts of this causal sequence as the focus of their analysis. In this introductory chapter, we therefore try to lay out some of the definitions, concepts, and premises shared by the contributors, pointing out some of the places where disagreements might arise. We end by briefly characterizing each contribution and which piece of the essentialism system it addresses.

This volume assembles contributions from the disciplines of developmental, cognitive, and social psychology, evolutionary biology and evolutionary cultural anthropology. Scholars from these social sciences are well-positioned to research

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and reflect on, culture, identity, and essentialism. This is the case even though, and exactly because the research traditions of the two sciences diverge in their starting assumptions, that is in their theoretical premises about the nature of the phenomena in question.

Perhaps one of the most fruitful, yet problematic, divisions of labor between these disciplines is the scale at which they focus their research questions. To simplify, psychologists tend to address their questions at the scale of the individual, while anthropologists are more likely to ask questions about social or cultural systems. For example, in traditional anthropological work, culture is seldom treated as a property of an individual. Instead, cultural and social processes are investigated through ethnographic inquiry that relies on participant observation and deep engagement with relatively few key informants or interlocutors. This anthropological approach implicitly treats such participants as representatives or translators of certain cultural experiences.

In contrast, psychologists traditionally treat culture as the aggregate of thoughts in individuals' minds. To capture this construct, and explain variation within populations, they relish recruiting large samples of participants, even if they are quite culturally homogenous undergraduates, and therefore unrepresentative of the target population for which they wish to draw inferences.

This tension between the role of the individual and of the structural in shaping behavior is as old as our disciplines, and our analyses of culture, identity, and essentialism should continue wrestling with these complex causal relations between scales of organization. Early sociologists, such as Émile Durkheim (1984) and anthropologists such as Alfred Kroeber (1917) introduced similar concepts of "collective consciousness" in 1893 and "the superorganic" in 1917 to describe the idea that culture is more than the sum of the information in individual minds. These social realities or "social facts" are of course products of individual humans in interaction, but in turn structure and constrain people's behavior often in coercive ways. Interestingly, when Freud dabbles with similar ideas of the group mind in *Group Psychology and the Analysis of the Ego* (Freud, 2007), collective effects are seen as aberrant conditions of mass movements that act as a sort of contagion—rather than as regular feature of all societies. Already in the beginning of the twentieth century we see the seeds of these disciplinary differences.

This basic difference in the scales of analysis is then reflected in other disciplinary traditions. For example, anthropologists tend to bring a more global perspective to social issues, and some consider long-term processes of genetic evolution and historical change, while social psychologists tend to do their research in rich state societies, focusing on the applied concerns of the here and now. Anthropologists' orientation often glosses over the role of mental mechanisms and their ontogenetic development in social dynamics. Psychologists, instead, delve into the psychological apparatus that processes social stimuli and the psychological ramifications of social conditions. Their frequent use of experimental and quantitative methods allows psychologists to map mental processes in some detail.

On the other hand, social psychologists largely ignore broader social processes that produce belief systems that get internalized in different ways across cultures. This

failure to appreciate the diverse forms that psychological processes can take across cultures is of both methodological concern—as reflected in the problem of cross-cultural measurement—and theoretical concern—as reflected in premature generalizations about human universals; replication failures are legendary (e.g., Amir & Sharon, 1987; Nosek et al., 2022; Open Science Foundation, 2015).

These disciplinary differences obscure the fact that cultures, identities, and essentialism are both intuitions and institutions. Minds hold and organize beliefs, concepts, and schemata that influence social structures. These structures in turn produce, or at least influence, these minds as individuals internalize belief systems and experience their coercive power. There are no institutions without minds, and no minds without institutions. At least in humans, such non-socialized minds would function very poorly. We therefore need both anthropological research that brings a more global, and sometimes evolutionary or historical perspective on the development of social conditions and institutions, and psychological research that maps out mental processes in some detail through experimental methods with large samples. If essentialism is both an early developing intuition and a strategically useful ideology, it is clear this interplay between the social and the individual merits our close attention in this domain. No one researcher can address all the causal relationships in this complex system, but several of the authors in the volume are trying to bridge the gap between the social and the individual. These papers illustrate the new questions that emerge when keeping the full picture in mind rather than being beholden to disciplinary traditions.

2 Essentialisms

Arguably the most minimal definition of essentialism is the tendency to think that some features are necessary (i.e., essential) to making something a member of a category (Cartwright, 1968). Most empiricists differentiate it further from categorization into classical categories by adding that essentialism entails thinking, not only that things share a feature, but that they share some underlying cause of their features. This underlying cause, the thing's essence, is understood to determine its enduring character and its resemblance to other things that jointly belong to a category. Such categories are often called “kinds,” a particular form of category referring to things that are believed to represent reality rather than a human convention. Several researchers have argued that some phenomena lend themselves to spontaneous grouping and develop reliably and recur cross-culturally. Atran's (1990) research, for example, showed that natural objects and particularly living beings are categorized in surprisingly similar ways into “life-forms” across cultures.

The terminology in the field of essentialism varies and is not always coordinated. In our understanding the term “psychological essentialism” is the “view that certain categories have an underlying reality or true nature that one cannot observe directly but that gives an object its identity and is responsible for other similarities that category members share” (Gelman, 2004, p. 404). Psychological essentialism

covers all instances where an individual makes an essentialist category judgment irrespective of the domain, be it natural, cultural, or social. Psychological essentialism emphasizes that an essence attributed to a category is an idea, intuition, or opinion of the individual, not a substance that exists in reality outside of the human mind. The terms “biological” and “cultural essentialism,” then refer to the belief that biological-genetic or cultural forces are decisively responsible for a living being’s, or in the latter case, a person’s constitution. As with psychological essentialism, these terms are used to refer to people’s intuitions, beliefs, or rhetoric about the world, rather than to make an ontological claim about stable and enduring characteristics or essences.

Psychological essentialism must be distinguished from metaphysical essentialism as in Plato’s *“Philosophy of Forms”* where things are what they are by their resemblance with the ideal form. The drawing of a circle, for example, can be a circle as long as it resembles the idea of the form of a circle. In short, a circle drawn by a pair of compasses will have minute imperfections but be a circle by virtue of possessing the essence of circleness, that is the idea of a circle, to a degree. To simplify, this view can be called “essence realism” or metaphysical essentialism (e.g., Politis, 2021).

Before the mid-twentieth century many scholars of human diversity devoted their efforts to creating typologies, often imbued or tinged with some flavor of essence realism. These could take the form of racial taxonomies focused on presumed biological phenotypic differences (Caspari, 2003) or cultural ones, focused on understanding the types of cultural systems (Benedict, 1959). The latter was a focus of research even among strong proponents of cultural relativism, such as Benedict herself, who additionally eschewed race essentialism (Benedict, 1940). However, the academic focus on the topic has since shifted to understanding the psychological underpinnings of essentialism, the social and cultural contexts under which related ideologies arise, and the political consequences of their use.

Since the 1980s social scientists have noted the prevalence of essentialist intuitions about social groups. Having just gotten themselves out of promoting the notion of such distinct groups themselves in the form of “race science” a couple decades earlier, the prevalence of the intuition seemed puzzling.

The rise in the relative frequencies of essentialisms with different adjectives starts in the 1980s as shown in Fig. 1. There are two important caveats regarding these data: First, it is unclear what constitutes the English language database of Google’s N-gram calculations and how complete it is with regard to science books (Pechenick et al., 2015). Second, these statistics do not reveal whether the respective terms are mentioned affirmatively or in a dissenting context. Mention of the terms in book paragraphs, in which the author refers to cultural essentialism as a potential explanation of a phenomenon or as a problematic issue to be rejected, would enter equally in the statistics. It is also unclear, what the original background justification for using one or the other adjective has been. Nonetheless, the pattern points to an increased interest in the topic at the end of the 20th century.

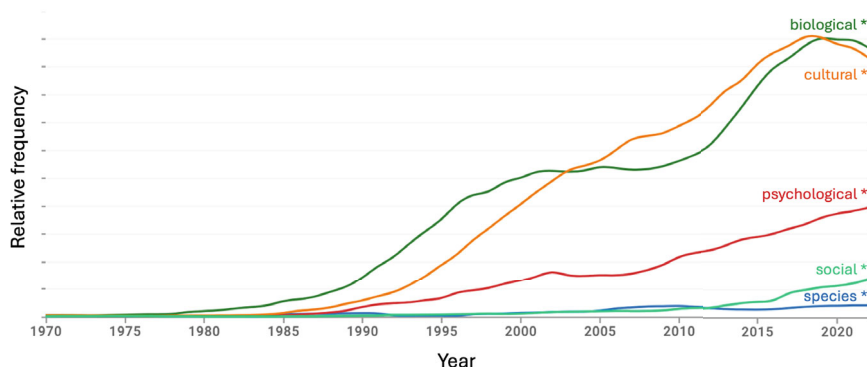


Fig. 1 Google N-grams for five versions of essentialism from 1970 onwards (Source Google books Ngram viewer, <https://books.google.com/ngrams>. Retrieved 12 March, 2025)

3 Cultural and Social Groups

This book is about psychological essentialism related to social groups that are at least partially defined by reference to their cultural differences. That means we do not focus on several forms of essentialism, such as that related to human biological sex or gender variation. In debates about these issues arguments by different proponents tend to intertwine psychological with realist essentialism by either emphasizing a biological essence, gender enactment, or social constructionism as being involved in determining sex and gender (e.g., Bem, 1993; Butler, 1990; de Beauvoir, 2011). While the debates in this field share conceptual overlap with our interests, they are sufficiently different to constitute a domain of their own.

In this volume some contributors propose genetic evolutionary arguments, while others prefer a more socio-cultural approach to understanding essentialism and identities. In either case, authors share a focus on understanding why people, cultures, or societies develop the beliefs they do about social groups. That is, the contemporary empirical questions in this field are about perceptions of social kinds, not the existence of social kinds. Since the ethnographic literature showed that people change their identities, often strategically, within their lifetimes and that no particular cultural element is constitutive of a group being ethnic, research has turned to why humans sometimes have primordialist intuitions that group identities are inherited, inherent, and timeless (Gil-White, 1999). The parallel understanding from human population genetics has complemented this shift, showing how demographic and evolutionary processes produce patterns of genetic diversity along continuous gradients rather than discrete units (Foster & Sharp, 2004).

Beyond the focus on beliefs, our fields broadly agree on at least three other contributors to essentialism, (1) genetically evolved cognitive capacities that all humans (and probably other species) share, (2) the cultural transmission of beliefs between individuals, and (3) the role of institutions and ideologies that work at group-level scales above the individual. These are represented as a rough sequence in Table 1 with

Table 1 Sequence of conditions, capacities, and processes relevant to the potential long-term development of essentialism

Capacities and processes:	1. Ancestral cognitive capacities for:	2. Cultural patterns captured by individual-level processes	3. Cultural patterns captured by group-level processes
Examples:	• social learning • inductive inference	• non-uniform cultural variation • essentialist ideas	• enforced segregation • essentialist ideologies

some examples of their products in the boxes below each heading. While researchers may agree about the existence of such processes, there is robust disagreement and debate about the nature of each and their interactions. First, humans must share some psychological capacities that are an outcome of biological evolution and that, perhaps indirectly, contribute to our capacities for essentialism. Minimally, these functions comprise the ability to generalize across instances (e.g. induction) and to learn from each other. Second, the evolution of symbolic language and cultural capacities in the hominin lineage allows people to share more ideas, including elements of essentialist ones. At least some social learning might be adequately captured as person-to-person transmission with limited influence of group-structure. For example, traditions in chimpanzees seem to spread in such a fashion, without norm enforcement, and result in non-uniform landscapes of cultural variation. Finally, not all ideas can easily be conceived of as properties of individuals rather than of groups. We return to the notion of the superorganic—ideas and institutions can be more than the sum of their parts in human societies. Human cultural capacities, beyond those for social learning common in other species pave the way for coercive institutions such as enforced segregation and ideologies that project essentialist ideas potentially for one’s own ethnic group and outgroups.

All these forces and capacities are at work in contemporary societies. Even as modernity changed the structure of the social universe, for example with the weakening of kinship ties and the emergence of more anonymous nation states, our psychological faculties, capacities for learning from each other, and responsiveness to institutional structures continue to contribute to contemporary forms of essentialism.

We are aware that authors assembled in this volume may focus on only some aspects of this complex system or disagree with details of the above account. For example, some authors make significantly different arguments about the genetically evolved cognitive capacities that are brought to bear on essentialist thought. It is an aim of this volume to juxtapose different positions from sciences dealing with intergroup relations in the field of culture, identities, and essentialisms. We hope this illustrates how progress is being made to understand the full system despite disciplinary boundaries.

4 Overview of the Contributions

In addition to bringing approaches to social essentialism in anthropology and psychology together, we invited authors whose work focuses on a rich understanding of real social groups rather than, say, experimentally induced minimal groups. Groups where actual or presumed cultural differences are relevant to the boundary such as ethnies, nations, or religious groups cannot be manipulated in experimental designs. However, the nature of their cultural construal is essential to understanding how people perceive them. This limits what we can learn from analysis of lab-induced groups.

The chapters are collected in four sections according to their most central argument and roughly corresponding to the main contributors to essentialism outlined in Table 1. Naturally though, each chapter extends to issues beyond the confines of its section given the complex ways cognitive capacities, individual, and group processes mutually constitute each other. The first two sections address the origins of essentialist thinking at different time scales. These different suggested points of origin suggest different cognitive capacities that are brought to bear in essentialist thinking (Table 1, column 1). Part I delves into the possibly deeper evolutionary origins of essentialist cognition, and its manifestation at the ontogenetic time scale, while Part II considers more recent cultural and historical origins of essentialist beliefs. The cultural constructions of essentialism highlighted in these pieces suggest the possibility that there isn't anything special about human cognitive capacities for essentialism other than our capacity to be cultural. Part III focuses on the role of the individual in the construction of identities and possibly essentialist construals of group boundaries (Table 1, column 2). While all three chapters' arguments require the existence of structures beyond the individual, the works emphasize bottom-up approaches to understanding the role of agents in these systems. Finally, chapters in Part IV address the role of collectives and more top-down processes in the construal of group boundary rhetoric and ideologies, be they essentialist projects or not (Table 1, column 3). Part V presents some theoretical considerations about essentialism instead of an afterword.

4.1 *Evolutionary and Developmental Roots of Essentialism*

Part I is dedicated to exploring the potential origins of essentialist thinking at evolutionary and/or ontogenetic time scales. The chapters are ordered roughly from those that discuss the deepest to most recent timescales of analysis, though importantly, all consider the socialization process critical for understanding essentialist cognition.

In her chapter *Can evolutionary epistemology shed light on the role of essentialism in group-thinking?*, Isabella Sarto-Jackson explores the functions of essentialist cognition within the framework of Evolutionary Epistemology. This framework posits that a species' cognitive capacities evolved to enable individuals to

perceive the world's structure, make inferences about it, and take useful actions. For example, if essentialist cognition helps to foster group cohesion and reinforce social structures it could have been favored by selection for its material consequences for organisms' fitness despite not reflecting ontological facts. The author also argues for the role of several phylogenetically old exaptations and human-specific socio-cultural niches in the development of essentialist cognition. She sheds light on the neurobiological basis for several of these capacities such as social learning and inductive inference.

In their chapter, *Cognitive adaptation to culturally evolved ethnic landscapes*, Cristina Moya and Robert Boyd discuss the ways that human cultural capacities produced ethnic phenomena in the hominin lineage and how the resulting social groups would functionally differ from any pre-existing aggregates of relevance to non-human primates. As such, any pre-existing cognitive mechanisms for thinking about other species, kin relations, coalitions, or primate groups would have been insufficient to account for the ways humans think about ethnic groups. The authors then consider how these cultural ecologies would have posed new challenges for social categorization, choosing who to learn from, who to interact with and with whom to cooperate. The functionalist taxonomy suggests some skepticism that essentialist intuitions would have been necessary to meet any of these goals, although they could be useful ideologies in certain cultural contexts.

Wolfgang Wagner's chapter *Ethnic identity, enculturated essentialism, and instrumental (de)essentializing* provides a framework to the topic of social essentialism by discussing, first its potential origin as a cognitive feature either directly selected for by biological evolution or by the evolutionary processes related to cultural group selection, which would favor parenting and early-age learning institutions transmitting essentialist and conformist intuitions about ethnic identity rather than non-essentialist ones. Second, the author suggests that the contemporary unease with essentialism is broadly based on politically motivated ideologies.

Gil Diesendruck's chapter, *The development of social essentialism: Group identity matters*, covers the developmental aspects of social essentialism and provides a review of children's beliefs about an array of groups. The evidence suggests that essentialist intuitions and intergroup biases develop reliably in childhood, indicating these might be core features of human cognition, despite their socially disruptive effects. The chapter highlights the importance of understanding respondents' motivations, such as for group belonging, to explain their use of essentialism in socially harmful judgements.

4.2 Cultural Roots and Historical Trajectories of Essentialism

In contrast to the chapters in the previous part that entertain the natural origins of group-related beliefs, and essentialism in particular, in Part 2 we turn to the possibility

that essentialist ideas have largely cultural roots, and possibly only exist in specific cultural contexts.

Yoshihisa and Emiko S. Kashima's chapter, *Culture, group, and identity: The case of diversity ideology*, provides an overarching analysis of different representations of culture and how these representations shape individuals' identifications and related essentialism. They contrast a 'color-blind' meta-culture that treats different cultures as insignificant expressions of one humanity, with a "multi-cultural" and a "poly-cultural" approach signifying different instantiations of diversity ideology. In multi-cultural settings, representatives of different cultures exist side-by-side, while in poly-cultural settings elements of different cultures exist in the same individual, which has important consequences for essentialist intuitions. The scheme provides an outlook on the development of a globalized culture.

Hovig Artinian and Thomas J. H. Morgan then present a chapter on *The origin of WEIRD essentialism*, where they delve into a specific historical trajectory of ideas about groups and other kinds. They depart from the observation that a full-fledged ethno-racial essentialism has been primarily observed with Western respondents and, even then, relatively late in the history of Western societies. This leads the authors to suggest that essentialist taxonomies, be they biological or social, are a product of cultural evolution in the Western industrialized (i.e. WEIRD) societies and largely transmitted through schools, science communication and popular media.

4.3 Individuals' Roles in the Construal of Identity and Essentialism

Part 3 collects chapters that highlight how individuals both produce the social structures that give rise to identities and essentialist ideologies and navigate these structures despite the heavy constraints they can impose. Individual agency is at the core of these analyses even as they acknowledge the importance of the social environment for the strategic decisions actors make.

Paul E. Smaldino, in *A functional account of social identity*, makes a case for understanding social identities as serving functions in behavior and intergroup relations. He presents an evolutionary argument about the individual strategic benefits of identity signaling in social decision-making about who to copy, partner choice, and action coordination. Identity markers emerge from their value in such individual transactions. This functionalist account of identities then is applied to understanding issues in contemporary and diverse societies such as political polarization and the spread of information in anonymous online networks.

In his chapter *Essence and class: Conceptualizing the experience of intergenerational social mobility in the UK*, Neil Carter describes how the class-structure in Great Britain produces widely varying enculturated identities among its members. His qualitative empirical study illustrates how these behavioral and affective differences become acutely perceptible when individuals follow upwardly mobile careers.

Transcending the boundary of their original class into a socio-economically “higher” class within their lifetime, these participants often experienced a “clash” of significantly different norms and behavior expectations. These personal accounts are reflected in some participants’ essentialist notions about the class boundary. This study illustrates the footprint that enculturation during one’s childhood leaves in adults and the ways upwardly mobile people negotiate this tension between change and stability.

In *The limits of essentialism within and across territories*, Adrian Bell and Cristina Moya present a mathematical model illustrating how individuals’ decisions and motivations can give rise to either porous or rigid boundaries at the group-level. Their formulation considers the role of individuals with outgroup-averse beliefs in moderating immigration into their group. The model shows that rigid essentialist beliefs that would hinder migration are unlikely to spread because economies of scale can favor larger groups. However, essentialist or other migration-inhibiting beliefs are favored when episodes of resource scarcity are common or severe, or if individuals experience high costs to miscoordination with culturally different migrants. This model illustrates several processes that can motivate the evolution of essentialist belief systems. It also provides a bridge between a focus on individual-level decision-making and group-level phenomena, both insofar as individuals respond to group-level economic conditions and produce group-level practices that affect intergroup migration.

4.4 The Collective Construal of Identity and Essentialism

The chapters in Part 4 share a focus on phenomena above and beyond the individual level that account for essentialist projects or other construals of identity. Here we find the effects of collective representations, formal institutions, or powerful elites that have disproportionate impact on political ideologies.

The first chapter in this section, *Mutual Maltese and Arab representations in Malta—A project of reconciliation* by Gordon Sammut and Rebekah Mifsud, straddles the focus on the individual and the collective, illustrating the importance of mutual social representations in explaining intergroup relations between Arab and indigenous Maltese populations on the island of Malta. In some ways it provides an empirical grounding to the formal model that ends the previous section. While intergroup attitudes might be properties of individuals, the authors argue they position us socially. They present a study of how the two groups represent each other, focusing on several divisive issues and ideological stances that are thought to cause coordination problems between the communities. Importantly, their analysis reveals several misconceptions of outgroup, for example, of Arabs’ desire to assimilate that can cause further coordination problems. The detailed analysis of the conflicting mutual meta-representations of each group reveals the core of the intergroup tensions and dramatically different essentialist representations of each other. At the end the authors suggest these meta-representations also provide a possible starting point for reconciliation.

Nick Hopkins takes a strong stance against conceptualizing ethnic group identities as a given, in *Identities as projects, essentialism as rhetoric*. Instead, identities are conceptualized as the product of social construction and negotiation, and a project in progress. He draws on national identities as examples of group identities that are shaped to accommodate strategic interests and that can mobilize group members into political action. In this construction process, essentialism is used and adapted to naturalize group identities according to the interests of the more powerful. In this understanding, psychological essentialism becomes a rhetorical device and argumentative resource.

Alejandro Erut's piece on *The interface of ethnicity and institutions: Power, regulations, and ethnic distinctions* develops a parallel argument focusing on how state institutions exploit ethnic divisions in their quest for maintaining power and political influence. In such systems ethnic distinctions are used as a means of preserving inequality, which provides the fundamental structuring of societal life. These processes are illustrated with examples from northern Romania, South Africa, and inter-ethnic marriage arrangements in former Yugoslavia. Focusing attention on the role played by self-interested actors in positions of power illustrates how thinking about collectives as the sum of individuals is inadequate for capturing inter-group processes. While he argues that all people have evolved ethnic intuitions, some individuals or institutional actors have structural positions that give them particular power to mobilize ethnicity in strategic ways.

Finally, in their chapter *Intergroup violence without essentialist beliefs: The case of Turkana cattle raiders*, Matthew R. Zefferman and Sarah Mathew illustrate how a group's ideological system need not invoke essentialist rhetoric or prod people's essentialist intuitions to nonetheless support high levels of intergroup violence. In this ethnographic context, East African pastoralist groups engage in regular lethal inter-ethnic hostilities largely for cattle raiding. However, these hostilities are not supported by perceptions of negative essentialized identities—in fact only 4 of 162 Turkana warriors interviewed endorsed an essentialist position about the boundary with their Toposa neighbors. This suggests some caution is warranted about assuming that a particular rhetorical tool that works in some cultural contexts is necessary to foment intergroup tension.

4.5 *Instead of an Afterword*

In the last chapter, *Of elephants and Aspirins: Similarity, Gestalt perception, and inductive inference in essentialism*, Wolfgang Wagner revisits the theoretical notions that explicitly or implicitly played a role throughout the book. He posits that psychological essentialism constitutes a sort of inductive inference that extrapolates perceived similarities among living entities and ascribes them to a stable kind. These similarities, however, are not perceived as a collection of enumerable characteristics but as a unified whole, a *Gestalt*. This perception is supported by the biological fact that living beings are not a random assortment of traits but have evolved into a

structured whole. Analogously, cultures are broadly constituted by an integrated set of features, which can be perceived as a *Gestalt*.

We organized this volume with the goal of confronting different disciplines, particularly anthropology and psychology. This intention is realized by having a mix of authors from these disciplines in each book section. We hope that this volume and its integrative structure can contribute to cross-disciplinary exchange and mutual inspiration in the wide field of intergroup relations.

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Part 1: Evolutionary and Developmental Roots of Essentialism

Can Evolutionary Epistemology Shed Light on the Role of Essentialism in Group-Thinking?



Isabella Sarto-Jackson

1 Psychological Essentialism: Cognitive Shortcuts, Cultural Beliefs, and Evolutionary Arguments

Essentialism refers to the belief that certain categories, such as gender, race, or behavioral traits like intelligence, possess an underlying, immutable “essence” that defines their nature. Along this line of thinking, human traits are also seen as fixed, natural, and inevitable, frequently leading to oversimplified explanations of interindividual difference, justifications of social hierarchies, and stereotyping. Philosophers of biology have distinguished biological essentialism—a scientific perspective—from psychological essentialism—a pervasive cognitive phenomenon (Machery et al., 2023).

While biological essentialism has been criticized (Ereshefsky, 2010; Wilson et al., 2007), psychological essentialism prevails to the present day as a fertile area of research (Gelman, 2003). Recent studies argue that essentializing can serve as an ecologically rational cognitive strategy for how to navigate the social world (Rhodes & Moty, 2020). To elucidate how essentializing can serve as a cognitive strategy, the development of essentialist thinking in children is explored in developmental psychology (Diesendruck et al., 1998), and the prevalence of stereotypes and biases is studied in social psychology. Notably, psychological essentialism is not so much about actual biological essences in certain “kinds” but about how humans perceive the world and thereby (subconsciously) attribute essences. Here, essentialism operates on an implicit, intuitive level, irrespective of being objectively verifiable (Brick et al., 2022). The essences in question are usually considered to be of biological, or more generally of natural, origin (Rothbart & Taylor, 1990).

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Psychological essentialism remains an important field of research also for understanding group and societal dynamics. Previous findings provide evidence that essentialist thinking emerges early in human ontogeny (Gelman, 2003) driven by neurobiological mechanisms that have been shaped by evolution. Evolution selected for cooperative caregiving in humans (Burkart et al., 2009) allows for a socially rich developmental context in which demarcation of out-groups from in-groups can readily arise. In this chapter, I will argue that the extensive neuroplasticity in humans in early childhood enables the developing brain to attune to group-specific dynamics by exploiting time-staggered learning mechanisms and affording the neural architecture involved in social categorization. Neural interactions of perceptual systems and emotional networks further reinforce categorical distinctions, thereby forming the functional basis for essentialist beliefs.

In addition, I will discuss how culturally transmitted knowledge and social context significantly influence the perception and evaluation of others, thereby guiding inference-making. Essentialism can support inductive inferences. Within this framework, I will show that evolutionary epistemology can contribute to the study of essentialism by highlighting the (ideational) trial-and-error nature of knowledge formation—governed not only by biological evolution but also by cultural transmission. Knowledge, in this light, is a dynamic, reciprocal process shaped by the co-evolution of neurobiological substrates of the mind and our human-specific cultures.

Furthermore, evolutionary epistemology can provide key insights into the dual role of essentialism in human cognition. On one hand, it fosters group cohesion and identity formation; on the other, it can promote exclusion, stereotyping, and discrimination. Essentialist thinking has become deeply embedded in public discourse, subtly shaping how we understand identity, belonging, and social order. By situating essentialism within an evolutionary and cultural framework, questions can be asked about how it continues to influence human behavior across generations. For instance, stereotypes may lead to skewed interpretations of ambiguous behaviors, where identical actions are judged differently depending on the group affiliation of the individual. This distortion arises because prior beliefs create expectations that filter new information, reinforce existing assumptions, and perpetuate stereotypes.

Psychological essentialism tries to explain how humans categorize and interpret groups, individuals, and identities, attributing fixed traits or inherent characteristics to social categories such as race, gender, ethnicity, and class without necessarily being based on scientific or true evidence (Barrett, 2001). It can be a useful cognitive strategy for decision-making when true causes that make up the members of those “kinds” are unknown. This argument aligns with what Simon termed “satisficing” (Simon, 1955). Since perceptual and analytical limitations may prevent humans from elucidating the structure of reality and thus keep the workings of the world epistemically concealed, inferences that drive decisions will necessarily be flawed. Despite being inaccurate, mental models can nevertheless be refined and confirmed. This can happen through prediction rather than mere real-world trial-and-error, thereby allowing “useful” but false beliefs to persist. In this way, essentializing can act as a cognitive shortcut to make sense of groups and predict their behavior. It can help in constructing and reconstructing intergroup and intragroup relationships (Wagner

et al., 2009) without the need of detailed knowledge of the underlying biological causes. By assuming that members of a group share intrinsic properties, essentialist reasoning helps in making quick generalizations, fostering a sense of stability and order in social interactions.

Despite the fact that most scholars agree that essentializing races or ethnic groups seems to be ontologically ill-founded and reflects social constructs (Banton, 1987; Hirschfeld, 1995; Rothbart & Taylor, 1990) rather than natural kinds, humans seem to consistently adopt such “wrong” strategies nonetheless. The tenacity of essentialist thinking in social contexts may be the result of natural selection of the human mind. In fact, the argument that essentialism has an evolved basis has frequently been made before (Atran, 1998; Sperber, 1994).

Across cultures, people commonly display the propensity to organize and reason about objects, people, or phenomena according to unchanging essences (Davoodi et al., 2020; Diesendruck et al., 2013), despite different cultures having different sorts of beliefs about categories. Given this proclivity to “essentialize,” it is interesting to elucidate how humans in their everyday thinking develop the idea of individuals having underlying, invisible essences. The observation that this mode of thinking is widespread across cultures indicates that psychological essentialism may be the result of a history of natural selection on human cognitive systems (Atran, 1998; Gil-White, 2001; Pinker, 1994). So, essentialism may represent a functionally effective way of thinking about certain kinds—be it natural, psychological, or social kinds—even if an essence proper might not exist (Atran, 1998; Coley et al., 1999; Gelman & Markman, 1986; Gelman & Wellman, 1991; Keil, 1989).

I will argue that psychological essentialism is the result of an amalgamation of different ontogenetically shaped, neurobiological domain-general processes rather than a single essentialism-specific cognitive mechanism. This aligns with the assumption that essentialist thinking is based on culturally evolved belief systems, not on factual reasoning. It bestows evolutionary benefits for social groups rather than providing a discrete survival value for individual group members.

In the following sections, I will first explicate the evolutionary framework I draw from to explore the evolution of cognitive functions that may enable essentialism. In the subsequent section, I will discuss which social functions may be facilitated by essentialism. Finally, I will substantiate my arguments with recent neurobiological findings. In particular, I will focus on neurobiological processes including attachment, narrative construction, and inductive inference.

2 Is Psychological Essentialism an Evolutionary Adaptation?

Essentialist thinking may have evolved as an adaptive response to the complexities of social life, or it could be a by-product or a repurposing of traits evolved to respond to different environmental challenges. I will argue that the latter is the case. By assigning

stable and intrinsic properties to groups, individuals could quickly categorize others as allies or threats, facilitating cooperation within groups and caution toward potential competitors or predators. It has been suggested by evolutionary psychologists that one of the primary evolutionary roles of essentialism is its contribution to group cohesion (Wagner, 2024). Since humans heavily rely on social groups for survival, it may have been adaptive to possess cognitive mechanisms to identify and reinforce group membership. Essentialist thinking could have helped in solidifying social bonds by emphasizing shared traits or essences that define in-group identity (Haslam et al., 2000). For instance, shared language, rituals, or physical markers could be perceived as indicators of belonging, fostering trust and cooperation within the group. Essentialism could also support the formation of stable social hierarchies and roles by attributing fixed characteristics to individuals based on their group membership.

These explanations align with anthropological arguments that the evolutionary enlargement of the human neocortex is at least partially attributable to the cognitive demands of social living and understanding complex social structures (Dunbar, 1992; Dunbar, 1998). To reduce the cognitive load of processing increasingly complex social relationships within large groups, essentializing can simplify complex social and environmental information.¹

A growing group size represents a challenge for maintaining group cohesion, because it requires constant cognitive awareness of the members to build and maintain trust and resolve conflicts. While smaller groups rely on personal, direct interactions, larger groups require more structured social mechanisms, such as hierarchical organization or shared cultural practices. Direct interactions such as bonding processes (e.g., grooming, attachment processes, etc.) are time-intensive and constrain the size of group an individual can have relationships with. Larger groups have most likely evolved more efficient mechanisms for group cohesion, e.g., social grooming (Dunbar, 1996) like language, storytelling, shared rituals, and collective activities. Psychological essentialism may offer a parsimonious ability to rapidly and subconsciously identify behavioral signals or anatomical features of group members. Honing such cognitive heuristics can contribute to group survival and stability and would thus be favored by natural selection as it may benefit the individual and/or the group as a whole.² In sect. 3, I will discuss in more detail how essentialist thinking can have evolved as a trade-off between individual and group learning, amplifying group-level selection.

Some scholars have suggested that the essentialization of races results from overextension of a system originally evolved to handle biological taxa (Carey, 1995; Hirschfeld, 1996; Rothbart & Taylor, 1990); in addition, it was argued that ethnicity

¹ A similar phenomenon can be observed for other complex cognitive processes such as arithmetic. Larger brains may have enabled our ancestors to process increasingly complex mathematical problems. Yet, a significant leap in mathematical processing occurred when humans did not have to rely solely on their cognitive processing capacities but found ways to mitigate their cognitive load (e.g., by using exosomatic devices).

² This probably also holds true if “free riders” are present in a group. Game theory can predict how many defectors a group can maintain without collapsing by having effective punishment systems and rewards for cooperation (Nowak & Highfield, 2012).

has become part of the evolved proper domain³ of an essentializing system that originally evolved to handle biological species (Burkart et al., 2009).⁴ In the past, essentialization of race, gender, ethnicity, class, or religion has invoked adaptationist explanations (Hirschfeld, 1995; Hirschfeld, 1996). However, based on neuroscientific findings, essentialist thinking—similar to many other cognitive traits—is probably not an evolved domain in the sense of a discrete essentializing system of the human brain.

Some contemporary scholars rather favor the idea that essentialist thinking can be understood either as a by-product of evolutionary pressures (Hirschfeld, 1995) or an exaptation.⁵ Hence, psychological essentialism may have emerged from more general mental faculties, such as category-based thinking, causal reasoning (e.g., Carey, 1995), or language use. And it may have evolved from cognitive abilities that have later been co-opted for different functions, rendering essentialism an “unintended consequence of a previous adaptation.”

3 Evolutionary Epistemology: Exploring the Origins of Knowledge

Understanding essentialist thinking as an evolutionary by-product or exaptation can be approached by drawing from the interdisciplinary framework of evolutionary epistemology. Evolutionary epistemology deals with the development of knowledge and cognitive processes based on the assumption that thinking and understanding the world have been shaped by natural selection broadly conceived. It is an interdisciplinary research program that integrates biology, evolutionary psychology, cognitive psychology, sociology, history, and philosophy (Bradie & Harms, 2017; Callebaut, 1993; Callebaut & Pinxten, 1987; Campbell, 1974; Gontier & Bradie, 2018).

Importantly, evolutionary epistemology does not require essentialist thinking to be an evolutionary adaptation nor reflect ontological facts. It therefore provides an explanation for essentialist thinking that is quite different from explanations based on evolutionary psychology.⁶ The former goes beyond adaptationist explanations (e.g.,

³ The notion of proper domain in this context refers to a specific cognitive mechanism that evolved to aid survival in humans by facilitating decisions about which creatures to avoid, hunt, or cooperate with. These domains are termed “proper” because they represent the specific environmental challenges that shaped human psychology and brain anatomy.

⁴ Scholars have, however, pointed out that essentialist thinking concerning ethnicity seems to have evolved for tracking culturally transmitted information and shared beliefs (Gil-White, 2001), while essentialism concerning race has evolved for detecting biologically significant traits (Hirschfeld, 1996).

⁵ Exaptation refers to a trait that originally evolved for a particular function but later came to serve a different purpose.

⁶ Evolutionary psychology aims at identifying psychological adaptations—distinct mental traits or mechanisms that evolved to solve recurring problems in ancestral environment.

including exaptations) and commits to group selection processes, niche construction theory, and the formative role of development in shaping evolutionary trajectories.

The traditional version of evolutionary epistemology (Campbell, 1960) sees knowledge and fundamental cognitive categories as evolutionary results analogous to morphological features or characteristics. Consequently, even the most basic knowledge categories (e.g., a priori categories *sensu* Kant, like space and time) must be subject to evolution.

Evolutionary epistemologist D. Campbell alludes to practical knowledge that effectively aids survival and reproduction, even if it does not represent objective or universal truths nor correlates to ontological structures or phenomena in the natural world (Campbell, 1974). Successful knowledge is retained through evolutionary processes because it works in real-world contexts. Similarly, Gigerenzer speaks of “ecological rationality” (Gigerenzer et al., 1999) as a property of cognitive processes in individuals that are shaped by evolution for coping with the environment. In this reading, practical knowledge supports heuristics—it is provisional and proves useful in navigating social environments, rather than harboring an abstract and objective truth. Accordingly, essentialist thinking that draws on practical knowledge could act as a heuristic, cognitive process prompting “fast and frugal” decision-making under conditions of uncertainty and limited information. Thus, rather than just driving flawed responses, essentialism—like other classes of heuristics—may elicit well-suited responses to the demands of real-world environments (Vollmer, 1975).

4 From Phylogenetic to Ontogenetic Knowledge

A research agenda that aims at elucidating the origins of knowledge and cognitive categorization requires the integration of ontogenetic and phylogenetic processes. I will explore how developmentally shaped knowledge acquisition (e.g., learning how to essentialize) can impinge on evolution. Essentialism can serve as an instructive example of an evolutionary trade-off between individual and social learning since essentialist thinking seems to reinforce group cohesion and social learning at the potential cost of flexibility and individual exploration.

As discussed above, evolutionary epistemology in the classical sense describes knowledge as a phylogenetic process. This stance is radically different from an ontogenetic understanding of cognitive processes (Callebaut, 1994). Some scholars have called for an integration of ontogenetic explanations into the program of evolutionary epistemology (Callebaut, 1994; Sarto-Jackson, 2021). A word of caution should, however, be made as Callebaut and Pinxten (1987) clarify “[w]e should emphasize that this is not to say that all knowledge should be viewed as the outcome of either a phylogenetic or an ontogenetic process. Such a dichotomy would be merely the old nature-nurture issue in a different guise” (Callebaut & Pinxten, 1987, pp. 22). On the contrary, knowledge is best understood as a multi-layered phenomenon that stems from multiple origins, is based on processes of relationships, and finds partial expression in genotypic and phenotypic structure (Plotkin, 1987).

In such an integrative framework, ontogenetic cognitive processes would assume a role of fine-tuning evolutionary products rather than representing distinct and complementary processes. The call for integrating ontogenetic processes into an evolutionary framework of cognition aligns well with an extended view of evolutionary theory (Pigliucci & Müller, 2010) that recognizes other processes, such as niche construction and various processes of non-genetic inheritance as highly important evolutionary processes. In fact, niche construction theory (Laland et al., 2016) understands processes by which developing organisms interact with their environment as driving factors of biological and cultural evolution. Central to this extended view of evolutionary theory is a multi-level model of evolution. This account understands knowledge acquisition as an interplay between individual and social learning.

Individual learning is often costly in terms of time and energy, and the outcomes may be uncertain, as not all experiments or innovations succeed. Social learning, on the other hand, enables individuals to learn by observation and imitation of others, thereby allowing the individual to benefit from the accumulated knowledge of their group without incurring the high costs associated with individual learning. Social learning is particularly advantageous in stable environments where the collective knowledge of the group has been shaped over generations to address recurring challenges. Here, individual and social learning are seen as two distinct knowledge- or information-gaining processes of organisms adapting to their environment. Both processes are considered to play key roles in cultural evolution (Boyd & Richerson, 1985). While the storage site of individually acquired knowledge is the central nervous system of the organism that is shaped by genetic information, the storage site for the next-higher level of (cultural) knowledge is the “culture pool” of a population that shares non-genetic channels of communication (Lumsden & Wilson, 1981; Plotkin & Odling-Smee, 1982).

Importantly, there seems to be a trade-off between individual and social learning that introduces a critical dynamic: while individual learning drives innovation and adaptation to novel challenges, social learning fosters the transmission and stability of cultural traits. This trade-off is believed to be a fundamental feature of human evolution. Cultural evolution can resolve the tension between individual and group learning and amplify group-level selection. It enables the rapid spread of traits through mechanisms such as imitation, teaching, and communication. This dynamic allows groups to develop distinct norms, values, and institutions that promote cooperation and suppress selfish behavior in individual group members. In this way, essentialist thinking can shift the balance between individual and group learning toward the latter. It can reinforce group cohesion by promoting the idea that group characteristics are stable and intrinsic, thereby favoring social learning over individual exploration.

5 Can Evolutionary Epistemology Contribute to Elucidate the Origins of Essentialism?

Evolutionary epistemology can help examine how essentialist thinking is influenced by cultural evolution as the former also deals with non-genetic forms of inheritance to explain knowledge transmission. While early evolutionary epistemologists predominantly posit that human cognition and knowledge systems are shaped by natural selection based on genetic inheritance and biological evolution, contemporary perspectives of evolutionary epistemology expand this view (Bradie & Harms, 2017; Sarto-Jackson, 2021). The latter strives to include cultural evolution in addition to biological evolution. Knowledge systems as well as belief systems have evolved cumulatively through feedback loops and ratchet effects (Tomasello, 1999) entrenching essentialist beliefs by reinforcing stable group identities and social categories. Cultural evolution can then preserve and amplify group-based beliefs through mechanisms like imitation, institutionalization, and socio-cultural niche construction.

There are two essential processes that contribute to the accumulation of knowledge within a group. Firstly, the modification of the socio-cultural environment can create new challenges and opportunities, that in turn can generate novel problem-solving capacities or cognitive strategies and drive the development of new knowledge. This reciprocal feedback mechanism (between environmental challenges and biological and cognitive responses) is characteristic for human niche construction and leads to species-typical epistemogenesis (Kovac, 2015), as innovations reshape the cognitive niche, thereby fostering further learning and cultural evolution. Secondly, the ratchet effect that is central to human cultural evolution ensures that once cultural knowledge or innovations are established at the group level, they are preserved and transmitted across generations without being lost. Consequently, the ratchet effect enables a cumulative buildup of increasingly complex knowledge. The underlying knowledge retention allows subsequent generations to build upon prior discoveries, creating a snowballing effect, where the growth of understanding accelerates as new layers of knowledge are continually added.

Non-genetic forms of inheritance spurring cultural evolution play a central role in the updated framework of evolutionary epistemology. Cultural evolution involves the transmission of information, behaviors, and technologies through learning and imitation. The cumulative nature of cultural evolution enables humans to create knowledge systems that far exceed the capabilities of any individual. Through ratcheting, innovations are not only preserved but can be refined and expanded by subsequent generations. This unique mechanism has enabled humans to build increasingly complex knowledge systems, such as language, art, science, and technology. Socio-cultural niche construction amplifies this process by creating environments that reinforce specific behaviors and cognitive patterns via feedback mechanisms. Education systems, libraries and databases, media, and digital platforms are examples of constructed niches that facilitate the preservation and dissemination of knowledge. Forms of social knowledge such as mentoring and institutionalized forms of teaching

can explain how socio-cultural traits evolve much faster than biological traits and spread exponentially (Kovac, 2015).

Socio-cultural evolution interacts dynamically and reciprocally with biological evolution, influencing the development of neurobiological substrates that underlie learning, memory, and communication. Essentialist thinking likely has its roots in evolutionarily old, cognitive capabilities that were later co-opted for other functions, and cultural evolution can drastically amplify this process. Ratchet effects ensure the accumulation and transmission of essentialist ideas across generations by embedding them in cultural practices, institutions, and norms. Such forms of cultural inheritance shape how individuals perceive and categorize social groups, often reinforcing existing biases. For instance, socio-cultural practices create and maintain distinct social categories (e.g., race, gender, or class) through legal systems, traditions, or institutional policies. Legal definitions of race or citizenship historically divided populations into fixed groups, reinforcing the perception that these categories are biologically or inherently meaningful. These practices can be further reinforced by artifacts, language, or rituals that can be transmitted across generations through social learning. Moreover, symbols like national flags, gendered clothing, or religious rituals emphasize group membership and identity, fostering a sense that these groups are natural and distinct.

In addition, chance can play an important role in the emergence of biases or stereotypes underlying essentializing. In isolated communities, chance can lead to local pluralities of any given cultural information. This may include incorrect beliefs or biases that the learning generation adopts from its mentors. Social transmission can then—within a few generations—push such pluralities to local unanimity. “Chance initial differences will have pushed other isolated communities into different internal unanimities. This combination of intragroup homogeneity and intergroup differences set the stage for a group selection of beliefs, were some beliefs to be accompanied by greater efficacy than others” (Campbell, 1987, pp. 155). As argued elsewhere, there is strong evidence that when groups whose members are broadly similar in outlook are isolated from external influences, two things happen: Their opinions become more homogeneous, and their opinions become more extreme (Wheeler et al., 2020). Thus, cultural drifts exacerbated by ratchet effects amount to a snowballing of socio-cultural beliefs.

What matters to the fate of cultural traits, like beliefs, is not how successful carriers are with respect to their biological reproduction, but how successfully they transmit the trait in question. Here, imitation, rather than reproduction is the key to evolutionary success. Clearly, the evolution of belief systems is not well captured by (Panglossian) adaptationist explanations⁷ (Gould & Vrba, 1982; Lewontin, 1982). Such cognitive mechanisms would provide at best only a crude fit between belief and referent, since essentializing does not rely on scientific or true evidence (Barrett,

⁷ Panglossian adaptationism refers to an evolutionary model that understands all traits in organisms as optimal adaptations shaped by natural selection, ignoring constraints, historical contingencies, and non-adaptive explanations.

2001) as discussed before. An alternative explanation draws on exaptationist arguments assuming that neurobiological mechanisms were involved in processing beliefs and were then co-opted for social solidarity functions.

Socio-cultural niche construction may facilitate essentialist thinking by creating stable and enduring social structures that reinforce essentialist interpretations, making them seem natural and inevitable. By categorizing objects or concepts based on perceived essential properties, humans may be able to make quicker decisions about potential threats or opportunities and make more reliable predictions about the behavior of entities within their environment. By means of reciprocal interactions (a hallmark of niche construction), humans actively modify their environments thereby reinforcing cultural practices, behaviors, and beliefs. Thus, cognitive processes underlying essentialist thinking, irrespective of its ontological validity, represent “practical knowledge.” Practical knowledge serves the preservation of group cohesion and enhances chances of survival and reproduction of the group even in the face of disadvantage for individual group members. In other words, the application and effectiveness of beliefs or practical knowledge in real-world contexts can function as a heuristic for achieving specific goals or fulfilling practical purposes by guiding actions (James, 1907; Dewey, 1911).

6 Neurobiological Mechanisms that Enable Essentialist Thinking

Human evolution is driven by the continuous interaction between socio-cultural and biological factors entailing epistemogenesis (Kovac, 2015). For non-genetic, socio-cultural transmission to happen, individuals need biological substrates that enable acquisition, retention, and transfer of knowledge. Essentialist thinking as a form of socio-cultural knowledge transmission must, therefore, exploit neurobiological processes involved in other cognitive faculties that are shaped by ontogenetic processes.

Most contemporary scholars have moved away from the idea of innate “Darwinian” modules of the human brain that are based on rigid, inflexible neural mechanisms. As mentioned elsewhere (Sarto-Jackson, 2021, pp. 5) “[t]here is a large body of evidence that the perceptual and cognitive apparatus that instantiates seemingly innate behavior is not yet fully developed at birth in many organisms. Organisms employ their cognitive apparatus to postnatally interact with the environment in order to achieve a fully functioning perceptual and cognitive brain. As a consequence, functional cognitive “representations” are not simply a product of past evolutionary environments, but reflect adaptive responses to local conditions.” Hence, learning processes during development are not simply fringe benefits restricted to problem-solving during one’s lifetime, but crucial for the maturation of phylogenetically primed knowledge.

It is therefore of high relevance to explore the neurobiological mechanisms that underlie epistemic processes on the ontogenetic level. I will expound insights from contemporary neurobiological research that may help elucidate the neurobiological substrates underlying essentialism. More specifically, I will focus on three neurobiological mechanisms that have become intensely studied over the last decades and that most likely contribute to essentialist thinking: (1) the exaptation of learning processes involved in attachment; (2) the neuronal recycling of brain areas underlying visual pattern recognition and the construction of narratives; (3) predictive processing that buttresses the importance of inductive inference in human thinking.

6.1 *Attachment and Associative Learning*

Precursors of essentialist thinking emerge early in development and probably depend on attachment-driven neuroplasticity that reinforces bonding during infancy and childhood. Through mechanisms like preference and aversion learning, infants develop cognitive shortcuts linking familiarity with safety and emotional reward, laying the groundwork for in-group favoritism and out-group bias. These early social experiences, embedded within culturally constructed environments, can contribute to the persistence of essentialist beliefs by reinforcing emotionally charged social categories that feel natural and enduring.

The interplay between neurophysiological mechanisms and social stimuli drives attachment, the bedrock of human prosocial behavior. Remarkably, the same neural mechanisms that govern mother-child attachment are implicated in pair bonding (Forero et al., 2024; Numan & Young, 2016) and peer relationships (Feldman, 2017). By first fostering early parent-child attachment and later relationships between partners and peers, evolutionarily conserved neurochemical processes enhance group cohesion (Anacker & Beery, 2013). The early years of human development are marked by exceptional neuroplasticity, which is especially pronounced in brain areas associated with social cognition, such as the prefrontal cortex, temporal lobes, and the limbic system (Kolb & Gibb, 2011). It is tempting to speculate that brain regions that originally evolved for prosocial behavior like attachment and bonding were co-opted during infant development to drive essentialist thinking.

In addition to attachment and subconscious, emotional processing, also visual processing mechanisms are likely involved in essentialist thinking. The ability to process complex visual cues together with social signals is critical for forming and maintaining social and emotional bonds.⁸ High neuroplasticity in early years allows for the rapid integration of sensory inputs with emotional responses. Visual processing regions, such as the fusiform face area and the superior temporal sulcus,

⁸ Impairment of the functional connection between the brain's emotional and visual pathways causes individuals to recognize familiar faces but feel no emotional connection to them, a disorder termed Capgras syndrome (Ramachandran, 1998). This cognitive mismatch causes the delusion that loved ones have been replaced by impostors, as the brain fails to link visual recognition with the expected emotional response.

specialize in rapid identification of individuals' faces and interpreting social cues. These regions interact with the amygdala to assign emotional significance to visual stimuli, linking faces with feelings of trust, fear, or aversion. The fusiform face area's specialization in facial recognition allows individuals to distinguish between familiar in-group members and unfamiliar out-group members, while the amygdala assigns emotional salience to these categorizations. Repeated exposure to the in-group members during early childhood strengthens the very connections, reinforcing the perception of familiarity and safety. During this phase, preference learning primes infants to form stable social bonds. The preferences for familiar faces, voices, and scents provide a possible explanation for the emergence of in-group bias, probably representing precursors to essentialist categorization.

During the first seven to eight months of life, infants display preference learning (Barr et al., 2009). They form bonds to attachment figures and develop positive associations with familiar caregivers and social groups. Caregiver–infant attachment is mediated by a network of brain regions involved in emotional processing, social bonding, and reward experiences (Feldman, 2017).

Around six to eight months of age, infants transition from preference to aversion learning. This developmental and behavioral shift is driven by the onset of the maturation of the amygdala (Graham et al., 2016; Opendak et al., 2017; Tottenham & Sheridan, 2010) and the functional connectivity to other emotional and sensory brain regions. The amygdala plays a decisive role in the mature brain, because it processes emotional responses and helps recognizing and prioritizing social cues, such as distress or joy.

During this phase, infants begin to exhibit fear toward unfamiliar faces and stimuli, possibly reflecting a precursor to out-group categorization. This behavioral change goes hand in hand with an increasing complexity of the social environment and the need to distinguish between safe and potentially threatening individuals. By associating unfamiliar visual stimuli with negative emotional states, the brain enhances the ability to detect and avoid threats. While familiar faces elicit activation of reward-related circuits (Bartels & Zeki, 2004; Rypma et al., 2015; Swain et al., 2007), unfamiliar faces more strongly activate the amygdala (Gobbini & Haxby, 2006). Neurophysiological reinforcement of familiar faces, probably resulting in an association of in-group members with positive valences, is mediated by implicit associative learning processes. In this way, early associative learning enables cognitive shortcuts that then lead to the generation of generalized beliefs about in-groups and out-groups merely based on limited social information. Neural responses to in-group and out-group stimuli are shaped by early social exposure and cultural conditioning, as well as innate tendencies to prioritize safety and familiarity that in turn foster trust and cooperation.

The course of the developmental trajectory of the amygdala is also reflected in the emergence of group bias. While infants as young as 3–6 months can perceptually

differentiate between racial groups⁹ (Bar-Haim et al., 2006) and preschool-aged children can accurately identify others' racial-group membership (Aboud, 2003), children do not exhibit an innate bias about race. In point of fact, the amygdala responds to emotionally salient stimuli (Cunningham & Brosch, 2012; Whalen et al., 2001), that can either be negatively or positively valenced (Breiter et al., 1996; Hennenlotter et al., 2005). It fosters learning of emotionally significant cues in the social environment. Thus, the amygdala can be equally involved in in-group and out-group stereotyping. Interestingly, some children already demonstrate implicit bias about race at the age of 6 years (Baron & Banaji, 2006).

Subsequently, connectivity with other brain regions, such as the prefrontal cortex and hippocampus, is augmented. At the age of 10 years, children have internalized the social and moral norms of their culture, demonstrating increased knowledge regarding racial stereotypes and cultural norms (Apfelbaum et al., 2008). During adolescence, the amygdala undergoes further changes in functional connectivity, particularly with the prefrontal cortex and orbitofrontal cortex (Gee et al., 2013; Mills et al., 2014), which contribute to improved emotional regulation, decision-making, and empathetic behaviors. It has been demonstrated that racial stereotyping does not reflect an innate process but is culturally acquired usually during adolescence through social learning (Telzer et al., 2013).

Subconscious bias correlates with heightened activity of the amygdala when viewing faces of racial out-groups. These conclusions are corroborated by empirical findings demonstrating that the selectively increased activity of the amygdala in response to out-group members can be reduced by exposure to racial diversity during childhood (Cloutier et al., 2017).

Due to their importance for attachment behavior related to child-caregiver as well as peer-to-peer interactions, the aforementioned neural mechanisms grant the persistence of essentialist thinking, even in the face of evidence that contradicts stereotypical beliefs.

6.2 *Exaptation and the Neuronal Recycling Hypothesis*

As discussed above, by drawing on an extended evolutionary theory it can be argued that essentialist beliefs may not be adaptations themselves, but culturally driven outcomes of flexible, co-opted cognitive systems originally evolved for unrelated functions. Cognitive faculties evolved for purposes such as visual pattern recognition and explicit, narrative memory may have been repurposed for social categorization and group identity. Cultural practices like storytelling and symbolic marking can exploit neural systems such as the ventral visual pathway and reciprocal pathways

⁹ Although the term "race" is still used in contemporary scientific literature, most scholars have rightfully rejected the traditional concept of "race." Here the term "race" is understood as a cultural construct.

between hippocampus and the prefrontal cortex to reinforce in-group signaling and out-group detection.

Rather than uncritically accepting Panglossian adaptationism, exaptations may better explain many cognitive faculties. Discussing exaptation, Caporael (1987) uses the analogy of learning how to ride a bicycle. It seems clear enough that riding a bicycle cannot be an evolved adaptation, but it is made possible by adaptations associated with locomotion that were later co-opted for the purpose of bicycling. In the context of cognitive abilities, exaptation explains how certain mental capacities that developed for specific evolutionary challenges were later hijacked for different purposes. For instance, cognitive skills that evolved for manipulating physical objects like tools may have been exapted as problem-solving skills for abstract reasoning. A similar exaptation process may underlie essentialist thinking. In fact, exaptations might be of particular importance for the evolution of human cognition in general. Gould and Vrba boldly claimed that “[m]ost of what the brain now does to enhance our survival lies in the domain of exaptation” (Gould & Vrba, 1982, p. 13).

Stanislas Dehaene’s neuronal recycling hypothesis elaborates on the idea of exaptation, proposing that cultural inventions such as reading co-opt neural circuits originally evolved for visual recognition and pattern detection. Visual pattern recognition is an evolutionarily old, adaptive trait. It has been argued convincingly that the ventral visual pathway of the human brain, which has evolved for processing complex visual stimuli, has been repurposed for recognizing written symbols (Dehaene & Cohen, 2011) in the course of cultural evolution. This ability reflects the brain’s capacity to adapt to the demands of literate societies. Moreover, visual pattern recognition may not only have been exapted for cultural-technological functions like reading, but also for in-group signaling entrenching essentialism. For instance, social signaling through tattoos, fashion, and other optical markers that distinguish in-groups from out-groups may tap into the brain’s evolved sensitivity to visual patterns and social categorization.

Furthermore, while skills like reading and writing seem to rely on recycled regions of the visual cortex, storytelling seems to rely on the hippocampus’s ability to encode, integrate, and retrieve sequences of events over time. The hippocampus is adapted to processing episodic memory and spatial navigation. In human evolution, episodic memory appears to have been repurposed for constructing complex narratives. During memory encoding hippocampal activity is crucially involved in integrating separate episodes into a single, coherent narrative by bridging temporarily distinct events (Cohn-Sheehy et al., 2021). Complex narratives can serve the purpose of transmission of individual and group knowledge and values (Hirst et al., 2018; Willems et al., 2020), providing a pivotal social function for cultural accumulation (Mesoudi, 2016; Wald, 2008). The hippocampus that enables narrative coherence is interconnected with areas of the default mode network that integrates personal experiences with broader story frameworks thereby contributing to the formation of a stable self-concept (Davey et al., 2016). The default mode network’s role in integrating content and structure not only supports the creation of coherent personal narratives but could also facilitate the generalization of traits, a hallmark of essentialist reasoning. Additionally, its engagement during social cognition tasks (Li et al., 2014; Yeshurun et al.,

2021) aiming at understanding others' mental states could promote the attribution of stable traits to other persons, thereby strengthening the formation of generalized beliefs about others.

In addition to the cognitive substrates of the individual, also constructed socio-cultural environments are necessary for the stable transmission of culturally shared beliefs. Structured social environments, such as mentoring and institutionalized forms of teaching, can shape cognitive development thereby amplifying natural cognitive tendencies. This has been well studied in the context of symbolic evolution of written language and mathematics. Similar processes may underlie the internalization of essentialist beliefs. Socio-cultural practices, such as rituals and shared narratives strengthen social bonds and create a feedback loop between biology and culture. Teaching cultural narratives and myths and emphasizing unique and immutable qualities of a group can exploit memory formation and generalization of traits. To this end, socio-cultural niches can provide frameworks that reinforce, validate, and perpetuate biases by co-opting cognitive predisposition of explicit memory formation and formation of coherent personal narratives to generalize about groups and amalgamate limited information into seemingly coherent narratives about others.

6.3 *Inductive Inference*

Finally, cognitive mechanisms involved in essentializing may have evolved also because of assisting in inductive reasoning (Gil-White, 2001). In fact, it has been argued previously that the most promising proposal for the function of essentialism is indeed its contribution to guide inductive inference (Atran, 1998; Coley et al., 1999; Gelman & Markman, 1986; Gelman & Wellman, 1991). This could be achieved by simplifying the complexity of the environment, conserving cognitive resources, and facilitating rapid decision-making. Essentialist thinking interprets causal structures of the world without having knowledge about the actual underlying causes themselves. Prior knowledge, including stereotypes and biased cultural narratives, can guide inductive inferences. For example, stereotypes can lead to biased interpretations of ambiguous behaviors, where the same actions can be viewed differently depending on the actor's group membership. This bias occurs because prior beliefs shape expectations that lead to interpreting information in ways that confirm beliefs and reinforce stereotypes. In this way, "wrong" mental models are refined without trial-and-error experiences from the real world, thereby confirming false, but useful predictions.

It is widely agreed that inductive inference presents challenging epistemological problems that cannot be solved without some pre-existing assumptions or constraints (Markman, 1989; Quine, 1977). This is where evolutionary epistemology again may offer theoretical grounding as it traditionally deals with intuitions about rational inference (Campbell, 1987), and in particular about inductive inference. Following the arguments of evolutionary epistemologists, pre-existing assumptions are re-defined as ontogenetic a priori that stem from phylogenetic a posteriori. These pre-existing

assumptions allow for a progress of knowledge by means of inductive inference. Importantly, the success of induction cannot be derived rationally, but requires hypothesis testing through trial-and-error. Knowledge acquisition through trial-and-error as much as inductive inference allows for learning from specific observations to develop general principles. In trial-and-error, repeated attempts and feedback help refine understanding, substantiating inductive reasoning where patterns and regularities in observed data lead to broader generalizations or predictions. However, testing through trial-and-error does not require extensive real-life exposure to persons or phenomena in question. It may be sufficient to use cognitive heuristics, as discussed before. This undersampling of real-life phenomena can then lead to the confirmation of biases.

Inductive inference is central to evolutionary epistemology. It is assumed that knowledge evolves by generalizing from observations, testing hypotheses, and discarding those that fail. Inductive approaches acknowledge fallibility, conceding that inferences and hypotheses may be wrong, but can improve over time through refinement and correction. In Campbell's evolutionary epistemology the notion of a vicarious selector is evoked that allows to test cognitive hypotheses (Campbell, 1974). These selectors are believed to play a critical role in evolutionary processes and cognitive functions by enabling systems to simulate and refine options before taking action.

Thus, internal processes or simulations that supplant direct interaction with the environment allow a system to "test" or "evaluate" possibilities before committing to actions or decisions. The advantages of using internal models, simulations, or heuristics are a reduced need for costly trial-and-error in real-world environments by simulating or approximating outcomes.

Essentialism can be considered a vicarious selector that guides decisions or judgments based on prior models, heuristics, or cognitive constructs. By attributing an essence to individuals or groups without needing direct evidence, individuals can "select" behaviors or attitudes toward others based on pre-existing stereotypes rather than engaging in a detailed analysis of individual differences. Contemporary approaches in theoretical neuroscience provide options how vicarious selectors can be formalized. In tangible terms, predictive processing can be seen as a vicarious selector. Predictive processing just as vicarious selectors uses internal models to simulate and predict sensory input (Hohwy, 2013). In support of this assumption, it was argued that predictive processing can explain the influence of prior knowledge and social context on intergroup perception (McGovern & Otten, 2024).

7 Conclusion

Evolutionary epistemology offers an evolutionary explanation of essentialism by illuminating the evolvable nature of cognition and its intricate relationships with socio-cultural factors. Human societies' reliance on collective breeding creates a

rich social environment that promotes the differentiation of in-groups and out-groups. Neuroplasticity during early childhood enables the brain to adapt to social contexts, with preference and aversion learning shaping the neural circuits that underlie social categorization. The interplay between visual processing regions and emotional circuitry further reinforces these categorizations, laying the groundwork for essentialist biases. Predictive processing offers an explanation of how essentialism aids inductive inferences and reinforces stereotypes through iterations. To that effect, evolutionary epistemology enriches the discourse on essentialism by emphasizing the recurrent, ideational trial-and-error nature of knowledge acquisition that is governed by cultural evolution and shapes and refines human cognition over generations by cultural transmission.

Evolutionary epistemology provides valuable insights into the evolutionary role of essentialism in group-thinking. It sheds light on the dual nature of essentialism as a facilitator of group cohesion and identity formation on one hand and as a source of bias that leads to stereotyping, exclusion, and discrimination on the other hand. The attribution of essence to groups can lead to the exclusion of those who do not conform to the perceived group identity. This dynamic is evident in phenomena such as xenophobia or ethnocentrism, where out-groups are stereotyped based on their perceived lack of the in-group's "essence." Such essentialist thinking is reinforced by cultural narratives, historical contexts, and language, which often encode and perpetuate notions of group differences. Whether through beliefs about innate talent, moral superiority, or biological determinism, these ideas provide seemingly natural explanations for social hierarchies and divisions, lending them an air of inevitability. As a result, essentialist perspectives are deeply embedded in societal discourse, influencing how we understand identity, power, and belonging.

Mitigating the negative effects of essentialist thinking requires interventions that address both its biological and cultural roots. Promoting social exposure to diverse groups, challenging stereotypes through education, and fostering inclusive cultural narratives are strategies that leverage the brain's plasticity and the flexibility of cultural systems. These approaches align with evolutionary epistemology's emphasis on the evolutionary adaptability of human cognition.

Early childhood represents a critical window for interventions aimed at reducing the negative impacts of essentialist thinking. Strategies that increase social exposure to diverse groups, promote inclusive cultural narratives, and encourage perspective-taking can weaken the neural associations that underlie rigid in-group and out-group distinctions. The brain's neuroplasticity during this period provides a unique opportunity to reshape social biases and foster more equitable social interactions.

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Cognitive Adaptation to Culturally Evolved Ethnic Landscapes



Cristina Moya and Robert Boyd

1 Introduction

Ethnic phenomena universally characterize human societies (Levine & Campbell, 1971; Richerson & Boyd, 2001) and are unique to our species. Like many mammals, people belong to social groups and often engage in cooperative behavior with at least some other group members. However, members of ethnic aggregates additionally tend to share norms, beliefs, socially learned knowledge, ideas about common origins, and markers such as dialect or dress that help identify even strangers as co-ethnics. Importantly, none of these features is constitutive of ethnicity given the range of forms that ethnic identities take across space and time.

Despite relative consensus about the uniquely human nature of ethnic phenomenon, their cognitive underpinnings are much debated. Cognitive mechanisms that evolved for thinking about (1) biological species (Gil-White, 2001), (2) kin (Krupp et al., 2008; Van den Berghe, 1987), (3) non-human primate groups (Mahajan et al., 2011; Schaller & Neuberg, 2008; Sperber & Hirschfeld, 2004), (4) coalitions (Cosmides et al., 2003; Kurzban et al., 2001), or (5) culturally-evolved ethnic structures (Gil-White, 2001; Henrich & Henrich, 2007; Moya & Henrich, 2016; Richerson & Boyd, 2001, 2005) may be brought to bear when reasoning about contemporary ethnic groups (see rows in Table 1). Additionally, (6) more general learning mechanisms that did not specifically evolve to process information about social groups or biological taxa may produce adaptive responses to new social environments (Moya, 2023; Wertz & Moya, 2019).

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People may reason about ethnic phenomena using cognitive mechanisms that evolved for reasoning about different kinds real-world patterns (labeled 1–6). Each theoretical account makes different predictions about the resulting perceptions (discussed in Sect. 3) and motivations (discussed in Sect. 4) that ethnic structures would trigger. For example, if people reasoned about ethnic structures as if they were biological species they would treat them as highly informative, immutable identities that were mutually exclusive with each other and had a biological basis. They might also motivate preferentially interacting with others of the same group for coordination, but not cooperative purposes. Some accounts do not make clear predictions about some psychological responses and are labeled “?”. Others make predictions that are conditional on the specific form an ethnic boundary takes and are labeled “if”.

In this chapter we argue that none of these theoretical perspectives can account for ethnic cognition on their own. Several of these accounts (1–4 and to some extent 6) posit pre-adaptations that evolved prior to the hominin lineage and therefore before ethnic phenomenon culturally evolved. Humans can nonetheless recruit several of these mechanisms when thinking about contemporary ethnic boundaries. However, none is likely to give rise to the observed suite of ethnic reasoning processes (e.g., essentialist intuitions, ingroup favoritism, outgroup hostility or suspicion) on their own (as illustrated by the expected pattern of responses in Table 1).

More specifically we contend first, that ethnic phenomena arose in the hominin lineage since the split with our nearest ape relatives and second, that these phenomena presented several new adaptive challenges. The former resulted from cultural evolutionary processes that fundamentally changed the affordances of human social group boundaries and created new cultural structures. For example, many group boundaries became symbolically marked, culturally differentiated, and maintained through norm enforcement. The second claim that these posed new adaptive challenges follows from the fact that different social goals present different problems. For example, one might want to predict strangers’ behavior, decide with whom to interact when coordination matters, or decide with whom to cooperate when defection is a risk. For each of these adaptive problems it is important to understand the cultural structures that the psychology is responding to. That is, we can only understand perceptions of ethnic boundaries and motivations for interacting across these by considering their fit to real-world cultural environments (Fig. 1).¹

We start in Sect. 2 by sketching how cultural evolutionary processes could have produced novel cultural structures in the hominin lineage. In doing so we differentiate cultural clusters, ethnic categories, and ethnic groups. The remainder of the paper focuses on selection pressures on human psychology that these cultural structures

¹ Much evolutionary research takes the fit of a trait to its environment as a core theoretical principle for deriving predictions. However, this approach is uncommon in many fields that tackle questions of social and ethnic identity. This partly reflects psychological research’s focus on people’s perceptions of groups, rather than how cultural structures affect these perceptions and anthropologists’ recognition that many ethnic identities correspond poorly, if at all, to cultural diversity. Neither of these critiques obviate the need to understand how cultural realities are produced and then processed by perceptual and motivational systems.

Table 1 Hypothesized psychological responses according to different theoretical accounts of ethnic cognition
The theoretical accounts on the left correspond to the domain for which a proposed cognitive mechanism evolved (i.e., its proper domain). The remaining columns consider whether proposed features of essentialism or of intergroup behavior would be expected for each cognitive mechanism. Question marks denote predictions that would be hard to make given limited information about the nature of culturally-evolved ethnic structures across hominin evolution. We add “if” to predictions that are contingent on specific manifestations of ethnic structures in line with their current diversity

		Section 3: Perceptions				Section 4: Motivations	
		Informa-tiveness	Immutability	Mutual exclusivity	Biological basis	Coordinate	Cooperate
Theoretical Account	1. Biological species	High	Yes	Yes	Yes	Yes	No
	2. Kin (genetic relatedness)	Med	Yes	No	Yes	Yes	Yes
	3. Non-human primate groups	Low	No	Yes	No	No	No
	4. Coalitions	Low	No	Yes	No	Yes	Yes
	5. Culturally-evolved ethnic structures	High	?	?	No	Yes	?
	6. General learning	High, if	Yes, if	Yes, if	No	Yes, if	Yes, if

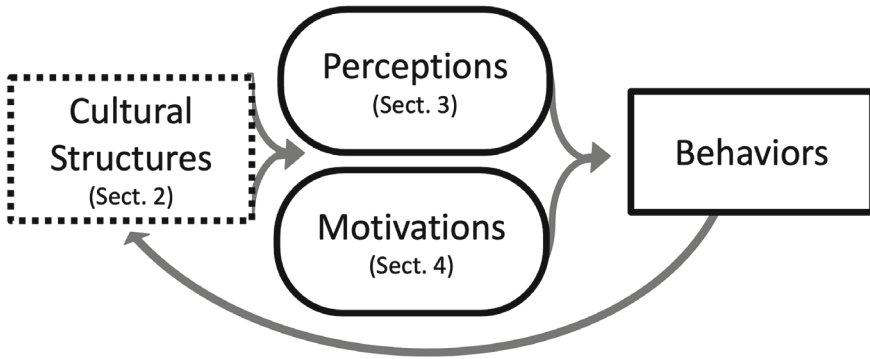


Fig. 1 Schema of causal relationships between cultural structures, psychological mechanisms, and behaviors. Ovals refer to psychological processes, while rectangles refer to outward expressions of these. While perceptions, motivations, and behaviors are properties of individuals (solid border), cultural structures are properties of aggregates of individuals (dotted border). For example, while an individual may wear an ethnic marker and participate in a ritual (both behaviors), the correlation between these traits and their distribution in a region are cultural structures. These cultural structures in turn serve as inputs to individuals' perceptions about, and motivations to interact with, ethnic groups. Cultural structures, perceptions, and motivations map on to Sects. 2–4 of the paper respectively. Note, not all causal relations are represented (e.g., motivations may affect perceptions)

could have produced. In this discussion we use the term evolution to refer to both genetic and cultural responses to these novel social landscapes given the difficulty of separating those theoretical accounts (Wertz & Moya, 2019). Section 3 considers possible selection pressures on human perceptions of cultural groups. We argue that adaptations for thinking of ethnicity as informative are likely and a genetic basis for these is partially supported by empirical evidence. However, it is less clear whether other features of essentialism, such as beliefs about mutual exclusivity and about the biological transmission of identity, would necessarily follow from a culturally-structured world. In Sect. 4, we turn to possible selection pressures on motivations for various kinds of intra- and inter-ethnic interactions. New cultural structures may have motivated preferentially interacting, or even cooperating, with co-ethnics. In the latter case we discuss a possible role of cultural group selection in favoring pro-social ethnocentric institutions or pro-social preferences. Empirical evidence is strongest for genetic adaptations that encourage homophilous interactions and norm compliance. We conclude by reviewing the ways that each of the theoretical accounts in Table 1 fail on theoretical or empirical grounds.

2 The Evolution of Cultural Structures

Here we suggest a plausible cumulative cultural process that could give rise to three different kinds of structures: cultural clusters, ethnic categories, and ethnic groups. Some amount of cultural clustering may predate the split between humans and chimpanzees (Barratt et al., 2023), but the extent of clustering likely increased in the hominin lineage, and the latter two phenomena are likely hominin-specific. Not only do ethnic categories exhibit some amount of cultural clustering, they additionally motivate people to assort based on their category membership. Ethnic categories will therefore often be marked to facilitate such assortment. Finally, ethnic groups will additionally act as units of collective action. These are roughly ordered in a temporal sequence and from fewest to most entailments, but we stop short of making empirical claims about a specific evolutionary timeline given the difficulty of identifying such cultural structures in the archeological record.

2.1 *How Cultural Clusters Can Evolve*

Cultural evolutionary processes have created and maintained structured variation across societies for much of human evolutionary history (Baker et al., 2024; Borg-erhoff Mulder et al. 2006; Boyd & Richerson, 2010; Collard et al., 2006; Mace & Holden, 2005; Shennan, 2011). More specifically this variation is often structured into “cultural clusters”—i.e., aggregates of individuals who share multiple cultural traits. We use this term, rather than ethnic groups or categories, to avoid implying that there is selection for marking membership, or that they are a locus of group loyalty and identification. Cultural clustering means that much of the variance in a trait is between groups rather than within groups and that this is true for multiple traits. It is worth noting that many identities do not map onto large sets of cultural features (e.g., some of the greatest hostilities can occur between culturally similar neighbors as is the case between Serbs and Croats). Nonetheless, cultural clustering would give social categories their informativeness or rich inductive potential—features proposed to be important elements of, or even reasons for, psychological essentialism (Barrett, 2001; Gelman, 2003; Haslam et al., 2000; Keil, 1989). We return to these claims in Sect. 3.

Empirically, the extent to which, and scale at which, culture clusters vary considerably. These conditions varied even in the Pleistocene. Sites within 50 miles (80 kms) in Southern African showed culturally distinct toolkits as early as 90kya (Mackay et al., 2022). Minimally, lithic, ostrich eggshell, and dietary technologies clustered, though it is possible these indicate other cultural distinctions that do not preserve archeologically. Yet some thousands of years later, toolkits across these sites converged. In contemporary societies researchers have been able to measure the cultural clustering of beliefs. Even for categories as broad as national ones, an average of about 8% of the variation in responses to the World Values Survey is found

between, rather than within countries (Bell et al., 2009; Muthukrishna et al., 2020).² The first of these studies shows there is decidedly much more cultural than genetic variation between countries, validating common expectations that social categories are informative about individuals' behavior because of cultural rather than genetic differences between them. Work among smaller-scale East African pastoralists replicates similar cultural clustering values on norms about topics such as cooperation, punishment, and family dynamics (Handley & Mathew, 2020). This study furthermore illustrates that cultural clustering is higher at the ethnolinguistic level than at the clan or territorial section level, with 9% to 22% of the variation accounted for at the ethnolinguistic scale (Handley & Mathew, 2020). This has implications for the ways humans are likely to carve up their social world and form basic categories for generalization.

Several social learning heuristics that are common in other species allow the evolution of cultural clustering but are not sufficient to explain it. While social learning has been documented in a wide range of taxa—e.g., octopus, fish, insects, asocial reptiles, and rodents (Fiorito & Scotto, 1992; Galef, 1993; Leadbeater & Chittka, 2007; Pike et al., 2010; Wilkinson et al., 2010)—these do not result in cultural clusters. However, many social learning heuristics have the side effect of reducing the amount of variation in the trait within the group, thus increasing the informativeness of cultural clusters. For example, disproportionately copying the majority (i.e., conformism), copying similar others, and copying the same set of prestigious or successful individuals can readily evolve (Axelrod, 1997; Boyd & Richerson, 1985; Henrich & Boyd, 1998; Henrich & McElreath, 2003; Perreault et al., 2012) and increase within-cluster homogeneity. Again, many of these social learning heuristics have been documented in other animals (Cruz y Celis Peniche, 2025; Pike & Laland, 2010; Pike et al., 2010), but are only used for a limited number of culturally transmitted traits. While several non-human species such as chimpanzees, capuchins, cetaceans, and corvids (Hunt, 2000; Perry, 2011; Whiten et al., 1999) have spatially structured traditions, and some show evidence of behavioral clustering (Barratt et al., 2023) these tend to encompass few cultural traits compared to information-rich cultural clusters in humans. In non-humans then, cultural cluster affiliation affords few generalizations.

Human culture is different from traditions in other species in the number of traits that are transmitted, and therefore the number of traits that can covary along clusters (Moya & Cruz y Celis Peniche, in press). This could be partially explained by our ability to accumulate cultural elements intergenerationally, facilitating the development of complex packages of cultural adaptations that work particularly well in concert and therefore are co-inherited (Richerson & Boyd, 2005; Tennie et al., 2009). This process, plus the open-endedness of human culture (Morgan & Feldman, 2025), can produce more divergent cultural clusters than seen in other species. Humans use such cultural learning to adapt to a wide range of ecologies (Boyd et al., 2011). The

² Note that all these studies find more cultural variation within, than between, social categories. However, these estimates will undoubtedly depend on the cultural traits being measured (see Handley & Mathew, 2020 for one such analysis).

new niches we create for ourselves in new ecosystems in turn further increase cultural differences between clusters.

Some ways that humans socially learn help explain both its cumulative nature and increase the set of traits that are culturally clustered. For example, an individual copying a successful individual may not know which of their behaviors explains their payoffs. Did planting legumes the year before, sowing the field in September, or praying to the gods contribute to their high crop yield? Copying several features of successful models can be favored, even if they leave individuals vulnerable to acquiring irrelevant, or even maladaptive, ideas from the model (Henrich & McElreath, 2003; Cruz y Celis Peniche, 2024). Such overimitation happens in the context of tool use cross-culturally, particularly when the functional affordances of the tool are unclear to participants (Buchsbaum et al., 2011; Lyons et al., 2007; Nielsen & Tomaselli, 2010; Whiten et al., 2009; though see Kline et al., 2020). Additionally, determining who has higher payoffs is often more difficult than determining who is prestigious according to local standards (Henrich & Gil-White, 2001; Hill & Kintigh, 2009). This bias may lead learners to imitate a larger set of traits from the same prestigious individuals. These social learning strategies produce cultural linkage (Yeh et al., 2019) and can increase the number of traits that correspond to cultural clusters, and therefore the inductive potential of the clusters, by allowing non-functional beliefs, norms, and preferences to be transmitted along with the adaptive traits.

So far, we have not discussed any process that would select for ethnic markers as signals of group membership. Nonetheless, people may have evolved to (or learned to) detect cues of cultural cluster membership, without there being selection for signaling social identities (Maynard Smith, 2004). Similarly, species are seldom designed to allow others to make inferences about them, with notable exceptions such as signaling toxicity to predators. Yet humans and other animals have little difficulty in making taxon-based predictions even in the absence of intentional markings. In the case of cultural clusters, easily detectable and culturally transmitted cues such as language use or clothing choice may have allowed humans to form concepts about the traits associated with cultural clusters.

To summarize, spatially clumped populations in concert with conformist, success or prestige-biased social learning could have increased within-cluster cultural homogeneity, even in the face of inter-population migration. Once cumulative and open-ended culture arose in the hominin lineage these clusters could accumulate trait differences and diverge further. Adaptive cultural responses to spatial variation in ecologies would also increase the relative differences between cultural clusters and the number of traits culturally acquired. Finally, credulous learning biases could have led to the covariance of a wider set of socially transmitted traits, thus increasing the inductive potential of clusters.

2.2 *How Ethnic Categories Can Evolve*

The evolution of cultural clusters could have generated new selection pressures to learn from, and interact with, others from the same cluster. Additionally, this could have favored signaling one's belonging to a cultural cluster. We refer to the resulting social structures as ethnic categories, thus differentiating them from ethnic groups whose members preferentially cooperate with one another.

There are several reasons why it would be advantageous to individuals to learn from others of the same cultural cluster (Smaldino & Velilla, 2025) and this could produce new selection pressures. First, some cultural traits might be suited to specific environments, and cues of cultural similarity can indicate that a model shares traits useful for the same environment (Boyd & Richerson, 1987). Second, some cultural traits are only advantageous to adopt for people who already possess other cultural attributes. For example, learning to cook acorn meal would only be useful for people who already know how to detoxify raw acorns (Basgall, 1987). Given that cumulative culture readily gives rise to such complex cultural packages, individuals may benefit from selectively copying others who share the same cultural repertoire, ensuring they acquire positively interacting cultural traits and avoiding traits that are detrimental alone.

Individuals that preferentially associated with others from the same cultural cluster would have also avoided costs arising from interacting with people who have dissimilar expectations and norms. In simple models of the evolution of this kind of assortment there is no conflict of interest between the parties, so both benefit from honestly signaling their cultural category membership (McElreath et al., 2003).

The incentives to learn from, and to coordinate with, culturally similar people both result in increasingly information-rich cultural clusters and provide the first selection pressures to signal ethnic category membership. First, clearly marked ethnic categories (e.g., those with detectible stylistic differences or intentionally marked accents) would have facilitated the acculturation of their members (Wagner, 2024). That is, all else equal, ethnic categories that made it easier for their members to learn locally adaptive cultural traits would have persisted more readily than those that did not. Second, in coordination games, clear signals of ethnic category membership can evolve cheaply to communicate one's norms and conventions to potential interaction partners. The coordination model suggests that a correlation between markers and all traits that affect coordination should evolve, thus increasing the number of traits that co-vary. As people update their behaviors to avoid coordination costs, within-category variation will decrease further.

2.3 *How Ethnic Groups Can Evolve*

We have not yet offered a mechanism that would produce ingroup cooperation or inter-ethnic conflict along these boundaries, features that are cross-culturally pervasive (Levine & Campbell, 1971) and commonly associated with ethnic phenomena. We will refer to structures with these features as ethnic groups following Brubaker's distinction between these and categories (2004). However, we have described various learning processes that can lead ethnic categories to diverge culturally from each other, reach different institutional solutions to adaptive problems, and maintain relative within-category homogeneity, despite migration between groups. While all these phenomena are driven by individual learning processes, they turn out to be critical precursors for cultural group selection (Richerson et al., 2016), a mechanism that can favor norms for ethnocentric cooperation and intergroup conflict. The logic connecting these processes follows.

The ethnographic record is full of different cultural solutions to the same adaptive problems. Tensions created by inequalities can be dealt with through redistribution or by justifying the existence of elites. Childcare needs can be handled by grandparents, older siblings, or multiple social fathers. Within society people do well to follow the established norm, meaning that these are stable cultural equilibria. However, some sets of cultural traits might provide higher payoffs. These institutions will generally outcompete others, for example by attracting immigrants, producing more emigrants, having a higher growth rate, or by spreading their ideas (Boyd & Richerson, 2009; Zefferman & Mathew, 2015).

Higher payoff equilibria can result from cultural norms that are in line with individuals' interests, or from norms that would be at odds with their interests if the community were not enforcing them. For example, taboos on unhealthy foods, more efficient technologies, or more effective conventions for coordinating social interaction and trade are examples of the former—they do not depend directly on ingroup cooperation. On the other hand, norms to defend one's group or limits on the use of local resources can be good for the group but require individually costly ingroup-favoring behavior. While conflicts of interest between individuals and groups can arise in this latter scenario, cultural institutions often incentivize and stabilize pro-social behaviors. For example, a society that encourages individuals to signal their wealth with philanthropy will do better than one that encourages signaling wealth by blowing up rockets. More commonly, punishment aligns incentives between individual actors and the group (Boyd & Richerson, 1992). To some extent the cultural learning rules we've described above, like conformism and prestige bias, can also make it less likely that individuals deviate from norms, including in selfish ways.

Cultural group selection provides a population-level explanation for how ingroup-favoring institutions, such as ethnocentric or expansionist ones, can proliferate. This cultural evolutionary process thus changes the landscape in which human social cognition develops. It also contributes another process that makes ethnic categories more homogenous along the dimensions a society rewards or punishes, thus reinforcing the cultural structures described in the previous two sections.

3 The Evolution of Perceptions About Ethnic Structures

The cultural evolutionary processes outlined in Sect. 2 would give rise to several new kinds of cultural and ethnic structures in the hominin lineage. The functional affordances of these ethnic structures would have been distinct from those of other kinds of ancestrally relevant groupings—e.g., biological species, kin relations, primate groups, and coalitions (corresponding to theoretical accounts 1–4 in Table 1).

In this section we turn to how these novel structures might have shaped cognitive systems involved in social perception. First, we consider the functional requirements of a categorization system, and specifically how it would be designed for thinking about ethnic structures (Sect. 3.1). We then focus on four aspects of social perception that are often invoked as aspects of essentialist intuitions; the extent to which social categories are perceived as informative, immutable, biologically based, or mutually exclusive with each other (Sect. 3.2 and left columns in Table 1). We discuss why these intuitions may or may not be accurate (Sect. 3.3). Finally, we assess the likelihood that humans have cognitive adaptations that evolved in response to a culturally clustered landscape (Sect. 3.4).

3.1 *Functional Requirements of Categorization Systems*

Categorization systems for parsing cultural variation could be favored by selection even if only cultural clusters had arisen, that is, even without a motivation to associate, or cooperate, with co-ethnics. The ability to form ethnic concepts may well predate the emergence of other ethnicity-based behaviors. We define concepts as cognitive tools for collapsing variation in inputs into a smaller set of outputs and thereby helping organisms make decisions in a complex world.

There are an infinite number of possible concepts, so a functional categorization system must efficiently exclude most possible concepts and favor the development of concepts that help organisms meet adaptive goals (Cottrell & Neuberg, 2005; Hunn, 1982). For example, people could divide others into two categories: those weighing between 30 and 31 kg, and all others. It is unlikely any cognitive mechanisms for conceptual development give rise to this possibility given it is unlikely to afford useful predictions. It follows that the same set of stimuli should be categorized differently depending on a person's specific goal. For example, people may engage gender concepts when deciding with whom to mate but find this dimension irrelevant when determining whether they are likely to speak the same language. Many differences across cultural clusters have fitness consequences, e.g., for trade, marital decisions, etc.

Additionally, efficient concepts should afford multiple predictions, not just fitness-relevant ones. For example, while categorizing organisms as edible or dangerous has important fitness consequences, such a conceptual boundary is unlikely to afford many other predictions. Hippopotamuses and black mambas share little in common

beyond the fact that they pose serious dangers to humans and are edible. As such, this boundary is unlikely to be the only level of resolution we use. The number of conceptual distinctions in folkbiological taxonomies—estimated at several hundred at the generic level (Berlin et al., 1973)—seems to exceed the basic functional affordances of organisms as prey, predators, toxic, dangerous, or nutritious even if they are often driven by utilitarian needs (Hunn, 1982). People must also choose the level of categorization that optimizes the tradeoff between generalizability and accuracy of their predictions. For example, one could categorize an organism as a *kiboko* subspecies of hippopotamus and be quite sure that they share several features, but lose the efficiency of generalizing to other subspecies, while categorizing a hippopotamus as an animal instead does not allow many accurate predictions. Researchers have argued that the genus level in the taxonomic hierarchy clusters much biological variation and thus optimizes the trade-off between generalizability and accuracy in the folkbiological domain (Atran, 1990; Coley et al., 1997). Similarly with respect to social concepts, it is likely that developing rich conceptual schema about cultural clusters has adaptive advantages.

Finally, given the wide range of cultural and ecological settings that humans inhabit, our categorization system must be open-ended enough to allow novel conceptual development. For example, while humans only encountered platypuses once they arrived in Australia about 65,000 years ago, we can acquire concepts of egg-laying mammals. Scholars have proposed various ways natural selection can design cognitive systems that acquire adaptive biological folk taxonomies (Atran, 1990; Barrett, 2005; Coley et al., 1997; Medin & Atran, 2004). Similarly, social categorization systems must contend with cross-cultural variation in cluster boundaries and their cultural content. Is dialect or dress the best cue for assessing someone's cultural cluster? If the former, what are the distinctive elements: pronunciation, lexical choices, or cadence? Which other cultural features do these dialectical cues predict? Such flexibility must be integral to any cognition for processing human social categories.

In summary, an ethnic categorization system must develop reliably, extract fitness (or goal)-relevant information about complex social worlds, and be open-ended to allow for new kinds of cultural clusters.

3.2 Does Ethnic Categorization Necessitate Essentialism?

Researchers have suggested that essentialist folk theories about social groups evolved to support category-based predictions when these have rich inductive potential (Barrett, 2001; Gelman, 2003; Hirschfeld, 1996; Medin & Ortony, 1989). Minimally, essentialism involves acting *as if* unseen essences explain shared traits between members of a category. This intuition allows people to infer further similarities between category members even if the latter undergo superficial changes. However, models of essentialist intuitions do not explain which cues indicate that others share an will be interpreted as evidence of a shared essence, and which inferences can be

drawn based on category membership (Barrett, 2001). Furthermore, there is much debate as to how fleshed out a causal theory of essences must be to explain how humans detect causal relations (Ahn et al., 2001; Strevens, 2000), and even about the defining features of essentialism (Carey, 1996; Gelman, 2003).

Setting aside definitional disputes about essentialism, we discuss various qualities associated with essentialist folk theories and consider whether they would be necessary or useful for an ethnic categorization system. We argue that expecting rich inductive potential of cultural clusters and stable category membership affect people's ability to make adaptive predictions about others. On the other hand, beliefs that category membership is biologically inherited and mutually exclusive may be ideologies that develop in certain cultural contexts, but that are not functionally necessary for making predictions. Given we believe these are logically separable social perceptions, we discuss alternative interpretations of studies showing associations between these dimensions (Halperin et al., 2011; Haslam et al., 2000; Rhodes et al., 2012).

Rich Inductive Potential

Categories with rich inductive potential are useful for predictions whether or not they are represented in essentialist ways. Inductive potential is a function of the number of traits for which category membership is predictive and how well category membership predicts those traits. For example, if speaking Quenya is predictive of several cultural beliefs or norms then it would have high inductive potential.

A causal representation that essences (or essence placeholders) are responsible for the various traits may be a convenient way of organizing such expectations, but it leaves unspecified critical features of the cognitive architecture. Which cues indicate that individuals share an essentialized category membership? What are the prior expectations of the predictive power of category membership? What is the domain of traits for which the category has inductive potential? For example, even if cultural clusters have rich inductive potential, they will not be predictive of all features (Barrett, 2001). For example, cultural clusters will not predict someone's gender, or transient features like wetness (Keil, 1989). Determining the inductive potential of a category, and the domains along which induction is useful, is likely to be one of the basic functional requirements of any categorization system, be it essentialist or not (Markman, 1991; Murphy, 2002). How human minds address these questions is more functionally relevant to the design of an ethnic categorization system, than determining whether the mind uses an essence-based theory for organizing this information.

Furthermore, beliefs that category members will be similar to each other *relative* to non-category members do not necessarily follow from essentialist causal representations. The fact that people represent a causal relation between an essence (or category membership) and having a trait, tells us nothing about their expectations of non-category members having the same traits through independent causal pathways.

That is, a causal representation between essence and trait is not strictly a representation that a trait follows *if and only if*, or *particularly if*, the target has the essence. Yet, a conceptual system needs to consider the likelihood that non-category members have the same trait to ascertain the category's inductive potential. For example, one might have an essentialist notion that Quenya speakers are tall because of their genetic potential, and a non-essentialist notion that Sindarin speakers are tall because they have access to lots of food. Yet language spoken in this system would have limited predictive power, at least for height.

Because cultural evolutionary processes are likely to produce cultural clusters with high ingroup homogeneity relative to between-group variance, along multiple cultural domains, representing cultural clusters as having rich inductive potential would have been useful in allowing humans to make reasonable predictions under conditions of uncertainty or limited information. Importantly, most other theoretical accounts in Table 1 refer to adaptations for thinking about categories with lower inductive potential (i.e., kin, coalitions, and primate groups). While conceptual representations of cultural clusters could be instantiated as particular essentialist or causal theories (Gelman, 2003; Gil-White, 2001; Hirschfeld, 1996), we do not see why this need be the case. The functionally relevant pieces of the cognitive architecture only need to include a definition of the category boundary, representations of the distributions of traits within category and between categories, and some rules for carving out the domain of traits that co-varied (i.e., culturally-acquired ones). How these representations develop remains an open empirical question.

Immutability

Multiple studies have found early-developing expectations that individuals inherit their biological kind essence from their birth parents (Gelman & Wellman, 1991; Johnson & Solomon, 1997). The exact nature of these folk theories can be of functional significance but may only be appropriate to some kinds of categories (Barrett, 2001).

For example, while it may be adaptive to expect that parents and offspring will be the same species, the expectation that they are all the same sex would make little sense. This is despite both species and sex categories having rich inductive potential. We next consider whether folk theories of immutability of category membership are functionally useful for ethnic categorization.

The belief that essences exist somewhere deep inside an individual is often implicated in richer theories of essentialism (Newman & Keil, 2008) alongside beliefs that the essence is immutable. These two beliefs are logically independent—some superficial features are immutable (e.g., most people have two legs all their life) while some internal features change regularly (e.g., gut flora change with illness, diet, and age). However, it may be that people can observe superficial changes more easily than internal ones and so reject the hypothesis that the essence depends on superficial features. By this account, the belief that essences are inherent and internal is a non-functional confabulation. Alternately, believing that essences are internal

may be functional if they prevent people from interpreting superficial changes as meaningful. However, even this is likely to be an inelegant workaround in response to cognitive limitations rather than an efficient design.

Beliefs about the permanence of category membership have stronger implications for theories of ethnic categorization than do beliefs about the essence's locus. It is reasonable that folkbiological theories contain the expectation that individuals keep their biological species membership throughout their lifetime. However, it is less clear that this is a useful assumption about ethnic kinds. In fact, many ethnographic case studies and some constructivist accounts in political science, economics, and anthropology argue that people strategically shift their ethnic identity when they deem it politically beneficial (Barth, 1969; Fearon & Laitin, 2000; Horowitz, 1985; Moerman, 1965; Penn, 2008).

Furthermore, most of the theoretical accounts in Table 1 would predict permeable ethnic boundaries. Some evolutionary psychologists argue that people reason about some contemporary ethnic categories as if they were coalitions which people could flexibly shift contingent on sharing interests with other group members (#4 in Table 1; Cosmides et al., 2003; Kurzban et al., 2001). A somewhat different evolutionary argument considers small primate groups—whose females or males tend to emigrate at sexual maturity—as the precursors to ethnic groups (#3 in Table 1, Sperber & Hirschfeld, 2004). With no further selection on the cognition, this adaptation should not include an expectation that group membership is stable. Finally, one might also expect that cultural group selection would favor institutions that facilitate group expansion by allowing immigrants to shift group membership and encouraging assimilation (#5 in Table 1, Boyd & Richerson, 2009). If these accounts are right, ethnic categories might have rich inductive potential but shifting membership. Therefore, assuming that individuals' category membership is immutable would lead to incorrect predictions about any given individual at different points in their life.

On the other hand, if cultural traits associated with cultural clusters, ethnic category, or group membership are relatively stable throughout one's life, then expecting the associated essence to be immutable could be a frugal and accurate heuristic for predicting a person's features through time. In the case that categorization systems evolved to take advantage of the rich inductive potential offered by cultural clusters, theories of stable ethnic identity would have been functional if, and only if, people tended to maintain cultural traits throughout their life. There are multiple reasons this might be the case.

Most archeological, genetic, and ethnographic data (Barth, 1969; Copeland et al., 2011; Hill et al., 2011; Templeton, 1998) suggests that intergroup migration was a common feature of societies throughout human evolution. However permanent relocation across widely divergent cultural clusters could still have been relatively rare given the associated coordination costs. Many small-scale societies, in fact, have institutions that discourage migration by adults from distant groups—e.g., hereditary property rights, wariness of strangers—despite the potential group benefits of allowing population growth through immigration. Migration at marriage is a common circumstance under which individuals migrate between groups, but ethnolinguistic endogamy is cross-culturally pervasive (Davis, 1941; Gil-White, 2001; Kalmijn,

1998; Tindale, 1953). Even in the classic ethnographic counterexample, the Tukanoan in the Vaupés region of the Amazon, tribal units are linguistically exogamous, but ethnographers describe them as rather culturally homogenous, essentially a single social system (Jackson, 1983; Sorenson, 1967) with universal multilingualism, and relatively little cultural change upon migration for marriage.

Low intercultural migration rates allow the development of sensitive periods of culture acquisition. Critical periods of cultural learning may arise if there is a trade-off between being able to acquire more sets of cultural traits, and proficiency in one. Under such circumstances cognitive systems might start prioritizing becoming “expert” in one set of cultural rules after a certain age, or amount of input, and make it difficult to adopt or internalize new or differing cultural traits (DeWitt et al., 1998; Frankenhuys & Panchanathan, 2011). Analogous sensitive periods are well documented for language acquisition, though it is debated whether this is a function of natural selection or a byproduct of cognitive constraints (Elman, 1993; Hurford, 1991; Nettle & Dunbar, 1997).

Various lines of evidence suggest that such a sensitive period of acculturation may prevent large cultural shifts. Life history studies have documented long periods of learning necessary to achieve peak competence at skills such as hunting, collecting, or parenting (Gurven et al., 2006; Hewlett & Cavalli-Sforza, 1986; Walker et al., 2002). While these do not directly speak to people’s ability to acquire new skills or ideologies if they are given novel cultural inputs, they suggest that beginning to acquire a second set of cultural traits in adulthood might be impractical. Developmental neuroscience studies document neural pruning throughout adolescence coinciding with the end of sensitive periods for language acquisition (Craik & Bialystok, 2006), and perhaps more generally for culture acquisition. Finally, the socialization literature suggests that norms are often internalized early in life such that individuals naturalize them to the exclusion of competing norms (Haidt, 2001; Kelley & Volkart, 1952; Kelman, 1958; Restrepo & Vaisey, 2024).

While sensitive periods of socialization might lead to expectations that people’s cultural cluster affiliation would be immutable through adulthood, such beliefs may be specific to certain traits that have critical periods of acquisition. Politically strategic ethnic affiliation and identification shifts may be more labile, and therefore not construed as immutable. Furthermore, institutions that facilitate immigration and assimilation into a host society should spread, all else equal. If migrants conformed to the new host society’s cultural repertoire, then the inductive potential of the category with respect to cultural traits could be maintained even with identity shifts. More ancestral cognitive resources for reasoning about shifting coalitions, primate groups, or domain-general concept acquisition mechanisms that allow nuanced expectations about how people change when crossing boundaries could be brought to bear in such circumstances.

We know too little about demography, cognitive constraints, and critical periods of culture acquisition during humans’ evolutionary history to make strong *a priori* predictions regarding the utility of biases for thinking cultural identities are immutable (hence the “?” for #5 Table 1). However, we have suggested how the empirical data may speak to the theoretical proposals outlined above. Furthermore, this

framework suggests that much of the primordialist versus circumstantialist debate (Wimmer, 2013) about the permanence of ethnic identity may result from the presence of multiple kinds of cultural institutions with diverse construals of group boundaries. Additionally, some cultural features might change readily with group membership, while others might not. We propose that the relevant question regarding stability for an ethnic categorization theory is whether people maintain a large enough set of cultural traits for long enough to give ethnic clusters rich inductive potential. Empirical evidence thus far suggests that expectations of social kind stability reliably develop (Hirschfeld, 1996), possibly earlier than expectations about essence inheritance (Astuti et al., 2004; but see Diesendruck & Haber, 2009 for some mixed evidence). Additionally, membership in shifting coalitions seem to be tracked by cognitive mechanisms that are separate from ones for encoding a plausible ethnic cue, accent. (Pietraszewski & Schwartz, 2013).

Biological/Genetic Inheritance

Although a biological or genetic transmission pathway for essences is often conflated with the dimension of immutability, we believe these are logically, and functionally independent. Additionally, we are more skeptical that reasoning as if category membership is genetically transmitted is a necessary, or functional component of ethnic essentialist theories. While no scientist claims that ethnic category membership is in fact transmitted from parents to offspring through a genetic or prenatal mechanism, some do claim that people behave *as if* this is the case because it led to reasonable predictions throughout much of our evolutionary history (Gil-White, 2001). Gil-White more specifically claims that this heuristic evolved for reasoning about biological species for which believing that individuals beget offspring of the same kind was a reasonable assumption given the slow pace of speciation. Because of a similar correlation between the ethnic category membership of offspring and parents, he argues biological species reasoning was co-opted for reasoning about ethnic identity transmission. As with the immutability assumption, sufficiently low inter-ethnic migration rates may have made genetic inheritance intuitions useful heuristics. However, intuitions that category membership is acquired prenatally *and* is immutable would restrict the migration rates compatible with this heuristic even further. In fact, we know that young migrants can and do acquire most of their new host society's cultural repertoire.

Empirically, a genetic transmission folk theory does not hold up consistently cross-culturally as a reliable component of ethnic essentialism. Earlier research suggested that people at several sites reasoned as if social kind identity was genetically transmitted (Gil-White, 2001; Hirschfeld, 1996). However, research in various locations—e.g., Madagascar, Peru, Ukraine, and Namibia—has documented notions of essence acquisition that more closely match the acculturation process by which individuals are socialized into competent cultural actors (Astuti et al., 2004; Kanovsky, 2007; Moya & Scelza, 2015; Moya et al., 2015). In Madagascar, Peru, and the US children do show biases toward genetic transmission theories that differ from those of older

individuals. However, this was only the case for certain social categories—unfamiliar racial categories in Madagascar (Astuti et al., 2004) and linguistic ones in Peru and the US (Hirschfeld & Gelman, 1997; Moya et al., 2015).

These patterns are consistent with early developing intuitions that certain kinds of cultural cluster membership are prenatally inherited (i.e., cognitive attractors as used in Sperber, 1996), and with systems that regularly override these beliefs with alternative cultural elaborations that more closely reflect the actual socialization process of acquiring ethnic category membership. Beliefs about identity being inborn are unlikely to be a fundamental component of essentialism (Kanovsky, 2007). Furthermore, multiple “switched-at-birth” vignette studies reveal that by middle childhood people come to expect that ‘beliefs’ and ‘skills’ are socially transmitted (Astuti et al., 2004; Bloch et al., 2001; Mahalingam, 1998; Moya et al., 2015; Solomon et al., 1996). People could nonetheless hold onto ethnic essence transmission mechanisms as distinct from cultural trait transmission mechanisms, but this would raise the question of the functional significance of thinking someone “is innately” a particular ethnic category if it is causally independent of beliefs, personality, and skill traits.

Mutual Exclusivity and Discrete Boundaries

Essentialist theories often involve sharp boundaries between mutually exclusive and contrasting categories. For example, an animal cannot simultaneously be a dog and a cat, nor are there dog-cat intermediates (Wagner & Kronberger, 2024). In the case of biological taxa this may be a reasonable approximation. This allows additional inferences based on category membership since it precludes membership in another category. For example, an animal categorized as a cat is unlikely to bark, since it cannot simultaneously be a dog, and the base rate of barking among non-dogs is low.

Determining whether cultural clusters or ethnic categories necessarily evolve toward sharp boundaries is less clear (hence the “?” in #5 Table 1). Children’s abilities to learn multiple languages fluently and code-switch according to the appropriate cultural context speaks to the possibility that bilingualism and biculturalism are easily attained and possibly reflect human adaptations (Hirschfeld, 2008). Furthermore, even in some contexts where racial identities are considered prenatally inherited and stable, mixed marriages are thought to result in children with mixed essences (Jones, 2009). On the other hand, some research suggests that people do treat ethnic identity as mutually exclusive with membership in other categories at the same level in the social taxonomy or choose a single ethnic identity for children of interethnic marriages (Nave, 2000). For example, when asked to reason about the identity of children with parents from two distinct ethnic communities, participants in Mongolia overwhelmingly designated the child as having the identity of the father (Gil-White, 2001).

Under some circumstances cultural evolutionary processes may produce sharp boundaries between cultural clusters and norms against mutual membership. Any process requiring coordination, including in norm enforcement, could have further reduced boundary fuzziness (Hoffman et al., 2020). For example, ethnic markers that

allow beneficial assortment of individuals with similar norms should be particularly prevalent, and correlated with the norms, at boundaries (McElreath et al., 2003). This process also homogenizes norms that initially had characterized only a slight plurality of actors. Additionally, in cases of inter-ethnic conflict, knowing that an individual held some level of allegiance to one ethnic group may have sowed doubt about their allegiance to other groups. Finally, cultural group selection could have favored the persistence of institutions that encouraged offspring of inter-ethnic marriages to become full members of the group, rather than of a mixed category.

3.3 *Are Social Stereotypes Accurate?*

At first glance this functionalist perspective on social categorization seems at odds with the focus on inaccurate stereotyping in social psychology (Fiske & Taylor, 1991; Hilton & Hippel, 1996; Jones, 1986). This is because adaptive decision-making will often require accurate assessments of the world. Both economists and social psychologists have shown that people's category-based predictions can be surprisingly accurate (Arrow, 1973; McCauley, 1980; O'Flaherty & Sethi, 2008; Jussim et al., 2015). Economists call this "statistical discrimination" or "rational stereotyping" (Arrow, 1973; Phelps, 1972) in contrast to "preference-based discrimination" (Becker, 1971), which we will discuss in the next section. Some social psychologists refer to accurate social concepts as sociotypes to distinguish them from stereotypes (Bogardus, 1950).

Nonetheless, there are circumstances under which we might expect inaccurate stereotypes. First, error management theory proposes that when there are asymmetric costs to type 1 (false positive) and type 2 (false negative) errors selection might push for errors in the less costly direction (Haselton & Buss, 2000). These might, but need not, be instantiated at the level of perception. For example, incorrectly predicting that someone will attack you and running away is less costly than incorrectly predicting that someone will not attack you and staying put. It is unclear why selection does not favor accurate perception and then moderate behavioral responses (e.g., running away or staying put) in response to asymmetric costs, but such perceptual biases and prejudices have been documented, for example, when participants were placed in the dark and felt more vulnerable (Schaller et al., 2003).

Second, there may be cases where categories had rich inductive potential in the past but no longer do so. This disequilibrium can happen over genetic evolutionary, or historical timescales. In the former case genetic biases that evolved for a different socio-ecological setting may produce mistaken inferences given novel modern inputs. This might explain the pattern in highland Peru where children act as if language use has inductive potential even though adults—probably accurately—respond that speaking Aymara or Quechua has relatively little predictive power (Moya, 2013). It is possible that language was typically predictive of cultural differences throughout human evolutionary history, but no longer is so in some places because of large, recent migrations or imperial expansions. The second case of outdated historical stereotypes is more likely during periods of rapid cultural change. For example, our

students continue to estimate Bangladesh's fertility as closer to their 1970s rate of nearly 7 children per woman than today's rate of about 2 (Dattani et al., 2025). Similarly, while most college graduates now are women (Mather & Adams, 2007), stereotypes may persist about women being less likely to seek higher education than men, since these were accurate earlier in the twentieth century.

Third, self-perpetuating stereotypes may produce exaggerated disparities between groups from very small initial differences. For example, expectations that a group is not hard-working can lead to employment discrimination. This experience of discrimination can disincentivize relevant training for the workplace for members of that group, thus reinforcing stereotypes of their non-hirability (Arrow, 1973). Such logic has been usefully extended beyond the labor market to make sense of patterns of robbery (O'Flaherty & Sethi, 2008).

While these inaccuracies emerge from individual-level processes, a fourth source of stereotype inaccuracies emerges from cultural group selection. Imagine that some cultural groups uphold ideologies of group superiority. Part of this belief system maintains that other groups are inferior and that living in these groups is unpleasant. Other groups maintain no such beliefs, and individuals in these groups make relatively accurate assessments of the quality of life in various groups. It should be readily apparent that there is a conflict of interest between individuals and groups in this scenario. While individuals benefit from accurately assessing where they would be doing best and migrate accordingly, those cultural groups that convince people of their superiority are more likely to retain and attract members. Such selective migration could have led to the proliferation of convincing ideologies of group superiority.

3.4 Is Ethnic Categorization a Derived Adaptation in Humans?

The extent to which human categorization systems have been shaped by natural selection in response to cultural clustering, ethnic categories, and ethnic groups is an open question, and little psychological research thus far has been designed to speak directly to this question. Greater efforts have gone to the analogous question with respect to biological kinds, and yet debate on the matter persists (Atran, 1990; Berlin et al., 1973; Carey, 1985; Coley et al., 1997). The alternative accounts listed in Table 1 suggest that cognitive adaptations that evolved for different purposes—i.e., they have different proper domains (Sperber, 1996)—work well enough to process information about these new landscapes.

We have theoretical and empirical reasons to be skeptical that all social categories are handled by a single cognitive adaptation. The kinds of inferences and behavioral responses warranted for dealing with gender, ethnicity, age, coalitions, or body morphology categories are functionally distinct and sometimes at odds with each other. Unfortunately, social psychologists often treat stereotyping across these domains as examples of a unitary phenomenon (Bigler & Liben, 2006; Greenwald

et al., 1998; Tajfel & Turner, 1986). Surely some cognitive mechanisms are shared for thinking about all these social categories, but it is unclear that said mechanisms evolved *for* thinking about “social categories” exclusively.

It is plausible that domain-general concept acquisition mechanisms, folkbiological adaptations, and folksociological mechanisms that evolved in response to clustered cultural variation are all brought to bear in the ways that people reason about ethnic phenomena. Domain-general concept acquisition mechanisms would be necessary for learning about new kinds of cultural clusters such as nation-states. A more domain-general concept acquisition device could “offload” the process of designing “useful” concepts to faster-acting cultural evolutionary processes (Wertz & Moya, 2019). Furthermore, people must be able to override any innate folkbiological or folksociological expectations when social landscapes do not conform to those expectations.

One example of a relatively domain-general heuristic for learning about inductive potential is attending to which labels others use (Rhodes et al., 2012; Waxman, 2010; Waxman & Gelman, 2009). For example, Heyman and Gelman (2000) show that children will use psychological trait labels (e.g., “is shy”) over perceptual similarity when deciding to make predictions about people in an inductive inference task. Furthermore, children interpret noun labels—e.g., “being a carrot-eater”—as more immutable than the same information communicated through verbs—e.g., “eats carrots whenever she can” (Gelman & Heyman, 1999).

However, even this mechanism is somewhat domain-specific, that is, not all labels are treated equally. Labeling individuals by their first names does not motivate more inferences than similarity does (Heyman & Gelman, 2000), and social categories (e.g., gender, status, religiosity, and ethnic labels) promote more inferences than personality traits do for children (Diesendruck & HaLevi, 2006). Furthermore, children do not interpret labels as equally informative about the inductive potential of all categories. For example, Heyman and Gelman show that while children privilege label information for making inferences about people, they ignore the label information when the *same* stimuli are described as dolls (2000).

There is mixed evidence about the extent to which folkbiological cognition is used for reasoning about cultural clusters. In switched-at-birth vignettes a child is described as born to one set of parents but adopted by a different set. Children in Madagascar, the US, and Peru respond to these as if morphologically (Astuti et al., 2004) and linguistically (Hirschfeld & Gelman, 1997; Moya et al., 2015) marked social category membership is prenatally inherited. These biases may reflect misfiring folkbiological cognition or might be derived from folkbiological cognition but have undergone additional selection (Gil-White, 2001). In the latter case, natural selection would have at least expanded the set of inputs to the system to include linguistic markers as indicative of “kind” membership. Inferences about category stability could similarly have been derived from folkbiology or evolved independently for reasoning about cultural clusters specifically. The evidence that children expect immutable social categories is mixed (Diesendruck & Haber, 2009; Hirschfeld, 1996).

There is mounting evidence that humans have novel, folk-sociological systems for reasoning about cultural clusters. For example, cross-culturally, people develop the expectation that beliefs are more likely to be socially inherited than morphological traits (Astuti et al., 2004; Bloch et al., 2001; Mahalingham, 1998; Moya et al., 2015; Solomon et al., 1996). Furthermore, children expect psychological traits to cause behaviors, and treat internal psychological features, rather than the external behaviors, as inherent to social category membership. But they do not assume a similar causal relationship between internal biological traits and external morphological ones when it comes to the same social categories (Diesendruck & Eldror, 2011). The fact that linguistic markers seem to be privileged for making inferences supports the role of human-specific folk-sociological adaptations. In a series of experiments using the who-said-what paradigm (Taylor et al., 1978), Pietrazewski and Schwartz show that American adults consistently categorize strangers according to their dialect use, whether an independent coalition is made visually salient, and regardless of the adversarial or cooperative tone of their conversation (2007). Furthermore, children in the Peruvian highlands used audio information about language use to make inductive inferences about strangers, despite no memory bias for this information, and even though adults in the same context did not do so (Moya, 2013).

There is much evidence supporting our theoretical case that aspects of essentialism are independent of one another. For example, studies in the US and Israel provide compelling evidence that essentialism has at least two independent dimensions in these societies roughly corresponding to the concepts we have outlined as immutability/biological inheritance and rich inductive potential/mutual exclusivity (Diesendruck & Haber, 2009; Haslam et al., 2000). For example, in the Israeli study children responded that racial categories (i.e., black/white) were stable but did not have rich inductive potential, while they showed the opposite pattern for ethnicity (i.e., Arab/Israeli), believing it had rich inductive potential, but was not immutable. In the Peruvian Altiplano the independence of essentialist elements goes further. Many social categories that people treat as having rich inductive potential are neither conceived of as mutually exclusive with membership in other categories, nor stable through the individual's life course (Moya et al., 2015).

Furthermore, essentialist ideas can also be divorced from the affective components of intergroup interactions (Wagner, 2026). For example, Himba pastoralists' ethnocentric sentiments and endogamous preferences were particularly high with respect to the Damara, about whom they did not express essentialist beliefs in a switched-at-birth task. In fact, they represented the boundary with the Herero as slightly *less* permeable, despite having more amicable relations with them (Moya & Scelza, 2015). Similarly, Zefferman and Mathew provide a case study in this volume where the Turkana exhibit low rates of biological essentialism about their neighbors despite regular intergroup raiding between them (2026). The few essentialist participants in their sample did not exhibit particularly different affective responses to outgroups. While multiple studies have found correlations between components of essentialism and ethnocentric motivations (Halperin et al., 2011; Keller, 2005), this does not mean that they are causally, or functionally, linked. Such correlations can arise because a third variable, such as conservatism, drives both effects in the

local context, or because of the specific norms governing social boundaries in that culture. In summary, the empirical evidence provides little support for a full fledged essentialist cognition being a derived adaptation in the human lineage.

4 The Evolution of Motivations for Ethnically Structured Behaviors

The various ways that people engage across cultural and ethnic boundaries increase the value of a sophisticated ethnic categorization system. Learning about cultural clustering could have been useful in the absence of intergroup interaction, for example, to predict where neighboring groups were going to be harvesting their resources. However, once the opportunities for exchange, larger scales of cooperation, intergroup peace or war increased (Glowacki, 2024), so too did the value of accurate cultural predictions about neighboring groups. Cultural differences between groups could have motivated or impeded intergroup interactions, depending on the social game being played (Beheim & Bell, 2024). We first consider the possible motivations to interact within and across groups in coordination games (Sect. 4.1) and then in cooperative dilemmas (Sect. 4.2).

4.1 *The Evolution of Ethnic Assortment*

The same clustered cultural landscapes that promoted categorization are likely to have selected for motivations for ethnic assortment (see Sect. 2.2). We will discuss two such possible selection pressures: (1) socially learning locally adaptive norms, (2) avoiding coordination costs. The following cases show that avoiding people who do not conform to local norms can be a self-interested strategy that has little to do with concerns about outgroup members being threats to the “integrity” (Schaller & Neuberg, 2008), or “distinctiveness” (Brewer, 1991) of the group, or to the individual’s “self-esteem” (Tajfel & Turner, 1986). We finally turn to the costs to ethnic assortment that would have favored more sophisticated calculations for interacting across ethnic boundaries.

Learning Locally Adaptive Cultural Traits

In contexts with spatial variation it can be costly to learn from individuals from other cultural clusters who may have cultural attributes that are not well suited to the local physical and social ecological setting (Boyd & Richerson, 1987). For example, foraging strategies that are well suited to one ecological context may not translate

well to another. For traits that affect social interaction it may be even more important to adopt locally appropriate norms, as the payoffs for such cultural traits are more likely to be frequency dependent. For example, if most individuals drive on the right side of the road, individuals who adopt the rare left-side-driving behavior are taking a large risk. Similarly, if most families expect dowry at marriage, internalizing bride price norms would lead to confrontations. Some cultural practices, such as net hunting, also become particularly profitable the more individuals use them, adding further incentive to copy what other locals are doing (Boyd & Richerson, 2022). The social costs of being out of sync with others can also arise from norm enforcement. For example, a valued food distribution norm in one cultural cluster may be considered rude, or even worthy of punishment, in another. If intercultural migration was common, heuristics for learning from locals could have prevented learning cultural variants that were locally disadvantageous.

Some have proposed that humans have evolved to selectively learn from others who share ethnic markers such as clothing or accent (Henrich & Henrich, 2007). The empirical literature is inconclusive in this regard. While gender-biased copying seems robust, it is less clear whether people selectively copy models of their same race or ethnicity (reviewed in Saunders 2022). Innovations tend to diffuse less readily across larger cultural and social distances (Rogers, 2003), but prestige hierarchies can overcome such barriers (Prall et al., 2024). One of the stronger pieces of evidence in favor of ethnicity-biased copying comes from developmental psychology—children learn how to use new tools from others with ingroup accents (Kinzler et al., 2011). It is possible that certain cues like linguistic ones are privileged dimensions of categorizing others early in development. The mixed findings might reflect heterogeneity in the kinds of social categories lumped in these analyses.

Avoiding Coordination Costs

People may suffer coordination costs from interacting with others who have different cultural expectations and norms. It would be costly to learn to drive on the “wrong” side of the road, or the “wrong” marriage payment practice, or the “wrong” food distribution norms, precisely because these practices would result in coordination problems with neighbors. Under such circumstances, selection for cheap and honest signals of ethnic category membership is expected to evolve as neither actor has an interest in deceiving the other about cultural attributes that facilitate coordination (McElreath et al., 2003). As such, dishonest signaling would be spiteful, costing both the signaler and their interaction partner.

There is plenty of evidence that people have homophilic preferences (Festinger, 1954) both when choosing friends (Kalmijn & Vermunt, 2007) and marriage partners (Kalmijn, 1998). In large part this may be attributable to a desire to avoid problems of coordination common to intercultural interactions (Clarkwest, 2007; Pasley et al., 2001). Consider the difficulties of sharing a household with someone with different hygiene norms. Or the challenges of co-parenting with someone who values their children’s autonomy more than their safety. The accumulation of such coordination

costs in long-term relationships may help explain the prevalence of culturally endogenous marriage (Gil-White, 2001; Nave, 2000). Coordination costs are not unique to contemporary multi-cultural societies with long-distance migration. Norms about gender division of labor, private property, child-rearing, what constitutes equitable distribution of goods, and post-marital residence, for example, are known to vary widely even across small geographic ranges in smaller-scale societies (Argyle et al., 1986; Ember, 1975; Guglielmino et al., 1995; Henrich, 2004a, 2004b, 2004c; Low, 1989).

It is worth noting that not all intercultural relations result in coordination failures. This should be expected if, for example, people can change their cultural traits that cause misalignments (Saunders, 2022). Furthermore, many coordination games do not require a large repertoire of shared cultural norms. This may help explain some empirical failures to document coordination costs in inter-ethnic interactions, for example, in abstract tasks like opening puzzle boxes (Habyarimana et al., 2006). On the other hand, many everyday interactions involve implicit social contracts that can vary across ethnic boundaries.

Costs to Ethnic Assortment

Despite the potential costs of inter-ethnic interaction, an outgroup avoidance heuristic alone would not have sufficed for an individual to respond adaptively in many circumstances. While some psychologists have proposed functionalist accounts of intergroup relations (Ackerman et al., 2006; Cottrell & Neuberg, 2005), they have been constrained by an overemphasis on negative affective responses to outgroups (see Schaller & Neuberg, 2008 for a review). This reflects a general emphasis on inter-ethnic tension in the social sciences (Fearon & Laitin, 1996), as well as simplistic assumptions within evolutionary circles that fear, avoidance, and aggression would have been adaptive responses to underspecified ancestral outgroups. It is uncontroversial that being overly vigilant is energetically costly and has opportunity costs. However, isolationism has additional costs in a cultural species such as humans.

There are various circumstances under which it would be advantageous for an individual to seek interactions with people from other ethnic categories. We will discuss two: (1) gains in trade and (2) learning better cultural traits. While we focus on the individual benefits these provide, they can also provide benefits at the level of the cultural group. We will also describe two group-level benefits to inter-ethnic interaction; (3) attracting migrants through proselytism and (4) inter-ethnic coalition formation. Cultural systems that encouraged these kinds of inter-ethnic contact should have done well relative to purely isolationist ones.

While much intra-ethnic specialization is likely recent in human history, some level of between-group specialization is likely to arise earlier (Glowacki, 2024). Small-scale ecological variation means that it could be beneficial for individuals to trade foods or raw materials for tool production. Beyond resource access, intergroup exchanges could have been a strategy for risk management (Pisor & Gurven, 2016;

Smith et al., 2023). The ethnographic literature is full of such exchange relationships across societies with different subsistence strategies (Bahuchet & Guillaume, 1982; Cashdan, 1987; Headland & Reid, 1989; Lathrap, 1973). Even among hunter-gatherers, goods were exchanged long distances (Sloan, 2003), and raw material for lithics was procured from wide geographic ranges (Gould & Saggers, 1985) that likely extended beyond the range of cultural groups. This suggests inter-ethnic contact even in the Paleolithic.

Furthermore, inter-ethnic contact can foster technological advancements and hitherto unforeseen recombinations of cultural traits. While cultural evolutionary processes are likely to reach pretty good solutions to problems (local optima), these may make it difficult to reach even better solutions (global optima). Most small changes to a well-functioning tool are likely to make it worse, reinforcing the value of making it in the traditional way. Inter-ethnic contact gives people the opportunity to assess and select among various local solutions to the same problem, thereby getting closer to the global optimum. There is some evidence that groups living in more interconnected areas develop or maintain more complex toolkits (Kline & Boyd, 2010). China's isolationism in the fifteenth century has also been implicated in their stalling on the world stage, despite their technological and political sophistication at the time (Diamond, 1997). Although the historical data only allows inferences about group-level costs to isolationism, a similar argument can be made for individuals as well. Psychologists have documented outgroup preferences (Jost et al., 2004), even in children (Baron & Banaji, 2006), when participants belong to lower status groups. This is consistent with individuals potentially benefiting from intergroup interactions.

Relatively open stances toward outgroups can also foster cultural group expansion by allowing immigrants or converts, as long as they or their descendants assimilate (Boyd & Richerson, 2009). Proselytizing religions provide one extreme example of such openness. Additionally, this cultural belief system can encourage individual members to sacrifice time or energy for the benefit of the cultural trait's expansion. This kind of openness to outsiders was necessary for the cultural success of early Christianity (Latourette, 1993) and modern proselytizing religions such as Mormonism.

Finally, groups may benefit from inter-ethnic coalitions, particularly in cases where numerical superiority is paramount, such as in war. Such intercultural coalitions likely existed for some time in human history (Gat, 2006). In these circumstances it would still behoove coalition members to choose partners with whom coordination is relatively easier—e.g., those who share norms regarding how to distribute the responsibilities and spoils of war. This means that people would need to make complicated tradeoffs regarding coordination efficiency and group size. The last two cases described (i.e., warfare and proselytizing) presuppose some level of intra-ethnic cooperation, for which we will review the empirical evidence next.

4.2 *The Evolution of Intra-Ethnic Cooperation*

Given the vast literature on the evolution of cooperation, we limit ourselves to one question here: Do humans have psychological adaptations that evolved for cooperating with members of the same ethnic group? There are many mechanisms that can allow cooperators to assort and proliferate, and we do not deny the importance of kin selection and reciprocity in the hominin lineage. However, these are unlikely to produce cooperation at the scale of cultural clusters or ethnic categories, unless the relevant cognitive mechanisms are significantly misfiring.

Here we assess the plausibility of two propositions: (1) that there was cultural selection among ethnic groups such that those with institutions that promoted cooperation among their members spread more readily, and (2) that this gave rise to genetically evolved preferences for costly pro-sociality toward members of the same ethnic group (Richerson & Boyd, 2001). The case for proposition 1 is less contentious given that cultural group selection will necessarily ensue under the right set of circumstances (e.g., the strength of selection between groups relative to within groups is high, migration rates are low, or acculturation rates are high). Its only psychological entailments are that humans produce cultural institutions and assimilate these norms, at least insofar as they are useful to follow. The second question is more debated, harder to assess empirically, and makes stronger predictions about the nature of humans' ethnocentric psychology. We suggest it is best addressed by looking at the empirical data on the scale at which people show ingroup cooperative preferences. A secondary goal of this section is to illustrate that many popular accounts of ingroup favoritism in social psychology imply a mechanism that requires group selection or a misfiring of other mechanisms for cooperation in smaller groups, even though the proponents are seldom explicit about it.

High levels of between-group competition, and the punishment of non-cooperators within groups can select for cooperative cultural equilibria (Richerson & Boyd, 2005). This competition need not take the form of direct conflict, so long as the payoffs to cooperation facilitated the spread of the relevant institutions (Richerson et al., 2016). In addition to such cultural group selection, a few researchers have argued that human genetic population structure may have facilitated genetic group selection (Sober & Wilson, 1999; Schonmann et al., 2011). This is a minority position given concerns that moderate migration rates like those found in most human populations can easily erode the assortment of cooperators within groups. The critical difference between genes and cultural ideas in these simple models is that the former necessarily mix when there is migration, whereas the latter can be changed to accommodate the local majority behavior after migration. In other words, rare defectors will proliferate in groups of cooperators if the behavior is governed by immutable genes, whereas such defection can be disincentivized if defectors can assimilate to local cooperative norms. All the cultural homogenization processes described in Sect. 2, and the material incentives for norm compliance afforded by punishment institutions set up plausible conditions for cultural group selection (Boyd & Richerson, 2010).

Ethnographies case studies furthermore illustrate the potential for selection on cooperative norms that vary across ethnic groups (Handley & Mathew, 2020) and show the possible consequences for groups that are either subsumed under larger ethnic units (Kelly, 1985) or go extinct in the face of direct conflict (Soltis et al., 1995).

Attachments to ethnically marked groups are cross-culturally pervasive and develop early in life (Aboud, 1988; Allport, 1954; Levine & Campbell, 1971). Aspects of this tendency might be reflected in people's behavior toward *arbitrary* groups they are assigned to in lab settings. Results from the minimal group paradigm have shown the ease with which adults (Tajfel, 1982), children (Dunham et al., 2011), and even infants (Mahajan & Wynn, 2012), begin assuming ingroup-favoring stances, even when they are randomly assigned to these arbitrary groups. However, Yamagishi and his colleagues called into question the degree to which these reflect blind loyalties, since the behavioral favoritism effects disappear when participants have no opportunities for reciprocation (1999). This suggests that humans will readily interpret arbitrary markers as cues indicating a closed social network where reputational effects can help stabilize cooperation (Bowles & Gintis, 2004) but easily abandon such false impressions, leaving no residual pro-social preference toward the arbitrary category. The minimal group results may provide some evidence that humans expect markers to correspond to social networks or to groups that can develop norms and enforce them. However, the arbitrary delimitations alone do not strongly trigger any primordial ingroup-favoring response.

More reliable cues to ethnic group membership do seem to preferentially trigger ingroup favoring or cooperative responses early in life. There is increasing evidence that children and infants privilege dialect use, even over race, on ingroup favoritism (Kinzler et al., 2009) and ingroup preference tasks (Kinzler & Spelke, 2011; Kinzler et al., 2007, 2011), suggesting that language use was of primary evolutionary relevance and an indicator of belonging to the same culturally group-selected ethnic unit. Ethnographic evidence also suggests that ethnolinguistic boundaries are often the scale at which cooperative enterprises—in this case cattle raids—are organized (Mathew & Boyd, 2011, but see Moya et al., 2015, for a counter example).

There is debate about the extent to which these loyalties reflect adaptations for ethnic group cooperation as opposed to more general coalition formation. Sharing joint goals triggers cooperation and ingroup favoritism (Sherif et al., 1961). Furthermore, the same ethnic groups can be mobilized for joint coalitional purposes in one context, and experience friction in another, depending on the political expedience of the coalition (Posner, 2004). While the psychological machinery for such behavior may borrow heavily from coalitional cognitive mechanisms shared with non-human primates, there are some challenges that cannot be met with this adaptation alone. Most non-human coalitions rely on relatedness or the possibility of withdrawing from a repeated interaction to ensure assortment of cooperators. In the case of cooperation at the scale of ethnic groups, such mechanisms are unlikely to work (Boyd & Richerson, 1988a, 1988b). Kin relatedness drops steeply as a function of group size. Additionally, withdrawing cooperation from a single member without harming others in a large group may not be feasible in the case of public goods from which all residents benefit, such as territorial defense and clean water. This leaves coordinated

(though not necessarily costly) punishment as a plausible way of ensuring norm compliance at the scale of cultural units.

Empirically differentiating the coalitionary psychology account from a cooperative ethnic psychology account is quite difficult. Some have argued that evidence of untargated prosocial preferences in humans (Silk & House, 2011) may be an indication of a psychology that was selected under recurring conditions produced by cultural group selection (Richerson & Boyd, 2001), though others maintain this behavior reflects the low likelihood of one-shot interactions during human evolutionary history (Burnham & Johnson, 2005; Delton et al., 2011). Further research into the cues that engender pro-sociality cross-culturally and early in development might shed light on this debate (e.g., Kinzler et al. 2012). Evidence that cues of cultural group membership (e.g., language, food taboos) are disproportionately used for choosing cooperation partners, even in places where they are not being used as ethnic markers, could provide stronger support for a gene-culture co-evolutionary account.

It is worth noting that many prominent theories in social psychology imply either a group selectionist account or a misfiring of some unspecified psychological mechanism (e.g., Sidanius & Pratto, 1999). For example, Social Identity Theory (SIT) and its various offshoots (Tajfel & Turner, 1986) hold that peoples' self-esteem is partly derived from their group membership, and that within-group loyalty and outgroup derogation follow from this motivation. The theory does not explain why high self-esteem is adaptive nor why an individual would care about their group's reputation. If the claim is that individuals benefit from being perceived as a member of a prestigious group, then the group's reputation is a public good. This sets up a possible cooperative dilemma within the group for individuals to sustain the group's positive reputation, even at a personal cost. Such an account would require a mechanism to ensure reputation-maintaining behaviors. A more explicit set of theories in social psychology could help bridge gaps between levels of explanation and perhaps address inconsistencies.

5 Conclusions

We have argued for the importance of taking an evolutionary functional approach to studying various ethnic phenomena. This perspective takes as a starting point that human behavior and cognition are shaped by the adaptive challenges people face in a given environment. In the case of human social cognition this means taking seriously the ways that cultural evolution has changed the landscapes of groups that humans belong to and must navigate. Each theoretical account listed in Table 1 that does not take into account hominin-specific ethnic landscapes will lead to some odd predictions: (1) organisms don't cooperate at the biological species level, nor do they typically mate with or aggress toward members of other species, (2) kinship affords inferences about a relatively limited set of traits, doesn't encourage assortative mating, and functions as a continuum in many non-cultural species, (3) primate

groups afford few inferences, half their members often migrate out at sexual maturity, and primates seldom cooperate at the scale of the troop, and (4) coalitions afford few inferences and change relatively quickly for strategic purposes. This means that these cognitive mechanisms alone are unlikely to be easily exapted for thinking about ethnic phenomena in humans. Differentiating a domain-general learning account (6) from a folksociological account wherein human cognition was shaped by these new ethnic landscapes in the hominin lineage (5), is a much harder task. While there are multiple ways that pre-adaptations for reasoning about species, kin, primate, or coalitions could be integrated with these last two theoretical accounts, a full understanding of ethnic psychology requires a consideration of cultural structures that co-evolved with this cognition.

As became more culturally structured, our perceptual and motivational systems would have faced new social and individual learning capacities might have been sufficient for facing the challenges of predicting others' behaviors (Sect. 3) and choosing with whom to coordinate and cooperate (Sect. 4). On the other hand, we review some evidence consistent with some selection on our cognition for thinking about cultural structures. Specifically, we suggest that natural selection may have shaped our priors that cues of cultural group membership, such as language, would be informative for making predictions about, and possibly encouraging interactions with others.

Finally, our approach allows us to disentangle various elements of ethnic cognition, allowing for different cognitive mechanisms to be brought to bear on the task. For example, we question the necessity of certain essentialist intuitions (e.g., biologically inherited essences, or mutual exclusivity), for making predictions about others or assorting with them. This suggests that ethnic stereotyping, ethnic essentialism, ethnic assortment, and intra-ethnic cooperation will not necessarily co-occur cross-culturally.

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Ethnic Identity, Enculturated Essentialism, and Instrumental (De)Essentializing



Wolfgang Wagner

1 The Trouble with Psychological Essentialism

Social essentialism is the psychological tendency to attribute stable identities and shared group-specific attributes to members of social groups. Essentialist reasoning posits a stable social world in which social groups are perceived as part of a ‘natural order,’ and which possesses explanatory power regarding individuals and their attributed group membership. Essentialist reasoning can be observed in relation to human sexes and genders (De Gioannis, 2025), individuals with specific body attributes (Bastian & Haslam, 2006; Ho et al., 2015; Pauker et al., 2016), members of social classes (Bailey & Knobe, 2023; Zhu & Scott, 2025), and individuals of ethnic, religious, or geographic origin (Yang et al., 2015; Zeromskyte & Wagner, 2019). Essentialist reasoning is prevalent and has been observed in both children and adults across various regions of the world, such as Turkey and the USA (Davoodi et al., 2020), Israel (Diesendruck & Menahem, 2015), Mongolia (Gil-White, 2001), Peru, Fiji, USA (Moya et al., 2015), Estonia (Raudsepp & Wagner, 2012), Greece (Doumou et al., 2024); and Northern Ireland (Smyth et al., 2017), to varying degrees.

The prevalent tendency to reason within an essentialist framework is often subject to critical scrutiny by social scientists. Psychological essentialism applied to groups has been criticized for perpetuating an inflated and erroneous notion of the uniformity and ontological immutability of groups and their characteristics, while in reality, individuals would be flexible and adaptive in their affiliations and choices of group membership. Hence, the radical plea that social groups should not ‘be understood as an essence or nature with a specific set of common attributes [...] There is no common nature that members of a group have.’ (Young, 1989, p. 260).

This concern refers to the perception of the causes of group attributes and the projected homogeneity of a group’s members. It questions whether these attributes

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refer to a shared ‘nature’ of the group members, whether social construction is involved, or whether an individual’s affiliation is voluntary. The political critique arises from the frequent correlation between essentialist attributions in the social domain and socially detrimental cognitions, such as prejudice, discrimination, and racist judgments. Moreover, there is a strong association between essentialist reasoning and conservative and right-wing political ideologies (Barreiro et al., 2025; Holtz & Wagner, 2009; Yzerbyt, 2016; Zagefka et al., 2013).

The aspiration to eliminate essentialism in public discourse may make political sense as long as individuals are led to believe that distinctions among members of different groups necessarily imply a difference in values and rights. This would be the case, for example, if a European individual judged migrants as being *necessarily* less valuable and having lesser rights as the host majority *on the grounds of their African, Asian, or other descent*. Denying rights because of an individual’s religion, ethnic origin, or skin pigmentation clearly contradicts our understanding of human rights. However, the underlying question remains: why is essentialist reasoning so prevalent and spontaneously invoked by individuals observing animals, and also in the social domain? This phenomenon can be seen as an integral component of folk biology and folk sociology, respectively. Furthermore, a naturalist interpretation of group attributes per se is not inherently morally reprehensible. I will deal with these issues under the heading Instrumental Essentialism. At the end, Young’s (1989) proposal to conceptually eliminate group differences may be misguided and denying a crucial aspect of the human mind.

The fact that psychological essentialism can easily be observed, suggests that we may be dealing with a fundamental human psychological function rather than a spontaneous discursive construct. While widespread psychological phenomena are not necessarily universal, it lends credence to the notion that essentialist cognition has a deeper origin than being solely the product of social construction or a personal rhetorical device employed to characterize or denigrate social groups in political discourse.

In the next section, I discuss essentialism in the perception of natural kinds that allows us to categorize living beings by providing a commonsensical understanding of the stability of natural species. Secondly, when applied to groups, group members, and identities, it is crucial to distinguish types of social aggregates where it makes sense to attribute essentialized features and where it does not make sense.

Regardless of their origin, essentialist beliefs are defined as the human mind’s imaginary construct aimed at comprehending certain characteristics of the living world. The present argument is restricted to living organisms and social groups, and employs biological, anthropological, and psychological perspectives. In doing so, it is crucial to distinguish the scientists’ hypotheses about the *origin of the process of essentialist cognition*—answering questions like ‘*how come essentialism is so wide-spread*’—and the politically motivated intuitions about the assumed *natural, or unnatural origin of features of a group and its members*.

2 Two Domains of Essentialism: Natural and Social

2.1 *Essentialist Reasoning in the Domain of Living Kinds*

Psychological essentialism suggests that people tend to attribute a specific mechanism to living beings, which they believe determine their biological kind or social group membership, that is an underlying essence. An essence is conceptualized as an intangible and causally active substance that is thought to govern the identity of a living being throughout its life cycle and the characteristics of its offspring across generations (e.g., Atran et al., 1997). A popular didactic example in psychology texts is the ‘tiger’ (e.g., Gelman & Bloom, 2007, p. 179), where tiger is a large cat-like animal with a striped fur, fangs, and a ferocious appetite for meat. In other words, a tiger has a lot of characteristics that an observer perceives and that allows to attribute its tiger-ness.

Intuitions in the biological domain are the prototype of essentialist cognition that allow us to demonstrate its basic characteristics. Essences represent the inherent potential that an exemplar of a living kind, a species, or life form has. Inherence has been defined as a central characteristic of essentialism (Cimpian & Salomon, 2014), though it is not exhaustive. Additional key aspects of perceiving a natural essence include immutability, which implies that an animal’s essence and category membership cannot be manipulated or altered by external influences. For instance, a cat remains a cat even if disguised as a dog. Discreteness further ensures that an exemplar’s essence uniquely determines its category membership, resulting in impermeable boundaries for essentialized categories. Homogeneity refers to the uniformity of members of a species or life form in their relevant characteristics, even though non-essential variations are permitted. Homogeneity is defined as a sufficient degree of resemblance among the exemplars of a kind. Stability implies that category membership remains constant throughout an individual’s life and is transmitted to their offspring; also young children anticipate the offspring of a cat to be kittens rather than pups (Gelman et al., 2007; Keil, 1992; Kronberger & Wagner, 2007; Rhodes & Gelman, 2009). Essentialist cognition in the natural domain has a longstanding history and despite the inclusion of genetic knowledge in science education, essentialist reasoning remains a useful heuristic figure in everyday life (Dar-Nimrod & Heine, 2011).

The requirements of discreteness and homogeneity logically preclude a continuous transition between two kinds such that an exemplar may be part A and part B. As a consequence of these intuitions, many people think it is impossible to mix essences, like combining the essence of a dog and of a cat to create a ‘cog.’ This idea came up with respondents when imagining the products of genetic engineering where genes of one living being are spliced into the genome of another being. That is one of the reasons why genetic engineering met stiff resistance in some countries and evoked a ‘yuk’ response in respondents (Wagner & Kronberger, 2024).

There is a caveat that needs to be taken into account. There is a strong argument in favor of considering the *overall* similarity of animal characteristics in essentialist

inferences than trying to identify single attributes (Wagner, 2026). The overall similarity of animals can be seen as the perceptual *Gestalt* used in similarity judgements. This is true for animal perception as it is for judgements about cultural packages comprising the overall similarity of cultural features of an ethnic group and its representatives that will be treated in the next sections.

2.2 *Social Categories and Group Markers*

There are basically two categories of groups that are crucial to distinguish: groups with a chosen membership and groups where membership is determined by birth. The two types differ in the form of social identity, in how they relate to essentialism, and in the psychological and social dynamics they entail (Demoulin et al., 2006).

The first kind of groups where membership is chosen comprise any aggregate of people ranging from loosely connected crowds to strongly bound friendship groups. A loosely connected crowd of passengers waiting for a train is one extreme. The people in this crowd may even express a faint sense of togetherness and shared fate if the train is delayed. Other examples are dietary associations (e.g., meat eaters, vegetarians), interest groups (e.g., movie enthusiasts, soccer fans), professional groups, or political associations. In most instances, such categories or groups are transient, and membership can be declared or revoked at will. Occasionally, the members of such groups may develop a strong sense of belonging and identity that may, on the surface, resemble the behavior of members of groups with belonging by birth.

Groups with a membership by birth are biological sex (female and male) and geographic origin that equips humans with specific body characteristics. Individuals with an African, Aboriginal, or Melanesian ancestry share certain physical features used by outgroups for categorization, even though they will exhibit significant cultural and genetic diversity among themselves. People with European ancestry, a corresponding pale complexion and specific physiognomy are referred to in Chinese as '*changbizi*,' meaning 'long noses' (Kuan & Häring-Kuan, 2009). This global diversity has historically led to the concept of 'races,' which many people apply across the globe. Individuals in these groups will not show much cohesion unless they discover shared interests, for example in anti-colonial struggle, to attain a sense of togetherness.

Geographic origin and body features usually correlate with membership in ethnic groups. I consider culturally defined ethnic groups as the prototypical social structure with an identity that goes beyond mere subjective inclinations and arbitrary interests as in the case of chosen memberships. Being born into an ethnic group also imparts a number of characteristics that are shared among coethnics as well as the belief in a shared descent. One of the most salient features is language and dialect acquired in infancy. In addition to the command of one's mother tongue, groups with a pronounced sense of identity employ additional markers of belonging, such as norms, values, beliefs, hairstyles, and body adornments (McElreath et al., 2003).

The importance of language is shown by a study involving schoolchildren. It shows that children tend to emphasize their ethno-linguistic identity more in ethnically diverse schools compared to schools where the same ethno-linguistic background dominates thereby showcasing their identity (Johnson et al., 2024). This resonates with the well-known effect that cultural groups located at ethnic boundaries tend to exhibit a more elevated feeling of group cohesion than elsewhere (Turchin, 2018, p. 40f; Smaldino, 2026). In such groups, identity is frequently emphasized by a sense of ethnic essentialism as elaborated in the next sections.

In modern societies ethnicity in the strict sense may not exist, but similar phenomena of a quasi-ethnic identity can be observed with families, neighborhoods, and socio-economic classes. For example, ‘native’ inhabitants of a city tend to distinguish themselves from newcomers by pointing out the long-term residency of their family as marking their special status. Hence, identity essentialism was found to be significantly higher among original inhabitants compared to newcomers (Torunczyk-Ruiz et al., 2024).

In the following I present two hypotheses about potential origins of psychological essentialism. The first posits an evolutionary origin that directly selected for the cognitive essentialist mechanism. The second suggests an evolutionary selection of the enculturating institutions in ethnic groups that may give rise to identity essentialism. Finally, I discuss the emergence of social subgroups within societies as a consequence of the ontogenetic niche.

3 Potential Origins of Essentialist Cognition

3.1 *Innate Origins and the Cultural Niche*

Recent biological evolutionary approaches emphasize the significance of an organism’s environmental activity in shaping a species’ genetic makeup. This activity, termed niche construction (Müller, 2017; Odling-Smee et al., 2003; Sarto-Jackson, 2021), has been instrumental in the evolution of the human species. Notably, the development of the cultural niche played a pivotal role in shaping human psychological faculties, as elucidated by Henrich and McElreath (2003), Whiten and Erdal (2012), and Fuentes (2015).

The hypothesis of an innate origin posits that essentialist reasoning conferred an advantage on humans within their ecological (cultural) niche. In general, the ability to think in terms of categories and to perform rapid deductive inferences about objects is likely to have been adaptive in the complex causal network of the natural environment (Quillien, 2018). In particular, essentialist intuitions are likely to have promoted individual survival. For instance, the ability to automatically recognize their kind and swiftly respond to potentially dangerous animals, such as snakes, or spiders, lead to immediate flight or defensive reactions. This capacity to swiftly comprehend the characteristics of an animal as indicators of its species membership

and infer its potential behaviors enabled appropriate responses that had life-saving consequences.

The aspect of essentialist cognition's rapid execution in the natural domain may have contributed to its tendency to be triggered in social settings. In the social domain, essentialism, together with norm enforcement, have likely played a significant role in promoting group cohesiveness and commitment to ethnic groups (Boyd & Richerson, 2001). Commitment then, contributed to reciprocity and to large-scale cooperation among coethnics. Crucial components in this process were the promotion of endogamy and discouraging defection (Boyd & Richerson, 2022; Richerson et al., 2016). '[E]thnic groups [...] become normatively endogamous in part because of parental enforcement. Next, because much of culture is acquired at a young age and is developmentally stable, expert practitioners of a group's norms—when groups are endogamous—would tend to be those born of two member parents, creating the illusion that their cultural mastery was biologically inherited' (Gil-White, 2001, p. 532). The concept of ethnic organization being analogous to natural species that form a lineage of ancestor-descendant populations and maintain their distinction from other such lineages (Harrison, 2013) has led some researchers to propose the evolution of a parallel cognitive system being applied to human groups as an exaptation of folk biology (Gil-White, 2001; Rothbart & Taylor, 1992). This basically means to apply the capacity of automatically categorizing animals into natural kinds to social groups. This evolved cognitive system can be specialized in responding to different ethnic markers, where language figures as a prime stimulus for recognizing ethnic belonging.

3.2 *Parenting, Enculturation, and Realistic Group Identity*

I consider an alternative hypothesis to the innate origin of the cognitively complex function of essentialist cognition as more likely. This hypothesis focuses on the evolutionary drivers of the *institutions* of enculturation (Wagner, 2024). Parental care is not a unique human invention as it exists in some vertebrate and all mammal species (Feldman et al., 2016). At least in human evolution, the institution of enculturation by parents and alloparents adds an extragenetic layer of variation and selection in the species, known as developmental or ontogenetic niche construction (Fuentes, 2015; Stotz, 2017). This institution comprises genetically driven early-age parenting and language acquisition, where caregivers and children actively participate in realizing their parental investment and the offspring inheriting it (Stotz, 2017). Consequently, early-age enculturation is influenced by co-evolved determinants that govern both the offspring and the caregivers' behaviors.

Enculturation encompasses any available cultural learning mechanism, commencing in postnatal and early-age parenting, which activates prewired preferences for facial patterns and plays a pivotal role in filial imprinting (Buiatti et al., 2019; Feldman et al., 2016; Valentine, 2015). Enculturation is tacit and occurs incidentally during a child's playful interaction and 'peripheral participation' in daily life

(Lave & Wenger, 1991), including overhearing proximal speech during its linguistic window of opportunity. In enculturation, peripheral participation includes the experience of the social interactions between proximals, their relative social positions, and it endows the child with an implicit feeling of the social values and hierarchies at play in a social exchange (Duveen & Lloyd, 1990). At this early age, the child is introduced to the symbolic structure guiding cultural interaction in a group. This also includes embodying the tastes and scents that are learned as being pleasant. In essence, the early stages of enculturation transpire unconsciously, while conscious learning emerges later (Herskovits, 1964). Recently it was found that social learning in enculturation trains individuals to follow certain strategies that focus attention on the most meaningful cultural models and which of their behaviors are to be imitated (Kendal et al., 2018).

This process results in offspring becoming competent members of the group by acquiring the rules of cooperation, resource sharing, social intelligence, a well-developed capacity for cultural learning, a degree of political empathy for coethnics, and shared intentionality (Deffner & McElreath, 2020; Moya & Henrich, 2016). These elements together constitute the building blocks of ethnic identity, encompassing behavior routines, tastes, and ways of thinking, with language serving as the most prominent element (Giles & Johnson, 1987). It is crucial to recognize that ethnic identity, or the unconscious aspects of enculturation within any culture, society, or even family are emotionally charged characteristics that become cognitively accessible only later in life (Hrdy & Burkart, 2020), when identity may unfold its more complex functional aspects (Smaldino, 2026).

As previously mentioned, the mechanisms for trans-generational continuity, such as early-age parenting, allo-parenting, and cultural learning, have evolutionary origins and play a pivotal role as a cultural institution in the long-term survival of groups, as has been theorized in Cultural Group Selection Theory (Richerson et al., 2016). The conditions that facilitate offspring assimilation into the local identity are crucial for an individual's successful life within their group, because non-conformity may lead to ostracism and, consequently, reduce the individual's biological fitness (Hawkey & Capitanio, 2015; Muthukrishna et al., 2016). Furthermore, the group gains stability through cooperative behaviors and by avoiding ingroup competition (Denton et al., 2020). Taken together, human groupishness and early enculturation are evolutionarily adaptive traits (Moya, 2023; Tomasello, 2020).

According to the present argument, an essentialized group identity is driven by generic group-related language, such as 'We are X, and X are such and such,' along with anecdotes and narratives. Numerous studies have demonstrated that generic talk and generalizations entail perceiving a group as an essentialized kind (Cella et al., 2022; Gelman & Roberts, 2017; Leshin et al., 2021; Noyes & Keil, 2019; Rhodes et al., 2012; Segall et al., 2015; Vasilyeva & Lombrozo, 2020; Walton & Banaji, 2004). This linguistic effect, coupled with the affectively charged cultural burden of tastes, aesthetic preferences, norms, and social institutions, constitutes what individuals experience as their identity, which is tied to a specific group belonging. The intuitive notion of this identity establishes a long-term continuity with forebears and coming generations. It can easily be perceived as a natural and not coincidental quality

encapsulated in an individual's feeling of belonging, which is the core of essentialist thinking. It is immutable and discrete because it is specific for a cultural group, ensuring that members of an essentialized group are largely perceived as similar as far as the relevant markers are concerned, symbolizing an essentialized continuity across generations.

The affective weight of cultural practices implies that cultural elements cannot easily be adopted by cultural non-natives. Saito (1996), for example, has shown that the Japanese practice of Zen takes on a completely different character when enacted by British people compared to Japanese who experienced a culture inspired by *Zen* from an early age.

According to the present hypothesis, essentialism originates as a phenomenon of identity with a regulating function of ingroup behavior, implying that an essentialized ingroup identity is logically prior to outgroup essentialization. In this perspective, evolution established a series of interconnected learning opportunities for newborns and infants, as well as parenting behaviors. These behaviors are as biologically necessary as they appear socially and intentionally motivated. Evolutionary mechanisms nudge the parental mindset, making parenting of one's offspring feel intended, voluntary, and carried out with love. Behaviors that are biologically predetermined manifest as conscious decisions when enacted in an intimate setting or with kin. This presupposes a co-evolution of the biological necessity of cultural transmission and the cognitive receptors in the adult brain. At least in upbringing and family life, biology assumes control over an individual's volition. This approach renders the emergence of essentialist thinking as a byproduct of the evolution of enculturating institutions, eliminating the need to postulate innate pathways for this cognition.

The cultural institution of enculturation from an early age on relates to groups with a membership by birth and shapes a specific kind of identity. It is not only restricted to ethnic groups but works also in families and neighborhoods of modern societies. This identity also involves an essentialist element that comes to bear in self- and other-stereotyping. I call the identity produced in groups of membership by birth 'Realistic Group Identity,' because it contrasts with Self-Categorization and the 'Social Identity Theory' approach in contemporary social psychology. The latter two usually do not distinguish between groups of forced and of chosen membership (e.g., Hornsey, 2008; Scheepers & Ellemers, 2019).

3.3 *Enculturating Social Class*

Variations in enculturation within ethnic groups can lead to the gradual differentiation of rules and behavioral norms, resulting in the formation of subgroups. Subgroups may consist of individuals belonging to more affluent families or clans that control the provision of essential resources, such as livestock or grain (cf. Mulder et al., 2009). Such subgroups often exhibit a tendency to accumulate and enhance their possessions and societal status through arranged marriages and endogamy, a prevalent custom in societies at various scales of organization (Apostolou, 2010; Parkin, 2021). The

consequences of endogamy within these subgroups may sometimes resemble genetic drift due to geographic isolation and lead to inbreeding, potentially diminishing the biological fitness of members (Agey et al., 2021; Boughman, 2013). Subgroup division can also be reinforced by the provision of resources for offspring until adulthood, leading to the concept of ‘inherited niches’ (West et al., 1988).

Most human cultures and their inheritance rules permit the transfer of accumulated resources from the parental generation to their offspring. These resources extend beyond the basic provision of food and security and encompass economic, social, and cultural capital, as has long been recognized by sociologists (Bernheim et al., 1986; Bourdieu & Passeron, 1990). The material form of capital consists of tangible economic resources such as money, land, buildings, and enterprises, which facilitate the establishment of a ‘necessary’ material boundary toward outsiders (Knowles, 2022). Second, social capital encompasses the entirety of an individual’s social contacts, including relatives, friends, and acquaintances, acquired throughout their life. Children inherit these contacts by being socialized into the respective circles. Clearly, social capital becomes more valuable as the number and quality of helpful contacts and relations increase, particularly in times of distress or when pursuing economic or political objectives. The third type of relevant capital is cultural capital. This capital signifies an individual’s identity of a social group, class, or caste. Cultural capital is symbolic and operates through behavioral, linguistic, taste, and fashion-related markers, as well as through beauty and body styling that mark a sense of distinction and excludes members of the general population. Bourdieu referred to this complex of taste and rule-based characteristics of an individual’s mind as ‘habitus,’ which is imparted to the offspring through both informal and formal education (Bourdieu, 1998; Emmerich, 2015). As a culturally phenotypic set of attributes, cultural capital or habitus can be anticipated to signal group membership in sexual selection even prior to conspicuous consumption (Corneo & Jeanne, 1997).

The extended inheritance of exogenetic resources enables a profound transgenerational developmental plasticity and effectively decouples the offspring’s reproductive opportunities from their genetic outfit as a proxy for their biological fitness (Stotz, 2014). These social processes and ideologies can adapt to changing environmental conditions if necessary (Royle et al., 2014). It also promotes essentialist distinction (Kraus & Keltner, 2013). By transferring material, social, and cultural capital to their offspring, parents influence their children’s mating preferences toward the desired outcome and drive subgroup segregation (Stotz, 2014).

In contemporary societies, there exist sectors known as nobility, landed gentry in the United Kingdom, or aristocracy in continental Europe, with royals at the apex (Doyle, 2007; Lawler, 2008). As with any exclusive ethnic group, aristocratic circles maintain relatively strong endogamous rules that safeguard rightful descent and entitlement to certain titles and name particles, such as ‘von,’ ‘von und zu,’ ‘van,’ ‘de,’ etc. (Dronkers, 2008). The gene pool of the ‘rightfully’ aristocratic population for homogamous procreation was always limited, consequently leading to inbreeding. Some of the inbreeding-related consequences even attained the status of markers, such as the Habsburg jaw and other deformations (Vilas et al., 2019). Endogamy did not entirely preclude some degree of gene flow between aristocratic and ‘lower’ social

groups. However, to prevent ‘contamination,’ endogamous groups tend to exclude illegitimate offspring from their ranks. This practice was prevalent in pre-modern times and is sometimes still observed in modern societies, albeit with democratic ‘modifications,’ such as when a Belgian court forced a royal to acknowledge an extramarital child (Yeung, 2020). The strategy of post-mating exclusion bears a biological analogy to ingroup mates selecting against hybrids and limiting gene flow even after hybrids have formed (Boughman, 2013, p. 529).

The genetic consequences of societal rules of inheritance within the developmental niche bear a striking analogy to natural processes observed in biological evolution. This analogy highlights the close interdependence of social rules and biological processes, raising the question of what phenomena can be rightly considered natural and what social in ontogeny. Some of the processes mentioned previously, permit the conclusion that even in human societies, one can metaphorically speak of quasi-speciation or the emergence of a quasi-ethnic kind of aristocrats.

The core of the social representation of nobility lies in their ‘blue bloodedness,’ which is a deeply essentialist a notion. The notion of blue blood originates from the fact that the rich classes were not forced to toil in the scorching sunshine, which left their skin marble-white with visible bluish veins. This feature already served Spanish military noblemen in the ninth century, to prove their Christian pedigree in contrast to the darker skinned ‘moors’ (Russell et al., 2013). It denotes exclusive membership in a social subgroup characterized by political dominance, wealth, elitism, distinguished manners, a distinct accent and sociolect, a substantial nepotistic network of like-minded ‘coethnics,’ endogamy, and shared long-term descent. Mere possession of money cannot replace descent and would not suffice for inclusion in the real noble category as even four-year-old children know how to brandish their class distinction toward others (Streib, 2011).

It is noteworthy that, in analogy to ethnic identity, aristocratic descent-essentialism circumscribes ingroup identity, while ‘lowly’ outgroups are defined by the absence thereof. Consequently, the formation of social class by exhausting the possibilities of the ontogenetic niche directly corresponds to the enculturation processes typical for ethnic group formation by essentializing diacritical group markers (Lawler, 2008).

Two additional considerations warrant attention: Firstly, it is evident that societies harbor other classes that maintain a relatively endemic existence. Historically, this was the case with peasant societies, which retained their distinct cultures. As the industrial era progressed, the working class also developed a distinct cultural identity and behavioral norms, albeit with less emphasis on endogamy compared to aristocracy (Navickas, 2011; Rose, 2002).

Secondly, the practice of leaving tangible property to one’s offspring was not universal in human prehistory. In certain cultures, for instance, an individual’s wealth was either burned or buried upon their death and not bequeathed to their children. The social leveling effect of this custom cannot be overstated and may have played a pivotal role in fostering social equality and justice within these societies (Bettinger, 2015; Graeber & Wengrow, 2021, p. 203).

At the end, it is no surprise that members of the so-called ‘higher’ social classes also tend to occupy certain professions—such as lawyers, judges, elevated positions

in politics etc.—that are associated with a ‘distinguished’ habitus and tacit rules of behaving and language use. Because members of ‘lower’ social classes usually are not educated to acquire such a habitus, they may not easily enter these professions because tacit non-functional criteria also play a role in selection processes. Hence, if members of a lower class manage to enter this kind of professions, they are likely to experience a misfit of their own essentialized identity and the habitus common with other professionals (Friedman, 2015; Mallman, 2017). This affective entailment of essentialized identities comes to the fore in situations where class-cultures meet, for example in upward social mobility (Carter, 2026).

4 Instrumental Essentialism: The Political Flavor of Essence

In societal and political contexts, groups, whether they manifest as an entity with an inherited membership, possessing stable and inherited characteristics, or are envisioned as a fluid association of individuals bound together by shared interests, encounter situations where they are compelled to respond politically in managing their public image. While managing a group’s image can be challenging, it may become imperative in politically adverse environments. In this section, I show how the human ancestral capability of inductive inference is employed in political contexts and used to become ‘instrumental essentialism’ (Wagner et al., 2009).

It has been shown that a sense of group identity tends to be stronger in individuals who belong to the minority group compared to their majority counterparts. This phenomenon can be attributed to the potential risks associated with cultural assimilation that minorities face. They counter this risk by emphasizing their inherent cultural differences from the majority (Wagner et al., 2017; Zeromskyte & Wagner, 2017). Equally, in times of a group’s perceived victimhood, ingroup members are prone to endorse identity essentialism, particularly if motivated by their leaders’ rhetoric (Belavadi & Hogg, 2025). Black US-American families for example, conversed more often and affirmingly about race after George Floyd’s murder by police in 2020 than before (Sullivan et al., 2021). In some Jewish communities self-essentialization may extend to affirming a genetic basis for Jewishness (Tenenbaum & Davidman, 2007).

Zeromskyte and Wagner (2019) conducted a comparative study involving members of majority and minority populations in Austria and Lithuania. They were native Austrians versus Turkish-speaking individuals and native Lithuanians versus minority Poles. The participants were presented with a list of sentences that primed either a positive or negative group image. When minority members received a negative prime about their group’s social standing, they reduced their self-essentialization more than members of the majority. A lesser self-essence was supposed to help them accept more ingroup diversity than would be the case with an emphatically essentialized group identity. Conversely, in the positive prime scenario, minority members slightly increased their self-essentialization compared to majority members who

showed no change. These findings are in addition to the afore-mentioned tendency of minorities to self-essentialize more than majorities. They demonstrate that the intensity of an identity-related essence can be dynamically adjusted and negotiated in response to temporary challenges to the group's social positioning (Hopkins, 2026).

The former findings demonstrate that the intensity of self-essentialism and group identity can change depending on the perceived micro-political agendas. Another way to employ essentialist cognition involves manipulating the perceived origin of an essence. The imagined root of an essentialist cognition can be biological (Keller, 2005), cultural (Soylu Yalcinkaya et al., 2017), or social (Rangel & Keller, 2011). The imagined roots, the cornerstones of instrumental essentialism, are the result of a social construction process that is closely aligned with the interests of the group. It is important to see that the *imagined origins of group attributes in discourse* have nothing to do with the *evolutionary or bio-social enculturation process* discussed in Sect. 3.

Two notable historical examples of instrumental essentialism in Western society are the feminist movement and the movement for the rights of homosexuals. The feminist movement aims to establish equal rights between men and women on all socially relevant levels. Due to the enduring public representation of men and women as inherently different, not only in biology but also in mentality, behavior, and identity, feminists shifted from the biological representation of sexes to a socially defined system of gender differences that enables women and men to occupy all social roles and professions equitably. For this purpose, feminists argued against essentialist intuitions and beliefs that inadvertently naturalize differences between the sexes. Notably, in the 1970s and 1980s, significant portions of the feminist movement engaged in debates on the role of essence versus social construction. These debates highlighted the political implications of essentializing or de-essentializing their target group, which led to the concept of strategic essentialism (Bell, 2025; Hegarty & Pratto, 2004). Strategic essentialism in feminism employed essentialist group definitions to politically organize their movement while simultaneously rejecting any essentialist attributions when discussing the constitution of women and men (Eide, 2016). Currently, the feminist movement encounters debates regarding essential similarities or differences between women and transwomen (Bailey, 2003; Dreger, 2008).

The second example illustrates a contrasting conception of essences to advocate for social change for gay men in recent history. For centuries, homosexuality¹ has been widely represented in public discourse as a deliberate choice. The public image of a freely chosen sexual preference hindered their pursuit of full legal equality, particularly in terms of marriage and child adoption. Consequently, proponents of the movement considered it advantageous to find and postulate a biological cause of homosexuality in their political messaging, thereby essentializing homosexuality. This political interest was supported by some findings of genetic correlates, which were adopted by certain segments of the movement because they enabled the representation of gay people as living a biologically innate sexual behavior rather than a personally chosen one (Bailey et al., 1999; Conrad & Markens, 2001).

¹ At the time of these events the acronym LGBTQ was not yet in use.

Then, there is the concept of the aristocracy that I discussed in a preceding section. Traditionally, the self-representation of nobility and its outgroup representation converge in attributing this category of people political dominance, wealth, elite status, distinguished manners, and separation from the general population. This separation is attributed to an essentializing upbringing, descent, and inheritance. The underlying naturalizing core idea is distinguished descent, which is supposedly shared among European dynasties, and which is actively promoted in the yellow and other press (Lawler, 2008).

Finally, Bilewicz and Bilewicz (2025) present an interesting contemporary aspect of politically instrumental essentialism. The authors observe that group demands are increasingly expressed as rights such as ‘ownership rights’ or ‘reproductive rights.’ The call to symbolically respect a group’s rights, adds the alleged rights to the group’s identity as inherent characteristics, which effectively essentializes and reinforces the group’s identity, perceived legitimacy, and stability. This essentializing approach, used by both revolutionary and reactionary movements, strengthens in-group cohesion and persuades out-groups.

As evidenced by the preceding real-life examples, the role of the ‘correct’ interpretation of essentialism in either promoting or hindering a political cause becomes evident. The term ‘political flavor’ of essentialism alludes to the emotional response that a biological or social essentialism evokes in discourse. Emotions, rather than cognition, play a significant role in shaping public opinion during political debates, as demonstrated by White (1990). Furthermore, an essentialist cognition can be invoked for political uses that may help to either expand or restrict rights. Its significance lies in the function it serves, whether it is used to denigrate visually distinct individuals (Buhagiar et al., 2018) or to achieve political emancipation. The outcome of such an attribution is contingent upon the perspective of the individuals involved, their social standing, and the historical context that determines whether the essence of a social group is perceived as biological or as a social construct.

5 Conclusion

In this chapter, I present an analysis of psychological essentialism regarding its potential origin in evolution and the political motivations driving political discourse. The origins of essentialist cognition can be located in evolutionary processes that either directly shaped the cognitive makeup of humans, or in evolutionary processes that shaped the genetic disposition of parenting behaviors during enculturation. In the latter case, the capacity for essentialist inference is acquired as a consequence of enculturated ethnic identity and language usage. In both cases, essentialist cognition is expected to promote the biological fitness of well-adapted individuals and the coherence, cooperation, and survival of the group across generations. Children of different ages in more or less ethnically structured contemporary societies exhibit spontaneous expressions of identity and essentialized group perception

(Diesendruck, 2020, 2026). Similar processes seem to operate in contemporary societies as well. Modern groups may not exactly conform to traditional ethnic boundaries and may not be precisely definable, but language, local cultures, dietary patterns, and culturally relative criteria of human beauty persist in families, neighborhoods, and social classes, delimiting group identities.

The psychological function of essentialism is to encapsulate the defining features of a group, forming a cohesive and integrated whole. From the perspective of an individual, this identity appears as a naturally given due to its affective quality and the cognitive opaqueness of early-age enculturation. It can be assumed that up to adolescence, essentialist thinking occurs spontaneously and does not require deliberate reasoning. Naturally, I do not posit that every member of a group shares an identical understanding of their group. There is always variance and flexibility in human self-definition.

In contemporary society, the capacity for essentialist cognition emerges within the discursive realm of meanings and interpretations of social conditions. Essentialism transforms into ‘instrumental essentialism,’ that is a tool for certain groups to achieve political objectives while simultaneously it can be employed as a means of oppression and discrimination by other factions. The perception of a group’s essence can be interpreted in diverse ways and manipulated through de-essentialization, which entails weakening the cognitive connection between group members’ characteristics and their belonging or emphasizing a reified status of essentialist attributes. This phenomenon applies not only to ingroup identity but also to essentialist outgroup attributions.

This conceptual analysis concludes that essentialist thinking in the social domain is a psychological faculty that emerges to varying degrees in societies. As a part of categorization processes, it is a natural cognitive given that needs to be acknowledged as such. On the other hand, a politically conscious person must actively confront inappropriate and detrimental instrumental essentialism in everyday micro-politics and intergroup dynamics.

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The Development of Social Essentialism: Group Identity Matters



Gil Diesendruck

1 Intergroup Biases

All around the world and throughout history, people have been found to think about, feel toward, and treat members from their own group vs. other groups differently. In fact, a common rhetorical tactic used by social psychologists to introduce these “intergroup biases” and all their potential destructive consequences, is to refer to historical cases in which atrocities were inflicted by one group onto another. Authors then move to describe the vile discourse that fomented such atrocities, and the feelings and rationalizations the different fighting sides offered to justify their actions. As I write these words, I do not have to recount such historical events. I am living through such an event. Since October seventh, 2023, the country in which I reside—Israel—is in the midst of a terrible war with a number of neighboring groups. I mention this not to discuss what sparked the war, the political and military considerations underlying the war, or the consequences of this war. Rather, I mention this because I am observing first-hand the psychological machinery of intergroup biases at work. In particular, on the conventional and social media from all sides involved in the conflict, messages about the inherent evil of the adversarial group, the fixedness of evil in that group, and the homogeneity of the group are ubiquitous. These “essentializing” messages fuel and justify the commitment of atrocious acts onto others.

Since the pioneering work of Allport (1954) on intergroup prejudice, numerous studies have revealed how adults across the world hold a variety of intergroup biases. To name just a few, adults hold robust stereotypes about various social groups (Cuddy et al., 2009), evince automatic implicit attitudes regarding groups (Greenwald & Banaji, 1995), act in discriminatory fashion (Schmitt et al., 2014), construe groups differently (Hugenberg, Young, Bernstein, & Sacco, 2010), and infra- or de-humanize

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certain groups (Leyens et al., 2007). The discovery of these phenomena gave rise to a variety of theories attempting to account for their emergence.

One class of theories places at the root of intergroup biases certain fundamental properties of humans' social cognition. In particular, borrowing from work on categorization (Medin & Ortony, 1989), it has been argued that adults across the globe develop essentialist beliefs about a variety of social groups (Rothbart & Taylor, 1992), such as caste in India (Mahalingan, 2003), ethnicity in Mongolia (Gil-White, 2001), and race in Western countries (Haslam, Rothschild, & Ernst, 2000). Although defining essentialist beliefs is a matter of some debate, most agree that they consist of a set of related components, including the belief that social categories capture objective partitions of the natural world, consist of homogeneous sets, are permanent, and are defined by inherent and causally explanatory properties.

To note, although the argument is that this so-called "social essentialist belief" (in short, "social essentialism") emerges as a feature of human cognition, and without necessarily a functional/motivational foundation, once such beliefs are in place, they may make intergroup biases "justifiable" to the believer. In simple terms, if two groups are essentially different, then "it makes sense" that they might not have the exact same competencies and even moral status. And indeed, correlational and experimental studies demonstrate that holding social essentialist beliefs is associated with numerous manifestations of intergroup biases in adults, such as stereotyping (Bastian & Haslam, 2006; Levy, Stroessner, & Dweck, 1998), discriminatory attitudes (Keller, 2005; Morton et al., 2009; Prentice & Miller, 2007; Yzerbyt et al., 2001), and social distancing (Williams & Eberhardt, 2008) (see also, Sammut & Mifsud, 2026).

A second class of theories places basic needs and motivations as the foundations of intergroup biases. One influential theory within this approach—Social Identity Theory—explained the emergence of these biases as a natural consequence of the development of one's identity (Tajfel & Turner, 1986). According to the theory, people's fundamental need to belong to a group gives rise to, a) a need to identify the group one belongs to—one's in-group—and invariably those that one doesn't belong to—the out-groups, and b) given people's other fundamental need to feel good about themselves, once one identifies their in-group, they will appreciate it more highly than the out-groups. Two other influential theories propose that what underlies intergroup biases are the need to maintain power hierarchies (Sidanius & Pratto, 2001), and the need to justify the social system (Jost, Banaji, & Nosek, 2004). These three theories share a basic causal structure, each identifying a certain fundamental need of humans' sociality as the root cause of attitudes, emotions, and beliefs people eventually develop about the social groups they encounter in the world. Recently, I proposed that these, or other, motivations may also lie at the foundation of social essentialism (Diesendruck, 2020, 2021; see also Wagner, 2026).

The goal of the present chapter is to address this theoretical debate from a developmental perspective. The rationale is to assess whether at their earliest stages of development, social essentialism is shaped by cognitive and/or motivational factors. To that end, I will start by reviewing the evidence as to how early in development we see manifestations of intergroup biases. I will then review the evidence as to how

early in development we see manifestations of social essentialism, thus assessing the plausibility of it being a core cognitive mechanism underlying intergroup biases. The upshot of this initial review is a delineation of what seem to be very early emerging and somewhat robust features of these two aspects of children's group cognition. I will then problematize this generalist conclusion by reviewing evidence of the cross- and within-cultural variation in the manifestation of social essentialism. This evidence, I will argue, is critical for evaluating the theoretical debate as to the origins of social essentialism. In particular, this evidence calls for an analysis of the kinds of factors that give rise to such variations. I will thus review evidence on the factors—cultural and motivational—that affect the development of social essentialism, discussing them in light of the theoretical debate expounded above.

2 The Development of Intergroup Biases

In attempting to trace the origins of intergroup biases, it is convenient to pinpoint a stage at which children's intergroup attitudes or beliefs resemble those of adults in their nature (though they may differ in the type of category they get applied to). That is not to say that further developments do not occur after that stage, but it demarcates a point at which the fundamental emotional dispositions and cognitive capacities are in place. One such point is children's entrance to elementary school, around 5–6 years of age. At this age, children hold implicit racial biases at a level parallel to that found in adults, as revealed in studies that adapted the Implicit Association Test to children (see Dunham, Baron, & Banaji, 2008, for a review). On more explicit measures, children's biases can be found even earlier. Between ages 3 and 5, children exhibit stereotypes regarding various groups (Bar-Tal & Teichman, 2005; Bigler & Liben, 2007), and they discriminate between in- and out-groups in terms of how they evaluate them (Aboud, 2003), who they like (Misch, Dunham, & Paulus, 2022), and who they prefer to interact with (Kinzler & Spelke, 2011; McGlothlin & Killen, 2006), share resources with (Renno & Shutts, 2015), and punish (Jordan, McAuliffe, & Warneken, 2014). In fact, many of these biases are manifested even in relation to minimally defined groups, i.e., groups determined based on arbitrary criteria such as shirt-color (see Dunham, 2018, for a review).

Prior to age 3, however, intergroup biases are quite different in nature. First, whereas starting at age 3 there is evidence of biases regarding social groups along various dimensions—e.g., race, nationality, ethnicity, religion—prior to that age robust biases have been documented regarding only gender (Fagot, Leinbach, & O'boyle, 1992) and language/accent (Kinzler et al., 2007; Kinzler & Spelke, 2011). In fact, even 12-month-old infants manifest biased associations based on speakers' language (Pun et al., 2018). Second, infants do exhibit biased preferences based on similarity of characteristics. For instance, 11-month-old infants choose to interact with an agent who has manifested the same food or color preferences as themselves, over an agent whose preferences differ from theirs (Mahajan & Wynn, 2012). Third, although even 3-month-olds discriminate in their looking behavior between faces

from their racial group (e.g., faces of White people) and faces from another group (e.g., faces of Black people), this seems to reflect solely a sensitivity to familiarity vs. novelty (Bar-Haim, Ziv, Lamy, & Hodes, 2006; Kelly, Quinn, Slater, Lee, Ge, & Pascalis, 2007; though see Xiao Quinn, Liu, Ge, Pascalis, & Lee, 2018). In other words, at this age—and arguably up to age 2 or more—children do not recognize racial groups—and even less so religious or national groups—in terms of in- and out-groups.

In fact, prior to age 2, infants possibly do not even recognize the above dimensions as criteria for classifying people into groups. Evidently the only dimensions infants might be able to spontaneously rely on to form groups are those distinguishable by some visual (e.g., gender or race, but not nationality or religion) or linguistic (e.g., accent) cue. But even then, the narrowing of these cued dimensions onto the conventional social categories prevalent in a culture is far from trivial. Taking race as an example, presumably infants might rely on skin tone and certain physiognomic features as classificatory criteria. Yet, how can they determine where to “draw the line” dividing people into “Black” and “White”, for instance? And how should 1-year-olds know that they should break down the above continua into two groups and not more? Interestingly, highly constrained experimental studies have shown that at that age, if exposed to a series of stereotypical pictures of faces of a given race, infants can discriminate between them and faces of a different race (Ferreira et al., 2021; Quinn, Lee, & Pascalis, 2019). Nevertheless, it is uncertain whether this perceptual capacity suffices for classification of faces in infants’ much messier social environments, and how these discriminated “sets” map onto the conventional social categories. These developmental achievements arguably require some direction from cultural input. In fact, a study conducted with 19- and 26-month-olds found that whereas the older age group succeeded in forming categories of gender and race based solely on pictures of people, the younger age group needed the pictures to be labeled in order to form categories (Diesendruck & Deblinger-Tangi, 2014).

In summarizing this brief review of intergroup biases in children’s attitudes, the key points to draw for the present purposes are that: a) prior to age 3, children do not spontaneously recognize in- and out-groups on a number of socially relevant dimensions, and may achieve such categorization only when provided linguistic scaffolding; however, b) at age 3 years, and more robustly by age 5–6, children manifest various aspects of intergroup bias in regard to various social groups present in their environment. This summary thus sets the stage for investigating the plausible cognitive mechanism underlying children’s biases. Specifically, is there evidence of social essentialism in children by age 5?

3 The Development of Social Essentialism

Medin & Ortony's (1989) seminal paper on psychological essentialism sparked great interest among cognitive and developmental psychologists. At first, research and theorizing focused on the application of the construct to "natural kinds", often operationally translated as "animal categories". Numerous studies, conducted in various cultures, uncovered components of essentialist thinking in children's construal of animal categories. As comprehensively reviewed in Gelman's (2003) book, children believe that animal categories:

- (a) capture objective partitions of the natural world and thus membership in them is obligatory;
- (b) are determined by birth and thus membership in them is stable across development;
- (c) consist of homogeneous sets and thus allow rich inferences;
- (d) are defined by inherent and causally powerful properties and thus constitute primary explanatory sources.

In his pioneering work, Hirschfeld (1996) imported this notion of psychological essentialism to his investigations of children's construal of racial categories. In a series of studies, Hirschfeld documented how by age 4- to 5-years, Western children exhibit many of the above "symptoms" of essentialism also regarding racial categories. Since then, we have witnessed an explosion of research on the development of social essentialism in children from various countries, regarding a variety of social categories, and with respect to different aspects of essentialism. On this latter respect, it has been argued that the developmental and contextual variance are not uniform across the different aspects of essentialism (see for instance, Rhodes & Mandalaywala, 2017, for a discussion). It is thus more appropriate to organize a review of the pertinent literature separately for each component of essentialism.

3.1 *Social Categories as Objective Partitions of the Social World*

Borrowing from the literature on moral thinking (e.g., Turiel, 1983), one of the ways in which researchers have assessed children's beliefs in this respect is by asking children whether they think there is a "right" way to classify people into groups, or alternatively, that classification is somewhat arbitrary. In their study on race and gender categories, Rhodes and Gelman (2009) presented children of various ages with triads of pictures of people varying in one of the above dimensions, e.g., pictures of two boys and a picture of a girl. The experimenter then asked children which two pictures had people "of the same kind". This simply helped establish that children indeed classified the gender and racial triads in a "conventional" manner. Children were then told that a visitor from a different place, classified the people in the triads

differently, e.g., by selecting a boy and a girl—rather than the two boys—as being of the same kind. The critical question children were asked was whether they thought the visitor’s alternative classification was “wrong” or “maybe right”. One of their main findings was that whereas 5- and 7-year-olds were intolerant of the alternative categorization of gender categories, they were tolerant of the alternative categorization of racial categories.

Adopting the same methodology as Rhodes and Gelman (2009), a study compared the assessment of alternative categorization of racial (Black/White) and ethnic (Jews/Arabs) categories among North American and Jewish Israeli 5- and 10-year-olds (Diesendruck, Goldfein Elbaz, Rhodes, Gelman, & Neumark, 2013). The key finding was an interaction among age group, culture, and social category. Namely, whereas North American children’s rejection of an alternative categorization of race (i.e., saying that a Black and a White person are of the same kind) increased from age 5 to 10, Jewish Israeli children’s rejection of an alternative categorization of ethnic categories (i.e., saying that a Jew and an Arab are of the same kind) was high and stable across ages. Arguably, the cultural salience of ethnic categories for Jewish Israeli children is higher than that of racial categories for North American children. In other words, Jewish Israeli children may be aware of relevant social categories in their culture at a younger age than their North American counterparts.

A further manifestation of children’s beliefs in the objectivity of social categories, is their willingness—versus reluctance—to adopt a proposed alternative categorization. In Diesendruck & Weiss (2015), 5-year-olds saw pictures of faces of varying degrees of similarity to prototypical pictures of either gender (man/woman) or race (Black/White person) categories. In Study 1, the experimenter also provided a category label regarding each target picture. In crucial trials, the target’s appearance and the label pointed to opposite categories (e.g., a target looked very similar to a man, but was labeled “woman”). Children’s main task was to place each picture “with the kind it belongs”. The main finding in that study was that labels did not affect children’s gender categorization, but did affect their racial categorization. In other words, a cultural input (i.e., labels) was effective only in altering children’s intuitive categorization of race, again displaying the relative initial flexibility of children’s racial concepts and stiffness of gender concepts.

3.2 Social Categories as Determined by Biological, and Thus Permanent, Properties

As mentioned earlier, experimental research on the development of social essentialism may be traced back to Hirschfeld’s (1996) work on children’s racial concepts. In his work, the main component of essentialism assessed was the extent to which children believe that racial categorization is determined by birth and is thus stable across development. In one of his tasks, Hirschfeld told children stories about babies born to parents from different racial groups (e.g., a Black couple and a White couple), who

were either accidentally switched-at-birth or who were cross-racially adopted—i.e., babies born to parents from race A, who grow up with parents from race B. Children were asked what the race of such baby would be later in life. Invariably, by age 4-years, North American children answered that the baby's race would be that of his/her biological parents. Similar results were obtained when showing children triads of pictures of two adults of different races, and a child matching one of the adults' race. When asked whose son/daughter the target child is, or which adult the target child would be when he/she grows up, again, young children responded based on race similarity. These initial findings notwithstanding, more recent work suggests that what 4-year-olds seem to have is a concept of skin color as inherited; but a concept of race as inherited seems to develop later (Mandalaywala, Ranger-Murdock, Amodio, & Rhodes, 2019).

A similar conclusion regarding the protracted development of race essentialism is reached, when looking at measures of the developmental permanence of race as opposed to other categories. For instance, Kinzler & Dautel (2012) presented children triads composed of a child of one of two races and who spoke one of two languages, and two adults each matching the target child on only one dimension. When asked which of the adults the target child would grow up to be, 5-year-olds selected the language-match and 10-year-olds the race-match. Roberts and Gelman (2017) used the same paradigm to pit race against emotion. They found that White 5-year-olds did not consistently pick by either dimension, and it was only by 10-years of age that White children consistently selected by race.

The above experimental paradigms and other measures have been adopted to assess children's beliefs about the heritability and biological foundation of other social categories. Using an adoption-like paradigm, for instance, it has been found that at age 5, children believe that gender characteristics (Gülgöz et al., 2019; Taylor et al., 2009) and one's language (Hirschfeld & Gelman, 1997) are determined by birth. Employing a switch-at-birth paradigm, Chalik and colleagues found that American Jewish and Christian children's belief that religion is determined by birth decreases from ages 5- to 10-years (Chalik, Leslie, & Rhodes, 2017). A similar decline with age on the same paradigm was found vis-à-vis nationality categories, among American and Canadian 5- and 8-year-olds (Siddiqui, Cimpian, & Rutherford, 2020). Using both, switch-at-birth and direct questions (e.g., whether people are born into social categories), researchers found similarities in the rank ordering of social categories among 5- to 10-year-olds in the U.S., Turkey, and Iran. In particular, across ages and countries, children essentialized the most gender, then race, and then nationality categories, and less so religion and SES (Davoodi, Soley, Harris, & Blake, 2020; Shahbazi, Samani, Mandalaywala, Borhani, & Davoodi, 2024).

In an attempt to clarify developmental changes on this aspect of essentialism, Diesendruck and colleagues studied Israeli Jewish and Arab 5-, 7-, and 12-year-olds, and assessed separately the "relative" and the "absolute" levels of essentialization of various social categories (Diesendruck, Birnbaum, Deeb, & Segall, 2013). To assess the former, children responded to triad tasks, like those used by Hirschfeld (1996), which asked children to determine the parent of a target child, based on one of two possible matching categories—here combinations of ethnicity (Jew/Arab),

social status (Rich/Poor), and religiosity (Religious/Secular). The overall finding was that whereas 5-year-olds did not exhibit any systematic preference for any of these categories, starting at age 7, children did privilege ethnicity and social status. Importantly, nevertheless, when asked to determine a child's category membership in an adoption-task like the one described earlier—i.e., a task assessing the absolute degree of essentialism regarding a single category—a different developmental pattern emerged. Namely, the only category for which children determined membership according to the biological rather than adoptive parents was ethnicity, and this pattern occurred among 5- and 7-year-olds but not among 12-year-olds. The conclusion from this study is that, at least regarding this component of essentialism, children might start off with somewhat promiscuous beliefs, and with development learn the weights of the different social categories as prioritized by their culture.

3.3 *Social Categories as Homogeneous Sets*

A third key component of social essentialist beliefs is the notion that given their shared essence, members of a category are fundamentally alike on numerous dimensions. As such, knowing the category to which an individual belongs allows one to draw numerous inferences about the individual. Indeed, one of the most used methods to assess this component of essentialism exploits this expectation regarding categories' high inductive potential.

In an initial study of this expectation, Diesendruck & haLevi (2006) presented to Israeli secular Jewish 5-year-olds and adults, triads of children composed of two "test" children who differed from one another in terms of their social category membership (e.g., ethnicity, gender) and their personality traits (e.g., niceness, creativity), and a target child who matched each of the test children on one of these two dimensions. Participants were then told about a unique property of each of the two test children (e.g., their toy preference), and were asked which value of the property the target child would have. The main finding was that whereas adults systematically responded that the target child would have the property of his/her personality trait match, children responded that the target child would have the property of his/her social category match. Interestingly, children and adults converged on the rank ordering of the inductive potential of social categories. Namely, both age groups were most likely to pick ethnicity-matches ("Arab" or "Jew"), over gender, social-economic status, and religiosity.

Studies have since investigated directly the comparative inductive potential of different social categories. Birnbaum and colleagues tested 5-, 7-, and 11-year-old Israeli secular and religious Jews, and Muslim Arabs (Birnbaum, Deeb, Segall, Ben-Eliyahu, & Diesendruck, 2010). The task was similar to the one used in Diesendruck & haLevi (2006), except that here, in addition to pitting social categories against personality traits, there were trials in which different social categories were pitted against each other. In this latter type of trials, the two test children in a triad contrasted in terms of their social category membership (e.g., one triad included

a Jewish boy and an Arab girl, thus pitting ethnicity against gender), and the target child matched each test child on one of the categories but not on the other (e.g., a Jewish girl). Here too children heard about properties associated with each test child, and had to determine which of the properties the target child had. The main general finding was that across ages and participants' social groups, ethnicity was the most inductively powerful dimension, trumping not only personality traits, but also gender, religiosity, and social status.

Adopting a similar induction task to Birnbaum et al.'s (2010), Smyth and colleagues investigated the relative inductive potential of social categories among 6- to 11-year-old Protestant and Catholic children in N. Ireland (Smyth, Feeney, Eidson, & Coley, 2017). Their focus was on religion categories ("Catholic" and "Protestant"), which they pitted against gender categories. One of their main findings was that overall, religion trumped gender among both groups of children, a trend that was stronger among older children, and children in N. Ireland compared to a sample tested in the U.S. Using the same methodology, Xu and colleagues tested Chinese and American 5-year-olds and adults, presenting trials pitting occupation (e.g., doctors/police officers) against gender (man/woman) and age (older/younger people). Their main finding was that in both cultures and age groups, participants privileged occupation as a basis for drawing inferences (Xu, Burns, Wen, Thor, Zuo, Coley, & Rhodes, 2022). Clearly then, by age 5 children around the world have learned to identify certain social categories salient in their culture as having strong inductive potential.

3.4 Social Categories as Defined by Inherent and Causally Explanatory Properties

The last component of social essentialism to be reviewed here refers to the idea that social categories are defined by some inherent property that causally determines many of the characteristics of category members. A few studies demonstrate that children believe social categories are defined by internal properties. For instance, in Diesendruck & Weiss (2015) mentioned above, Study 2 presented children trials in which the perceptual similarity of targets contrasted with novel information the experimenter provided about the internal psychological properties of the categories and target. For instance, in some trials, children had to decide whether a target individual who looked like a woman but had the same novel preferences as those assigned to men, should be categorized with "women" or with "men". The finding was that children determined categorization primarily by similarity in internal properties when these contrasted with physical similarity in terms of both gender and race.

In a more direct test of the expectation that internal properties have causal power, Diesendruck & Eldror (2011) introduced 5-year-olds to novel social categories, and

in different conditions, defined the categories by different internal properties (psychological or biological), external properties (appearances or behaviors), and the presence or not of a causal relation between the former and the latter properties. Children were then asked to infer which properties a new member of a category had. The findings revealed that children inferred primarily that the member would have the psychological properties of the category, irrespectively of what external property the member had, and whether the psychological property was defined as causally determinant of the external properties. In more nuanced analyses, others have argued that the sort of psychological property children take as centrally defining social categories are deontic ones, having to do with roles and obligations (Kalish & Lawson, 2008; Rhodes & Chalik, 2013).

Finally, in several studies children were told stories describing the behavior of an individual member of an explicitly mentioned social category, and were asked to explain the individual's behavior. These studies have found that by age 5, children often explain people's behaviors by simply referring to their category membership. For instance, a girl chooses the color pink "because she is a girl", or a member of a novel social category behaves in a certain way because he is a member of that category (for reviews, see Martin & Ruble, 2010; Miller & Aloise-Young, 2018; Rhodes, 2014). In fact, Cimpian and colleagues argue that this tendency to explain category characteristics by referring to inherent properties of the category may be foundational in the development of essentialism (Cimpian & Solomon, 2014).

This review of the development of the different components of social essentialism aimed at presenting a "mainstream" state of the field. In other words, to the extent that it is appropriate, the attempt was to present a picture of general trends. Perhaps the most general trend to be drawn from the above review is that by age 5, children around the world—with an over-representation of children from Western countries—essentialize a variety of social categories (see Artinian & Morgan, 2026, for an analysis of the cultural-specificity of essentialism). This finding provides an affirmative answer to the first question that sparked this review of essentialism; namely, essentialism is a developmentally plausible candidate mechanism underlying the emergence of intergroup biases.

Crucially, however, this general conclusion needs to be qualified by the variance in terms of which specific social categories get essentialized in different cultures (e.g., race in the U.S., ethnicity in Israel), and in what regard essentialism is manifested (e.g., biological origin vs homogeneity). In fact, even these qualifications need to be further broken down, as also within cultures, there is variance in the extent to which different groups essentialize the very same salient social categories. In other words, there is growing evidence from around the world that children's group identity—i.e., the particular social group to which they belong—impacts their tendency to essentialize.

4 Essentialism and Group Identity

The previous section reviewed primarily results of studies conducted among children from majority and high-power groups. Importantly, however, evidence has been accumulating—some of it from children from minority groups included in these studies—that children’s tendency to essentialize vary depending on their group membership. This asymmetric deployment of social essentialism, whereby one group essentializes a category (e.g., White children regarding race) to a different extent than the other group (e.g., Black children regarding race), bears on the theoretical debate as to the origins of social essentialism. Cognitive accounts would be more consistent with the notion that categories are uniformly essentialized. Motivational accounts by definition are swayed by the distinctive needs of groups. The following sub-sections provide brief reviews of the extent of this asymmetry in a few key social categories.

4.1 *Race*

As described in the previous section, several studies on White majority children revealed a somewhat late essentialization of race. Some of these studies, however, reveal that Black minority children exhibit aspects of racial essentialism at a younger age. For instance, when asked about the developmental stability of different traits, it was only by age 10, but not at 5, that White children systematically determined that a child would grow up to be like an adult matching her on race rather than on language (Kinzler & Dautel, 2012) or emotion (Roberts & Gelman, 2017). In contrast, when Black children were tested on these tasks, the privileging of race was found already at age 5. Consistent with this finding, Mandalaywala et al. (2019) found that Black children were more likely than White children to believe in the heritability of certain racial properties. Thus, in terms of race, in the U.S., minority children evince essentialism at a younger age than majority children.

4.2 *Social Economic Status*

To the best of my knowledge, only one study has systematically investigated potential variance across group identities regarding the essentialization of social economic status per se. This is a study by del Rio & Strasser (2011) who tested 5-year-olds from low- and high-SES kindergartens and schools in Chile. Children completed several tasks, targeting various components of essentialism. The general findings were that high-SES children essentialized SES categories (“rich” and “poor”) more than low-SES children. Thus, somewhat differently from the conclusion drawn above regarding race, here the “high-power” group essentialized the pertinent social category (SES) more than the lower-power group. Evidently, whether the comparison between these

social categories should be made in terms of power differences (high/low status) or demographics (majority/minority) needs to be further examined.

4.3 Religion

Religion is another dimension with varied evidence of differences across groups on their tendencies to essentialize. For instance, Smyth et al. (2017) found no systematic differences between Catholic and Protestant 6- to 10-year-olds in Northern Ireland, in their tendency to draw inferences based on religion categories. Similarly, using a switch-at-birth paradigm, Chalik et al. (2017) found no difference between Christian and Jewish 5- and 10-year-olds in the U.S. in their tendency to determine religious identity by birth parents. Interestingly, nevertheless, Chalik et al. did find that among 10-year-olds, the more religious Jewish children were reported to be, the more they essentialized religion. Clearly, research on potential group differences within the category of religion is scarce. It is nevertheless a theoretically interesting category as it can, in certain countries, distinguish between power and demographic status relations mentioned earlier.

4.4 Ethnicity

Ethnicity has been the focus of research conducted in Israel. It is important to clarify, however, that “technically” speaking, in the Israeli context, ethnicity is often confounded with religion. This is especially the case in work with children, as the two terms most familiar to children to denote the major social division in the country is “Jews” (a religious group) and “Arabs” (an ethnic group). These terms are routinely used almost interchangeably to refer to “Jews” and “Muslims”, “Jews” and “Palestinians”, and “Israelis” and “Palestinians”. Although there is no conclusive evidence that young children indeed interpret the terms “Jews” and “Arabs” as ethnic terms, it does seem to be the case that rather than having some religious connotation, children take these terms to refer to two “peoples”. Importantly for the present purposes, these two groups differ in both their demographic status (Jews being the majority) and power status (Jews having higher status).

As described earlier, Birnbaum et al. (2010) used a triad-induction task to assess children’s tendency to generalize a property based on various social categories or personality traits. They reported that both Jewish and Arab children privileged ethnicity over the other dimensions, as the strongest source of induction. Interestingly, they also found that whereas Jewish children relied on ethnicity equally irrespective of the ethnic identity of the target character (Jewish or Arab), Arab children did so more often when the target character was an Arab. In other words, Arab children treated “Arabness” as more inductively powerful than “Jewishness”, leading them to

determine generalization by ethnicity over all other alternative dimensions of similarity. A compatible asymmetry has been recently revealed in children's belief about the homogeneity of ethnic categories. Namely, although Jewish children construed the ethnic out-group as more homogenous than the in-group (Shilo, Weinsdörfer, Rakoczy, & Diesendruck, 2019), Muslim Arab children tended to do the reverse (Essa, Rakoczy, & Diesendruck, 2025).

Interestingly, in an investigation targeting yet a different component of essentialism, we found no difference between Jewish and Arab children in the essentialization of ethnicity. In Diesendruck et al.'s (2013) adoption-paradigm, both Jewish and Arab participants were more likely to determine the ethnic membership of an "adopted" baby based on the biological parents' ethnicity, when that ethnicity was the same as the participant's. In other words, Jewish children believed that Jewishness was biologically determined to the same extent that Arab children believed that Arabness was biologically determined. Or in general terms, Jewish and Arab children, to a similar extent, essentialized their ethnic in-group more than the out-group.

Finally, a series of more recent studies again reveal similarities between Jewish and Arab children's extent of essentialization, though here both groups essentialize their ethnic out-group more than their in-group. In particular, both groups were equally likely to attribute out-group behavior—more than in-group behavior—to their ethnic membership (Essa, Weinsdörfer, Shilo, Diesendruck, & Rakoczy, 2021), and to ask for more information about an out-group individual's general category compared to an in-group's (Nasie, Ben Yaakov, Nassir, & Diesendruck, 2022).

Taken together, these within-cultures studies demonstrate that matters of group status—and arguably of group identity—impinge on children's tendency to essentialize culturally salient social categories. Thus, even if race is a culturally salient category for N. American children and ethnicity for Israeli children, the extent to which majority/high-power vs. minority/low-power children within these cultures essentialize these categories vary. Moreover, even within groups, the extent to which they essentialize their in-group vs the out-group varies too (see Hopkins, 2026, for further discussions on the interplay between essentialism and group identity).

These observations raise the question of what generates these variations, both within and across cultures. What are the factors and mechanisms that lead children from certain groups to essentialize particular social categories? Relating back to the main theoretical debate driving this review: are there factors that uniformly impact children's social essentialism, thus serving as candidate catalysts of a cognitive bias? And are there factors that more conclusively derive from the distinctive needs driving different groups' tendency to essentialize? In the next section I review two broad kinds of factors that have been shown to impact children's tendency to essentialize social categories. As I review them, I discuss them in light of the above questions.

5 Cultural Influences on the Development of Social Essentialism

There is growing evidence about the effects of several cultural factors that contribute to the development of social essentialism in general. Three classes of factors seem especially pertinent for accounting for its cross- and within-cultural variations: social-ecology, language, and values.

5.1 *Social Ecology*

The composition of young children's social environment has been shown to influence their social categorization. Even young infants' attention to individuals from different races is affected by the social composition of their surroundings (Bar-Haim et al., 2006; Kelly et al., 2005), and exposure to racial diversity influences young children's attitudes toward members of different racial groups (Qian, Quinn, Heyman, Pascalis, Fu, & Lee, 2019). Several studies have also reported the effects of children's social environment on their tendencies to essentialize. Many of these studies define "social diversity" as the critical factor underlying these effects. I more cautiously refer to them as "social-ecological" effects, given that often it is difficult to separate between the numerous factors (e.g., demographics, values, actual contact, etc.) distinguishing between "natural" environments.

With the above caveat in mind, studies in the U.S. show that the degree of social essentialism varies between geographic locations. For instance, in Rhodes and Gelman (2009), participants were asked whether non-conventional alternative categorizations of race or gender were nevertheless acceptable (e.g., saying that a boy and a girl are of the same kind). Participants in their studies came from two different communities in the U.S.: a mid-size city and a rural community. Rhodes and Gelman found that starting at age 10, these participants' construal of racial and gender categories differed. Namely, regarding racial categories, whereas the "city" participants tolerated alternative categorizations from ages 5- through 17-years, "rural" participants started to not tolerate it at 10. As for gender categories, whereas the "city" participants started to tolerate alternative categorizations at age 10, "rural" participants did not tolerate them from age 5- up to 17-years. Similarly, Pauker et al. (2016) investigated children's beliefs about the developmental stability of racial cues, comparing between children in Hawaii (high in racial diversity) and Massachusetts (low in racial diversity) (Pauker et al., 2016). Consistent with the findings from Rhodes and Gelman, Pauker et al. also found that whereas 4- and 5-year-olds from the two locations exhibited similar patterns, 7-year-olds differed. Namely, those from Massachusetts had firmer beliefs about the stability of race than those from Hawaii.

On the one hand, these findings indicate that “structural” aspects of children’s social environment—namely, children’s exposure to social diversity—impact children’s tendency to essentialize. In fact, a fairly clear case for the role of diversity on children’s essentialism comes from a study on children’s beliefs about the stability of language (Dautel & Kinzler, 2018). Their study used a similar method to that of Pauker et al. (2016), in which 5-year-olds had to decide whether a target child would grow up to be an adult matching the target on race or spoken language. Dautel & Kinzler found that French-English bilinguals were more likely than monolinguals to select the race-match. In other words, bilingual children’s exposure to bilingualism arguably raised their awareness of the possibility that one’s spoken language may change throughout development.

On the other hand, however, as I had qualified earlier, it is possible that in some cases, “structural diversity” is accompanied by ideological motivations (e.g., a family’s choice to live in a diverse environment). In other words, in some cases, it is unclear whether the impact on social essentialism is strictly due to a structural feature of the social environment equally impacting all who live in that environment, or due to more motivated values.

An example for this potential confusion comes from a study by Deeb and colleagues, who examined Israeli 5- to 12-year-old Jewish and Arab children attending either “regular” ethnically segregated schools, or ethnically integrated schools (Deeb, Segall, Birnbaum, Ben-Eliyahu, & Diesendruck, 2011). Across a battery of essentialism measures, Deeb et al. found that 5-year-olds across all groups exhibited a similarly high level of essentialism. However, at age 8, and even more so at 12, children attending the integrated schools showed substantially lower levels of ethnic essentialism compared to their age-mates attending the segregated schools. Two further findings indicated that these developmental changes may have had to do primarily with the increase in exposure to ethnic diversity. First, the strongest effects were found among Jewish children, namely, those with the least initial exposure to the other ethnicity. Second, as assessed via other tasks, this decline in Jewish children’s ethnic essentialism coincided with an increase in their awareness of ethnicity. The question remains: did these effects occur because of the cognitive impact on Jewish children of exposure to Arab children, or were Jewish children more motivated by their parents to integrate?

5.2 *Language*

The potential effect of language on the development of social essentialism has been noted from the earliest theorizing about social essentialism (e.g., Carey, 1995; Sperber, 1996; see also Kinzler, 2021). Empirical work has since confirmed that certain linguistic structures promote children’s manifestation of essentialist beliefs or might even give rise to them.

Regarding language’s promoter role, studies have shown that children are more likely to display essentialist-like responses when social categories are labeled than

when they are not. For instance, in triad-induction tasks in which children have to infer the property of a target character based on one of several social dimensions, it has been found that when the dimensions are labeled (e.g., referring to an Arab character as “Arab” and a Jewish character as “Jew”), children most systematically draw the inferences based on the cultural salient social category (e.g., ethnicity; Birnbaum et al., 2010; Diesendruck & haLevi, 2006). In fact, these studies found that the presence of labels are sufficient to drive children’s induction, even when there are no signs of physical similarity between characters. Moreover, simply verbally cueing children to certain racial dimensions (e.g., skin tone) sufficed to influence their tendency to believe in the stability of racial properties (Roberts & Gelman, 2017). Taken together, these findings are consistent with the notion of language as a cognitive factor promoting essentialization.

Interestingly, however, Birnbaum et al. (2010) reported that in the condition in which labels were provided, significant differences between cultural sub-groups emerged. Namely, in that condition, religious Jewish children were more likely to draw inferences based on ethnicity than secular Jewish children and Muslim Arabs—a pattern found already at age 5. In other words, rather than uniformly promoting essentialism, labels seem to have triggered the different ethnic essentialism latent in the different groups.

Whereas labels and verbal cues may primarily serve an almost “pragmatic” function of pointing out to children a relevant social dimension, the use of generic language to refer to social categories arguably has a more formative effect (Gelman & Roberts, 2017). Generics are linguistic structures used to make a general statement about its subject. Thus, for instance, gender stereotypes regarding color preferences can be convincingly transmitted when phrased in generic form, such as, “boys like blue and girls like pink”. Indeed, when social categories are described to children via generics, children exhibit stronger essentialist beliefs in a variety of components (Leshin, Leslie, & Rhodes, 2021), and introducing even novel social categories via generics, increases the likelihood of children essentializing them (Foster-Hanson, Leslie, & Rhodes, 2022; Rhodes, Leslie, & Tworek, 2012).

Importantly, these effects of labeling or generics on children’s social essentialism are not limited to laboratory experiments. Rather, a quasi-naturalistic study revealed that the frequency with which parents spontaneously used ethnic labels or generics to talk about individuals of different ethnicities, significantly contributed to their children’s tendency to essentialize these categories (Segall, Birnbaum, Deeb, & Diesendruck, 2015). Here again we may ask: are generics sufficient to account for children’s essentialization? Segall et al.’s study provided another interesting set of findings pertinent to this question. Namely, the study unveiled relations between parents’ political ideology vis-à-vis the Israeli-Palestinian conflict, their tendency to use labels and generics when talking about members of different ethnicities, and their children’s ethnic essentialism.

In sum, as this brief review reveals, the language used by adults to talk about social categories has substantial impact on the way children construe these categories. Importantly, however, this finding raises a further “motivational” question: why parents speak to their children using these linguistic structures?

5.3 *Values and Beliefs*

As indicated above, parents' political beliefs contribute, at least indirectly, to children's social essentialism (Segall et al., 2015). Interestingly though, it seems that this type of effect may take some time to infiltrate children's thinking. For instance, as noted before, in Deeb et al.'s (2011) study with Israeli Jewish and Arab children attending segregated or integrated educational settings, the effects of setting on children's ethnic essentialism appeared only at second grade. In particular, not only did 5-year-olds from the two types of settings have a similar level of ethnic essentialism, but in fact they both had a high level of essentialism. Although Deeb et al. did not collect data on parents' political ideology, it is safe to presume that Israeli parents who willingly pay for their children to attend ethnically integrated kindergartens, hold an ideology of co-existence and mutual respect. And yet, at least by age 5, it seems that such ideology has not yet substantially shaped children's ethnic concepts.

Several studies further indicate that the way different societies construe social categories, impact children's tendency to essentialize these categories. Interestingly, the effect works in both directions: certain construals weaken essentialist beliefs and others reinforce them. In an example of a "weakening" effect, Woods (2017) investigated beliefs about ethnic stability among British 7- to 11-year-olds living in multi-cultural neighborhoods in London, in which ethnicity is commonly construed in terms of transient attributes, such as clothing, cultural preferences, and religions. She found that indeed, with age, children manifested a belief that ethnicity is changeable. Relatedly, experimental studies have shown that from a young age, introducing to children novel social categories in which differences in characteristics (e.g., preferences for toys) are explained in terms of structural differences (e.g., access), lowers children's tendency to explain the characteristics in inherent essentialist terms (Vasilyeva, Gopnik, & Lombrozo, 2018).

In an example of the "reinforcing" effect of social construals, Diesendruck & Haber (2009) found that the more Israeli Jewish children believed that social categories were created by God, the more they essentialized the categories. In an experimental study of the above relation, Foster-Hanson & Rhodes (2020) found that explaining to 5-year-olds that certain novel social categories were intentionally created by a supernatural agent, increased their tendency to essentialize the categories.

As discussed throughout, values and beliefs, but also social-ecology and language, although potentially having the type of uniform effect on social essentialism that cognitive accounts stipulate, they are clearly subject to functional considerations having to do with the motivations and needs of different groups. In the next section, I directly review whether and how motivations may indeed affect children's social essentialism.

6 Motivational Influences on the Development of Social Essentialism

The previous section described cultural factors, which are thus exogenous to the child, that influence the development of social essentialism. I have recently proposed (Diesendruck, 2020, 2021) that there may be endogenous factors that also carry such influence. Specifically, I refer to various social motivations proposed by social psychologists as underlying intergroup biases. In this section, I will briefly revisit these motivations, and evaluate—as I did in the case of essentialism—their developmental plausibility as candidate accounts for the emergence of social essentialism. This will point to some future directions for research in this area.

As mentioned earlier, one influential proposal for the underlying reasons for intergroup biases is Social Identity Theory. Drawing from this theory, Nesdale and others have traced the development of group identity in children, describing also some of its implications for intergroup biases. One of their main findings that aligns with the development of social essentialism, is that in many societies, by 5-years of age, children have some sense of their social group identity (Nesdale, 2004; Nesdale, Maas, Durkin, & Griffiths, 2005). Moreover, children's social group identification is related to various manifestations of intergroup bias, such as stereotyping, in-group favoritism, and social distancing (see for instance, Bigler & Liben, 2007; Pauker et al., 2015; Verkuyten, 2001). In fact, Essa et al.'s (2025) study suggested direct links between children's group identification and their essentialist tendencies. Namely, Arab children in Israel were most likely to draw inferences based on the particular social identity they had considered as most central to them (i.e., "Arab" or "Muslim"). Relatedly, the finding that racial minorities in the U.S. seem to essentialize race more than racial majorities, have been argue to related to Black families' interest in discussing race and racism with their children as a protective strategy (Sullivan, Eberhardt, & Roberts, 2021).

A further developmentally plausible candidate is social dominance motivations. Here, studies indicate that even infants are sensitive to differences in power status between individuals based on several cues (Mascaro & Csibra, 2012; Pun et al., 2016; Thomsen et al., 2011), a sensitivity that becomes more nuanced in early childhood (Brey & Shutts, 2015; Charafeddine et al., 2015; Gulgoz & Gelman, 2017). Importantly, by age 3, power differences affect children's intergroup biases, even to the point that children from low-powered groups may prefer higher-powered out-group individuals over in-group ones (Newheiser, Dunham, Merrill, Hoosain, & Olson, 2014; Olson, Shutts, Kinzler, & Weisman, 2012; Shutts, Kinzler, Katz, Tredoux, & Spelke, 2011).

A final basic motivation underlying social cognition is the "need to belong" (Baumeister & Leary, 1995). Arguably, humans need groups in order to survive, and need to feel safe in their group's commitment to their well-being. Interestingly, studies with infants suggest that such affiliative motivation influences their social behavior (Over & Carpenter, 2013) and their racial categorization (Ferera, Baron, & Diesendruck, 2018), even when triggered physiologically via the oxytocin system

(Ferera, Feldman, Zagoory-Sharon, & Diesendruck, 2023). Whether this motivation also affects young children's social cognition is yet to be explored.

The general point of this motivational perspective is to suggest that from a fairly young age, children experience fundamental needs — and as reviewed, have the conceptual wherewithal—to strive for sharp and stable boundaries between “their” group and “others”. The findings just mentioned on how affiliative triggers impact infants' racial categorization might suggest that children's first step is to identify “their” group, a task that as I have noted throughout, is not trivial and seems to be achieved by around age 3 at the youngest, but more robustly at age 5. Their culture, via the factors that I have reviewed above, assists them quite decisively in this achievement, directing them to the relevant group identities and offering specific construals of these groups.

7 Future Directions

As just hinted, one line of research to pursue in the future is direct investigations of the relation between social motivations and the development of social essentialism. For instance, to what extent does children's social identity affect their tendency to essentialize? One way to address this question is longitudinally: how temporally linked are the capacities to self-identify in terms of social groups, and essentialize the group? A further way is to assess the link between social essentialism and the centrality of social identities to children (e.g., Turner & Brown, 2007), possibly also assessing the degree of social identity fusion (e.g., Swann, Jetten, Gómez, Whitehouse, & Bastian, 2012). Similar approaches can be undertaken vis-à-vis the relation between essentialism and power dominance or a need to belong. In these cases, in fact, it may be even easier to experimentally manipulate these motivations and assess their impacts on children's essentialism.

A second line of research worth pursuing is a more systematic investigation of cross-cultural similarities and differences not only regarding the types of social categories essentialized, but also the particular components of essentialism that get essentialized. Such variations may have to do with diverse construals of social categories or society more broadly. But especially from a “motivational/functional” perspective, essentialism may be strategically deployed according to the interests of the deployers. For instance, a high-powered group may hold the belief that membership in their group is exclusive to those born into the group (i.e., higher in-group essentialism regarding the “biological” component), and at the same time make discriminatory generalizations about the out-group (i.e., higher out-group essentialism regarding the “homogeneity” component).

A third line of research worth pursuing has to do with the relation between the development of essentialism and intergroup biases. To date, only a handful of studies—some correlational and others experimental—have documented the positive relation between the two; i.e., higher essentialism correlates with higher intergroup biases (see Pauker et al., 2020, for a review). But more naturalistic and experimental

work, in a variety of cultures, and considering the cultural and motivational factors reviewed above, is needed. This is important for both theoretical and practical reasons. Such studies would be crucial to inform the design of more effective interventions for curbing the development of injurious biases (see for instance, Halperin et al., 2011).

8 Conclusions

Children develop intergroup biases from a fairly young age, manifesting not only preferences for people from their social group, but also discriminatory attitudes and behaviors toward those from other groups. These biases are arguably grounded in a certain construal of social groups, namely, essentialist beliefs. The review presented here described the development of such beliefs, revealing that they are manifested by children in various cultures already by age 5 years. The review further revealed, however, the between- and within-cultures variations in terms of which groups are most likely to develop essentialist beliefs, and regarding which groups. Several cultural factors contribute to these variations, but motivational factors may play a role as well. In general, the nature of these variations indicates that matters of social group identity impact the emergence of social essentialism.

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Part 2: Cultural Roots and Historical Trajectories of Essentialism

Culture, Group, and Identity: The Case of Diversity Ideology



Yoshihisa Kashima and Emiko S. Kashima

1 Introduction

This article presents a psychological perspective on the role of culture in the construction of a social group and social identity. Simply put, culture is critical for group and identity, while group and identity shape culture in turn. In the nexus of culture, group, and identity, we argue that people's lay conceptions of culture—ordinary people's everyday understandings of “culture”, that is, what “culture” means to them and how to perform it in their everyday life—play a critical role. Ordinary people's ideas and practices about culture have been called diversity ideology in social psychology. A well-known example is multiculturalism, but two other kinds have also been discussed: colourblindness and polyculturalism (e.g. Morris et al., 2015; Rosenthal & Levy, 2010; Verkuyten & Yogeeswaran, 2020). These are different ways in which groups—particularly cultural groups—and their interrelationships are conceptualized and acted out. Our contention is that essentialism—the process of attributing an essence to a category or its exemplars (e.g. Wagner et al., 2009)—plays a pivotal role in the cultural dynamics of identity and intergroup relationships.

To make a case for this argument, we proceed in three steps. The first section clarifies our theoretical understanding of culture and group, clarifying social identity as a self-concept as a member of a group and postulating cultural identity as a distinct form of identity, conceptually separable from social identity. The second section describes diversity ideologies as lay conceptions of culture. In so doing, we introduce the concept of metaculture (Urban, 2001)—a set of cultural information that structures and organizes cultural information in our understanding—and suggest that essentialization is a metacultural practice that differentiates different

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diversity ideologies. In the third section, we discuss the implications of our perspective for group and identity processes. In particular, we suggest that different diversity ideologies imply different conceptions of social group and social identity, and that ordinary people's lay conceptions of culture shape group and identity processes. We will review what empirical evidence there is in support of the hypotheses derived from our conceptualization.

2 Clarifying the Definition of Group, Social Identity, and Culture for the Present Purpose

In this article, a social group is understood as a certain set of individuals, typically with some relationships among them. A group may be based on a pre-existing social category, such as ethnicity, race, and nationality, but may also emerge in situ (Turner & Killian, 1972). It may involve a large number of people or a relatively small number. It may have elaborate and enduring organization, structures, and institutions, or may only have transient, but nonetheless powerful, internal structures and norms. The critical point is that a group consists of individuals, typically with some relations.

In contrast, culture is concerned with information, not with individuals or groups. In particular, the culture of a population is the set of information, which is available and non-genetically transmittable in that population, and can potentially influence psychological processes, including cognition, affect, and behaviour. This typically includes cultural ideas—things that are known, believed in, and valued—as well as cultural practices—what and how things are done (e.g. Kashima et al., 2019). Here, a population is a population of individuals, but whether they constitute a group or whether they have a social identity is irrelevant. A population is a set of individuals that researchers define as the target of investigation.

To further clarify, take, for example, judo, a form of martial art with a set of techniques and ideas. Although it originated in Japan, it is now widely practised around the world and even played at the Summer Olympic Games. It is an element of culture in that it is a set of information that is socially transmitted and that can influence human behaviour. Although it is associated with a social group, i.e. Japanese people, it is not the people. Nor do the Japanese possess it. It is accessible to all humans as a population, and its practices and ideas (i.e. particular techniques, tactics, and rituals) may be mostly carried by judo-ka, a group of people who practise judo, i.e. a subset of humans. To be sure, the exact information carried by different individuals varies, and not just judo-ka, but also those who do not practise this martial art have some ideas about it, and it is assumed that different variants of judo as information are held by different people and distributed within the population. Nonetheless, the critical point is that a culture is a set of information; a group and a population are sets of people. A population may include only one group or multiple groups, and a group may or may not be coextensive with the population. The relationship between

the population and a group depends on the research and how the researchers construe the population.

Social Identity and Cultural Identity. Once group and culture are conceptually differentiated, it is now possible to construe a person's identity in relation to group and culture as conceptually distinct. On the one hand, social identity is defined in relation to a group. Following Tajfel (1981), social identity is here understood as "that part of an individual's self-concept which derives from his (sic) knowledge of his (sic) membership of a social group (or groups) together with the value and emotional significance attached to that membership (p. 255)." Just as a group may be based on a pre-existing social category or emergent in situ, a social identity may be deductively derived from a pre-existing group or inductively emerge out of social interactions in situ (Postmes et al., 2005). In this sense, social groups and social identities are often closely interlinked. A social identity conceptually presupposes the existence of a group, but a social identity can be causally implicated in the formation and maintenance of a group and collective behaviour.

On the other hand, cultural identity is defined in relation to a culture or a cultural element. In parallel with social identity, cultural identity can be defined as that part of an individual's self-concept which derives from one's knowledge of cultural elements together with the value and emotional significance attached to the cultural elements. Given that cultural elements are ideas and practices, they may be in a person's memory system—stored in the long-term memory and activated momentarily in the working memory—but also embodied in artefacts, i.e. humanly created physical objects. To use the example of judo again, cultural identity can be based on one's commitment to and emotional attachment with judo as a martial art even though one does not play judo. In this case, this person does not have a social identity of judo-ka as a member of the group of people who perform judo, but has a cultural identity with judo as a cultural element.

3 Lay Conceptions of Culture and Diversity Ideology as Metaculture: The Role of Essentialism

Now that the theoretical concepts of culture, group, and identity are clarified, let us theorize the role of culture in the construction of group and identity. In our view, culture includes information about how to think about and act out "culture", or lay conceptions of culture, so that people construct their group and identity. Certainly, "culture" is a social scientific term, but it is also an ordinary word used in everyday discourse. For example, when people speak of "toxic workplace culture" or "culture of cooperation," they typically mean a prevalent pattern of talk and action among a group of people. Furthermore, under the circumstances of super-diversity (Vertovec, 2007), in which people encounter multitudes of cultural ideas and practices hitherto unheard of and originated in parts of the globe that they have not seen before, they are bound to be drawn to the cultural diversity in the world and its implications for

their lives. Thus, they have some ideas about what “culture” is, how to talk about it, and how to act on these thoughts and talks. We suggest that people’s everyday understanding of culture shapes group and identity dynamics in broad society.

3.1 Diversity Ideologies as Lay Conceptions of Culture

Lay conceptions of culture have been researched in social psychology under the rubric of diversity ideology. A diversity ideology is a belief system that describes the nature of cultural groups and group differences in society. Researchers have so far described three broad diversity ideologies: colourblindness (Wolsko et al., 2000), multiculturalism (Berry & Kalin, 1995; Plaut et al., 2018; Sasaki & Vorauer, 2013; Wolsko et al., 2000; Yogeeswaran & Dasgupta, 2014), and polyculturalism (Morris et al., 2015; Rosenthal & Levy, 2010) or interculturalism (Verkuyten et al., 2020; Yogeeswaran et al., 2021a).¹ It should be noted that these are the ideologies that researchers have discussed in the literature so far, and clearly they are not exhaustive.

Colourblind ideology emphasizes the sameness of all humans qua humans, and advocates that differences between ethnic groups should be disregarded. At one level, this perspective may be traced all the way back to the Enlightenment conception of the person, according to which all humans are equal, and should be treated equally under the law (e.g. Kashima, 2000; Kashima & Gelfand, 2012). These ideals lie at the foundation of the notion of human rights, and resonate through the United States’ motto, *e pluribus unum*, and Article 1 of the Universal Declaration of Human Rights—“All human beings are born free and equal in dignity and rights.” Arguably, it underlies The US Civil Rights Act of 1964, which prohibits discrimination on the basis of race, colour, religion, sex or national origin (Apfelbaum et al., 2012).

In contrast, multiculturalism regards cultural differences as fundamentally important. It draws attention to cultural differences between ethnic groups, acknowledges and appreciates diverse cultural groups’ positive contributions to the broader society, and often emphasizes the importance of maintaining cultural traditions (Berry, 2013; Berry & Kalin, 1995; Rosenthal & Levy, 2010; Wolsko et al., 2000). An example of its formal institutional form is the Canadian Employment Equity Act of 1995, which advocates “the principle that employment equity means more than treating persons in the same way but also requires special measures and the accommodation of difference” (Canada, 1995). Arguably, its historical forerunners can be found in Counter-Enlightenment thinkers such as Vico and Herder, Romantic theorists who regarded culture as foundational to human society (Kashima, 2000; Kashima & Gelfand, 2012).

¹ We thank Wolfgang Wagner for pointing out that the prefixes, multi- and poly-, have the same meaning, and therefore may not be an ideal terminology. Although we acknowledge this issue, in agreement with Cristina Moya’s perspective, we adhere to the distinction between multiculturalism and polyculturalism that is widely assumed in the literature.

Finally, polyculturalism regards culture as critically important in the making of a person's identity, but treats culture as not immutable. Rather, cultures are seen to be mutually influencing and constantly changing (Bernardo et al., 2013; Kelley, 2007; Morris et al., 2015; Prashad, 2001, 2003; Rosenthal & Levy, 2010). Just like kung-fu was performed not only by Asians, but also by Africans, and different styles were mixed and integrated (Prashad, 2001), cultural elements can be learned from different places and groups of origin and mixed together to create a new form. Interculturalism (Verkuyten et al., 2020; Yogeewaran et al., 2021a) is a variant of polyculturalism, often reflected in institutional policies (Council of Europe, 2008; UNESCO, 2009) with an emphasis on the importance of dialogue typically in the context of nation-states (Verkuyten et al., 2020). Arguably, Berry's (2013) notion of multiculturalism includes the element of inclusion and equitable participation in a national polity, very much akin to interculturalism.

Table 1 lists example items used in scales to measure each diversity ideology. Two points are worth noting. First, these items do not represent theoretical statements made by the researchers, and therefore they do not reflect the researchers' conceptualisations of culture or cultural diversity. Rather, they were part of the researchers' measurement instruments to gauge ordinary people's beliefs about culture and cultural diversity. Second, we call these ideas about cultural diversity "ideologies" as correlated opinion statements in a broad sense. This use of the term ideology follows Converse's (1964) conceptualisation of ideology as a loose system of beliefs. Here, beliefs are typically understood to include not only statements to which a truth-value can be attributed, but also evaluative or normative statements of prescriptions or proscriptions (e.g. should and should not). They do not represent a clearly articulated system of thought or deep convictions, but rather appear only as weakly correlated opinions in empirical research of public opinion.

Even based on these cursory sketches, the differences among these diversity ideologies should be obvious. First, colourblindness does not recognize culture as an important feature of humans, and as such, any influences cultures may have on individuals' identity are not so critical and differences between cultural groups, if they exist, are seen to be something to be ignored as something superficial. In contrast, both multiculturalism and polyculturalism/interculturalism recognize cultures and cultural differences. However, the former regards cultural differences as stable and enduring, and hard to change or that which one should not even attempt to change. On the other hand, the latter regards cultural differences as historically constructed and mutable.

Despite the similarity, polyculturalism and interculturalism are subtly different. Polyculturalism as measured by Rosenthal and Levy (2012) speaks largely about interaction and mutual influences between cultural groups. In contrast, interculturalism as conceptualized by Yogeewaran et al. (2021a) encourages the development of "common moral understandings across differences through ongoing dialogue and exchange (p. 5)," while "individual members of different groups interacting with each other leading to new and complex self-understandings, and forging substantive and shared commitments (p. 5)." In other words, the emphasis is placed on individuals, and their active construction of a newly shared identity. Similarly, Verkuyten

Table 1 Item examples for diversity ideologies

Colourblindness
• Ethnic and cultural group categories are not very important for understanding or making decisions about people • At our core, all human beings are really all the same, so racial and ethnic categories do not matter • Racial and ethnic group memberships do not matter very much to who we are (Rosenthal & Levy, 2012)
Multiculturalism
• Recognizing that cultural and racial diversity is a fundamental characteristic of Canadian society (Berry & Kalin, 1995) • All cultures have their own distinct traditions and perspectives • There are boundaries between different ethnic groups because of the differences between cultures (Rosenthal & Levy, 2012)
Polyculturalism
• Different cultural groups impact on another, even if members of those groups are not completely aware of the impact • Although ethnic groups may seem to have some clear distinguishing qualities, ethnic groups have interacted with one another and thus have influenced each other in ways that may not be readily apparent or discussed • Different racial, ethnic, and cultural groups influence each other (Rosenthal & Levy, 2012)
Interculturalism (three subscales)
• Despite the different cultures in (the USA/the Netherlands), we are all part of a single community (Sense of unity) • The cultural identity of people is not fixed, but very changeable (Identity flexibility) • We can only make progress as a country when we are prepared to enter into open dialogue with each other (Dialogue) (Verkuyten et al., 2020)

et al.’s (2020) interculturalism scale speaks to the effect of the influence of multiple cultures on an individual’s identity, emphasizing identity flexibility (see Table 1). Hereafter, however, we use the term, polyculturalism, to refer to both polyculturalism and interculturalism.

3.2 Lay Conceptions of Culture, Metaculture, and Essentialism

These diversity ideologies, then, carry cultural information about culture and its role in a society and identity formation. Borrowing Urban’s (2001) term, we call meta-culture such cultural information about culture. Although Urban’s original sense of metaculture was much narrower, we use this term to capture a broader set of

cultural information because of its theoretical utility. Cultural ideas and practices about culture—metaculture—are used to organize and structure cultural information, and as such they can shape the construction of multiple exemplars of cultural information. In a way, metaculture participates in the process by which cultural elements are constructed. Consequently, the exemplar cultural elements constructed through the use of the metaculture carry the signature of the metaculture. Therefore, metacultural elements are reproduced whenever relevant cultural information is reproduced, replicating and diffusing as the cultural information is transmitted in a population.

In the context of diversity ideologies, essentialism is a critical metacultural element that participates in their reproduction. As noted earlier, essentialism is the notion that there exists an essence that defines the membership of a category—if something contains an essence that defines a category, this something belongs to the category (e.g. Wagner et al., 2009). This essence is regarded as an immutable existence, and the category defined by the essence is seen to have a clear category boundary in that those which have the essence belong in the category, but those which do not have it fall outside the category. And in this sense, those in the category are distinctive from those in other categories. Further, because the essence is seen to be causally responsible for the category and its members' surface manifestations, the category membership is regarded as highly informative—a member of an essentialized category is believed to show the same manifestations in appearance and behaviour. Essentialism thus understood is cultural information about a category and its exemplars, which are themselves cultural information. Therefore, essentialism is metacultural information.

Essentialism is often implicated in colourblind ideology and multiculturalism. First of all, colourblindness tends to essentialize humankind. A good example comes from the Universal Declaration of Human Rights. Article 1 states, "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act toward one another in a spirit of brotherhood." The attribution of "reason" to all human beings reminds us of Voltaire's classic statement about the Enlightenment conception of the person:

God has given us a principle of universal reason, just as he has given feathers to birds and fur to bears; and this principle is so constant that it persists in spite of all the passions that oppose it (cited in Jahoda, 1992, p. 33).

As a basis of treating all humans equally, colourblind ideology tends to attribute this universal essence, and justifies the disregard for cultural differences by citing this apparent commitment to equality.

On the other hand, multiculturalism tends to essentialize a cultural group, treating a group's culture as its essence. This is reminiscent of the Counter-Enlightenment or Romantic thinkers such as Vico and Herder, and their successors in the German idealist tradition. One such example comes from the concept of *Volksgeist*. As Jahoda (1992) explicated, the founders of *Zeitschrift für Völkerpsychologie und Sprachwissenschaft* defined it in their introduction to the journal as "the inner activity

common to all individuals” in a society, providing unity and harmony of collective psychological functioning (Jahoda, 1992, p. 148). According to Jahoda, they suggested “the unity of Volksgeist is reflected in a feeling of being at one with the community (p. 148)”, which primarily derives from a common language. Volksgeist exists as thoughts, sentiments and dispositions of people as well as material embodiment in books, works of art, monuments etc. etc., generally cultural artefacts. Volksgeist is understood to be fundamental to a Volk, a group of individuals who share this Volksgeist. In this conceptualization, Volksgeist largely overlaps with what is typically regarded as culture and is like the essence of a group, which defines the group’s character and collective functioning as a whole. It is important to remember that the scholarship on culture did not regard culture as immutable, but it did regard culture as a defining characteristic of a cultural group. Put somewhat differently, a group and its culture are inseparable, and both define people’s identity. When the scholarly discourse on culture is absorbed into the contemporary discourse on culture and transformed into the diversity ideology of multiculturalism,² culture has become the essence of a group and its tradition, ensuring the group’s continuity over time and binding individuals to the group (Sani et al., 2007; Smeeke & Verkuyten, 2017).

In contrast, polyculturalism does not essentialize a group or a culture. Rather, it emphasizes the diffusion of cultural information across cultural and social boundaries, and mutual influence and dynamic change of culture over time. A historian, Vijay Prashad (2003), wrote:

Can we think of “Indian food” (that imputed essence of the Indian subcontinent), for example, without the tomato (that fruit first harvested among the Amerindians)? Are not the Maya, then, part of contemporary “Indian culture”? (Prashad, 2003, p. 52)

Cultures move (Hermans & Kempen, 1998), and as cultural elements invented or discovered elsewhere are imported into a different population, they may spread and become prevalent, thus influencing the culture and instigating cultural dynamics (Kashima et al., 2019; Morris et al., 2015). This way, polyculturalism emphasizes the mutability of culture, in contrast to multiculturalism’s tendency to view cultures as “fixed, discrete entities that exist side by side—a kind of zoological approach to culture” as a historian Robin Kelley (2007) put it.

Thus, diversity ideologies can be classified into a 2×2 scheme (Table 2), whose facets are (1) whether culture is important or unimportant for an individual’s identity, and (2) whether a social group is essentialized or not. Colourblindness essentializes humanity, but regards culture as unimportant for identity. Similarly, melting pot ideology neither regard culture as important nor essentialize a social category, but it was an assimilationism in practice (Berry & Sam, 2014) in that diverse cultural perspectives were meant to be melted into the majority cultural ideas and practices. In contrast, multiculturalism regards culture as central to identity, and essentializes cultural groups. Polyculturalism regards culture as important for identity, but does

² A similar process to transformation occurred to psychoanalysis as discussed from the perspective of social representations theory in Moscovici’s (2008) classic Psychoanalysis. Also see Wagner and Hayes (2005) on the social representations approach.

Table 2 Taxonomy of diversity ideology

	Culture is unimportant	Culture is important
Essentialism	Colourblind	Multiculturalism
Non-essentialism	Melting pot ³	Polyculturalism

not essentialize social groups. In so doing, polyculturalism differentiates culture and group as conceptually separate.

4 Implications of the Diversity Ideologies for Intergroup Relationship and Identity Process

Lay conceptions of culture through diversity ideologies can play a significant role in intergroup relations and identity processes, by providing different perspectives on the nature of intergroup relations and the construction of identities. Here, each diversity ideology's implications are discussed and evidence for these speculations is reviewed.

4.1 *Colourblindness*

Colourblindness does not recognize the existence of cultural groups and claims that differences between “cultural groups” are unimportant, superficial, or not real. This diversity ideology denies any claims of cultural differences, and denials can take different forms. One possibility is to individualize any claims of group differences. For example, economic disparities between cultural groups may be explained in terms of some deficiencies as individuals, e.g. laziness, disabilities, or circumstances. Another possibility is to explain differences in terms of effort and other surface-level differences, by claiming that those who cannot “make it” aren’t trying hard enough. Perhaps more generally, colourblindness can encourage the attribution of superficial deficiencies to a disadvantaged group, while holding them responsible for their deficiencies. A third possibility is to explain them in terms of contextual factors such as politics and economic forces, thereby exonerating those disadvantaged.

Colourblindness can result in varied intergroup and identity processes. On the one hand, colourblindness can justify actions to rectify disparities between cultural groups (Knowles et al., 2009). This is because colourblindness can act as a utopian vision, depicting a possible world in which disparities between cultural groups do not exist (Fernando et al., 2018; Kashima & Fernando, 2020). In this case, it may encourage the formation of social identity for the disadvantaged group and motivate

³ We thank Wolfgang Wagner for pointing out that this cell represents “melting pot” ideology and decided to adopt this.

collective action to gain equality (van Zomeren et al., 2018). Indeed, that was the way in which colourblind ideology may have contributed to the French Revolution, the American Independence, and the civil rights movement and the Civil Rights Act of 1964.

On the other hand, colourblindness can justify disparities between cultural groups (Knowles et al., 2009). It can justify the status quo and the current social system as in Jost's (2020) system justification theory, or it can hold everyone responsible for their circumstances, prompting positive evaluations of the advantaged and negative evaluations of the disadvantaged. In this form, colourblindness can enhance their self-perceptions for those who are advantaged—they are advantaged by their own accord and responsible for their advantageous positions. For those who are disadvantaged, colourblindness may be detrimental to their self-perceptions. They may think that they are responsible for their own disadvantaged circumstances. Indeed, colourblindness is associated with generally more negative attitudes to racial, ethnic, and cultural minority groups in many countries, including the United States (e.g. Bernardo et al., 2013; Rosenthal & Levy, 2012; Wolsko et al., 2000), the Netherlands (Verkuyten et al., 2020), the Philippines (Bernardo et al., 2013), Australia (Virgona & Kashima, 2021), France, Quebec in Canada (Wollast et al., 2023), and New Zealand (Yogeeswaran et al., 2021b).

4.2 Multiculturalism

Multiculturalism tends to stabilize the existing intergroup relationships between cultural groups. It recognizes the existence of cultural groups as a fundamental truth, tends to essentialize those groups, and therefore regards their characteristics and the relationships among them as fixed and hard to change. Consistent with this reasoning, people who endorse multiculturalism tend to biologize race (Williams & Eberhardt, 2008) in the US (Wilton et al., 2019), and tend to essentialize race in Australia (E. Kashima, personal communication), China, Indonesia, Macau, Malaysia, and the Philippines (Bernardo et al., 2016). Bernardo et al. (2016) reported no association between multiculturalism and essentialism only in Hong Kong. In the Netherlands, multiculturalism was associated with essentialist beliefs about ethnic minorities; however, the association was positive among minorities and negative among majorities (Verkuyten & Brug, 2004),

This means that multiculturalism can have positive or negative implications for intergroup processes, depending on the pre-existing intergroup relations. On the one hand, when the existing intergroup relationships are relatively benign or at least not excessively conflictful, multiculturalism is likely to promote positive attitudes toward cultural groups. Cultural groups are likely to be seen as benevolent rather than antagonistic. Indeed, multiculturalism tends to be positively correlated with more positive attitudes toward minority groups in those countries where intergroup relations do not involve outright violent conflict, such as civil war, e.g. the United States (e.g. Bernardo et al., 2013; Rosenthal & Levy, 2012; Wolsko et al., 2000),

the Netherlands (Verkuyten et al., 2020), the Philippines (Bernardo et al., 2013), Australia (Virgona & Kashima, 2021), France, Quebec in Canada (Wollast et al., 2023), and New Zealand (Yogeeswaran et al., 2021b). A meta-analysis found that multiculturalism is associated with both explicit and implicit positive intergroup attitudes (Leslie et al., 2020; Whitley & Webster, 2019).

On the other hand, multiculturalism may be a double-edged sword. Its tendency to essentialize cultural groups can entrench conflicts between cultural groups if they exist. Cultural groups in conflict (e.g. Jews and Palestinians in Israel, the West Bank, and the Gaza Strip) are likely to see each other as having inherent tendencies to aggress against each other, and because these characteristics are essentialized and regarded as immutable, the existing conflict is likely seen to be unsolvable. Evidence for this speculation comes from findings that suggest this proposition's converse. That is, when beliefs about the malleability of group characteristics and intergroup relations are promoted, intergroup attitudes and beliefs appear to ease even in one of the most entrenched intergroup conflicts in the world (Halperin et al., 2011).

Further, multiculturalism affects identity processes. To begin, it recognizes culture as an important factor that defines a cultural group. Consequently, cultural differences are acutely felt, and the questions, "What are you?" and "What am I?", become a pressing issue. Indeed, if there is no ambiguity in one's cultural identity (e.g. I am an Australian, and nothing else), multiculturalism is likely to promote self-concept clarity (Campbell et al., 1996) and positive views about the self. However, if one recognizes the influence of multiple cultures on one's self, the identity question – What am I? – can be challenging. Migrants and offsprings are typically influenced by their culture of origin (heritage culture) and their adopted culture (host culture). There is a clear recognition that integration of these two cultures is psychologically adaptive for migrants (Berry et al., 2022; Nguyen & Benet-Martínez, 2013); however, whether such multiple cultural influences are seen to be compatible with each other is a critical determinant of one's well-being (Benet-Martínez & Haritatos, 2005; Tikhonov et al., 2019; Yampolsky et al., 2013).

4.3 Polyculturalism

Polyculturalism influences intergroup relations largely by de-essentializing cultural groups and obviating the social issues associated with cultural groups, while recognizing the significance of culture as a fact of life. Experimental research in the United States found that reading about interculturalism (i.e. a form of polyculturalism) reduced the extent to which people essentialized cultural groups, relative to the conditions in which participants read about multiculturalism or an unrelated text (Yogeeswaran, Verkuyten, et al., 2021a, 2021b). Endorsement of polyculturalism is associated with positive attitudes toward minority groups in many countries, including the United States (e.g. Bernardo et al., 2013; Rosenthal & Levy, 2012; Wolsko et al., 2000), the Netherlands (Verkuyten et al., 2020), the Philippines (Bernardo et al., 2013), Australia (Virgona & Kashima, 2021), France, Quebec

in Canada (Wollast et al., 2023), and New Zealand (Yogeeswaran et al., 2021b). Polyculturalism was associated with positive attitudes toward former colonizers in Hong Kong, Macau, and Jakarta, Indonesia. In contrast, this was not the case in Johor Bahru, Malaysia and Wonosobo, Indonesia. It has been suggested that this is because contacts between locals and former colonizers were limited (Bernardo et al., 2019). By facilitating the quality of the intergroup contacts (Bernardo et al., 2013; Healy et al., 2017; Virgona & E. Kashima, 2021), polyculturalism may likely foster more positive mutual attitudes (Batkina et al., 2022).

Further, the polycultural view that cultures are mutually influencing and not separate systems may avoid essentialist beliefs (Virgona et al., 2024) and direct individual's attention to similarities as well as differences between cultural groups. This helps polycultural individuals to negotiate their intergroup relationship flexibly by drawing on similarities when necessary, but recognizing differences if they need to. Such flexible intergroup negotiation can reduce intergroup threat and anxiety (Batkina et al., 2022; Rosenthal & Levy, 2016). Those who identify strongly with their group desire their ingroup's distinctiveness. Consequently, they may be threatened when they feel their ingroup is not as distinctive as they would like to think (Ng Tseung-Wong & Verkuyten, 2018). Nonetheless, by de-essentializing cultural groups and regarding their relationships as changeable, polyculturalism may reduce an "us vs. them" mindset by promoting cultural accommodation and adjustment (Cho et al., 2018; Salanga & Bernardo, 2019), making culture mixing (Cho et al., 2017) and cultural shifts less threatening in societal contexts of growing diversity (Osborn et al., 2020).

Polyculturalism may have an important implication for intersectionality (Crenshaw, 2013). Intersectionality arises as a significant social issue when the intersection of two or more social categories (e.g. "Black" and "women") falls out of the social discourse because none of these categories recognizes the intersectional subset as their "typical" members. For instance, "Black women" as the intersection of "Black" and "women" often fall out of the discourse on racism or sexism because "Black" as a social category often implies Black men and "women" as a social category typically means White women in the United States. Polyculturalism as a diversity ideology implies that culture is mutable and may change due to a variety of influences from different social groups, and consequently suggests that the concept of "race" or "gender" as an aspect of culture can also change. This implies that polyculturalists may be more attentive to the issues of intersectionality. Indeed, those who endorse polyculturalism tend to have low levels of sexism in the United States (Rosenthal et al. (2014). Given that sexism predicts the endorsement of the stereotypes of "Black women" (e.g. "Mammy," "Jezebel," "Sapphire," "Ratchet"), an intersectional social group in Canada (Hodson et al., 2021), it is possible that polyculturalism too can reduce the endorsement of an intersectional social group.

In addition, polyculturalism, like multiculturalism, can help make sense of identity questions in culturally diverse societies by recognizing culture as an important part of experiences that comprise the sense of what you are. Unlike multiculturalism, however, polyculturalism avoids the problem of choosing one social identity, permitting identification with multiple cultural elements from diverse cultures of

origin, without raising issues as to whether one is a member of one cultural group (e.g. heritage culture) or the other (e.g. the host culture) and whether those elements are harmonious.

A historian, Robin Kelley (2007), in his brief essay, *Polycultural Me*, suggests that a person's identity does not neatly fit into a social category.

My mother never fit the “black momma” media image. A beautiful, demure, light brown woman, she didn’t drink, smoke, curse, or say things like “Lawd Jesus” or “hallelujah,” nor did she cook chitlins or gumbo. A vegetarian, she played the harmonium (a foot-pumped miniature organ), spoke softly with textbook diction, meditated, followed the teachings of Paramahansa Yogananda, and had wild hair like Chaka Khan. She burned incense in our tiny Harlem apartment, sometimes walked the streets barefoot, and, when she could afford it, cooked foods from the East.

Kelley’s mother has many cultural elements that originated from highly diverse cultural backgrounds. Her identity consists of multiple diverse cultural elements but does not necessarily fit into a social category of “Black” in the United States or any fixed social categories in any countries.

Corroborating this interpretation, recent qualitative research shows that, among Australians including both recent migrants and those who have been in Australia multiple generations, cultural identities are experienced as generally polycultural. They describe their identities as “being a product of many influences,” “learning, bridging, and blending cultural influences,” and often involving “the importance of meaningful social group identities” (Virgona & Kashima, 2024). They also express desire for an inclusive identity drawing on knowledge of cultural elements—values, attitudes, and perspectives shared by the group. Based on this qualitative research, a polycultural identity scale was derived. Individuals who scored high on polycultural identity tend to have greater interests in culturally diverse activities, while endorsing polyculturalism and interculturalism more strongly and racial essentialism less strongly (Virgona et al., 2024). Further, higher polycultural identity was associated with more integration and hybridization of discrete cultural influences into the self and a stronger personal identity—the sense of knowing who they are, and what they like, think, and do (Virgona et al., 2024, 2025), which correlated with emotional well-being (Jetten et al., 2010).

5 Directions for Future Research

The implications of diversity ideologies as metacultural elements may go well beyond those group, intergroup, and identity processes we have reviewed in this chapter. In this section, we sketch out some potential directions for future research. First, the effects of diversity ideologies on intergroup processes can be further investigated by examining their relations with stereotypes and prejudices. As an ideology about culturally based groups, multiculturalism may promote stereotypes about cultural groups, but may buffer against negative prejudice toward them because of

its emphasis on positive intercultural relations. Whether colourblindness and polyculturalism are consistently related to stereotypes and prejudices of different types of social groups is more difficult to speculate. Do these diversity ideologies relate to the stereotypes and prejudices about intersectional groups (e.g. “Black women”)? As we suggested earlier, polyculturalism may promote a greater recognition of intersectionality as a social issue and contribute to the improvement of the social condition of intersectional groups, but diversity ideologies’ impact on stereotypes and prejudices may critically depend on their content—how these particular groups have been construed and talked about in the cultural and historical context of the intergroup relations. Further empirical research is needed to answer these questions.

Second, with regard to identity processes, it is important to investigate how people’s identity processes are influenced not only by their own diversity ideologies, but also by the diversity ideologies of those who interact with them. It is a classical social psychological insight that an individual’s self (including identity) is a product of the social interaction with others (e.g. Cooley, 1909; Mead, 1934). The case of diversity ideology and identity would not be an exception. A polyculturalist’s identity may be fully recognized as polycultural only when others around them also take a polyculturalist stance. How would a multiculturalist react to a polyculturalist’s claim that, although they may be a member of a certain social group (e.g. Chinese), they also acknowledge and endorse a different group’s cultural (e.g. Western European) influence on their identity? How would this polyculturalist respond to this multiculturalist’s reaction? Again, these are intriguing questions that await further empirical research.

Finally, these discussions imply that the effect of diversity ideologies on intergroup and identity processes is likely to depend on the context of their historical intercultural and intergroup processes. In other words, the diversity ideologies such as colourblindness, multiculturalism, and polyculturalism may have different implications on group and identity processes in different national institutional contexts, their history, and broader culture, including the experience of colonization and history of intergroup relationships. As we noted, some research has already begun in this area (e.g. Bernardo et al., 2016, 2019). However, there is a great scope in extending this line of work in the future.

6 Conclusion

Culture is critically involved in the formation, maintenance, and transformation of identity as well as social groups and intergroup relationships. Essentialism is a cultural element deeply implicated in the nexus of culture, group, and identity. Cultural ideas and practices about “culture” as metaculture shape these identity and intergroup processes through people’s lay theories of culture or diversity ideologies, such as colourblindness, multiculturalism, and polyculturalism. These lay theories of culture differ from each other in terms of whether culture is recognized as a

significant factor in shaping identity, and whether groups are essentialized. Consequently, different lay theories stipulate different types of relations between cultures and groups. Colorblindness essentializes humanity as an all-inclusive group. Multiculturalism regards culture and group as inseparable with a group's culture defining the group's essence. In contrast, culture and group are separable in polyculturalism, and cultural elements originated in a group are seen to be influencing other groups. This way, essentialism is a critical organizing principle in the cultural shaping of identities and intergroup relations.

Diversity ideologies have organized public discourse about cultures, cultural identities, and intercultural relations within the context of a nation-state. As Vertovec (2007) famously suggested, some nations (e.g. Britain, Australia) are not just diverse, but super-diverse. Cultural diversity is on the increase even in countries traditionally marked by relative ethnic homogeneity. This is due to long-distance movements of people around the world, in part, through sojourn and migration, but also by some fleeing their places of birth as refugees due to conflict or persecution. As people move, so does the cultural information they carry. Together with the global information technologies and the information they transmit, the availability of diverse cultural information and the awareness and recognition of cultural diversity can only grow in people's lived experiences. With this, the dissonance between the ideal of a culturally homogeneous nation-state and the reality of cultural diversity in it has been increasingly felt, stretching the institution of the nation-state itself as seen in the rise of populism and its opposition to cultural diversity inside a nation (Inglehart & Norris, 2016).

Going beyond national borders, however, the world does contain diverse cultures, groups, and identities, and there is no escaping the cultural diversity of humanity. Diversity ideologies can shape the public discourse about the world order within the institutional system of nation-states and international relations. Consider the discourse about current geopolitics—the Israel-Palestine conflict in Gaza is often framed as a cultural conflict, and its proposed two-state solution of a separate Palestine reinforces the nation-state system. However, it is a political solution that most resonates with multiculturalism, and it can be played out across the existing national borders. The same ideology if applied to other geopolitical hotspots—Kurds, Sikhs, and many others—can begin to challenge the current system of nation-states and international relations. Could polyculturalism offer another perspective by highlighting the inherent interdependence among ethnic and national groups, shaping an answer about how to manage mutual cultural influences? Metacultural questions of how to conceptualize culture and its relations with individuals and groups will be critical in the contemporary geopolitics of globalized humanity.

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The Origin of WEIRD Essentialism



Hovig Artinian and Thomas J. H. Morgan

1 Introduction

Researchers aiming to understand the evolution of human behavior must grapple with its tremendous flexibility and the cultural variation present across geography and history. This is particularly challenging because researchers themselves are not external observers, but are raised, educated and trained within a particular culture. Such an upbringing inevitably generates expectations about how all humans reason and behave. Moreover, when empirically testing hypotheses, the most readily available subjects are typically those from a researcher's own population, who share the same upbringing, and thus are disproportionately likely to behave in the expected way. Until data is generated from elsewhere, this circularity can transform local cultural practices into seemingly universal, evolved human behaviors. Here, we outline how such a dynamic came to be in play with the hypothesis that ethno-racial essentialism is underpinned by evolved folk-biological reasoning. We first outline the hypothesis and note that while much evidence from industrial populations supports it, data from other populations provides a more complex picture. It is not that industrial populations are simply more or less essentialist than others, but that essentialism in industrial populations is an unusually good match for folk-biology relative to essentialism in other groups. We then seek to explain this by describing how essentialism and biology became intertwined in Western thought over the past few centuries. We conclude that essentialism may well have an evolutionary basis as a general feature of human cognition, one that applies across many domains, but its relationship to biological reasoning is likely to be culture specific.

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2 Essentialism and Folk-Biology

The belief that individuals are guided in their attitudes and behavior by a stable, internal, causal factor subject to biological inheritance (henceforth “essentialism”) has a rich history of study (Allport, 1954), particularly among Western academics. In large part, the study of essentialism was spurred on by the horrors of the Nazi regime, whose genocide of the Jews and other groups was firmly rooted in an essentialist theory of Aryan supremacy. Beliefs about the disunity of humanity were not new though; for centuries, taxonomists had attempted to catalogue human diversity into a varying number of types, often in strikingly naïve ways such as the claim that people from neighboring British counties had reliably different facial structures (Ritvo, 1998). Paradoxically, such beliefs were even widespread among groups who were targeted on that basis. For instance, early twentieth-century Jewish anthropologists wrestled with the question of whether Jews were biologically capable of assimilating into broader European societies, and some concluded that they were not (Lipphardt, 2016).

The essentializing of racial and ethnic groups is all the more striking because we now know they lack a biological basis. That is, the stable, internal, causal factors of biological organisms are now understood as genes, yet very little genetic variation falls between racial groups (Lewontin, 1972; Rosenberg et al., 2002). Such information was not available prior to the mid-twentieth century, and the expectation of many evolutionary biologists prior to these discoveries was that most species would be virtually genetically homogenous, with their various alleles fixed at the “wild type” (Gayon, 1998; Mayr, 1998). For instance, American geneticist, Nobel Prize winner and progressive eugenicist Hermann Muller argued that individual humans had, on average, only eight loci with mutant alleles—a tiny fraction of the overall genome (Muller, 1950; Paul, 1987). On this basis, race being a cue of important genetic differences made more sense.

Given its poor concurrence with reality and negative social consequences, how humans come to hold essentialist beliefs has become a key research question, with many studies investigating the development of essentialism in young children. For instance, in one study (Rhodes et al., 2012), both children and adults were introduced to a new group of people called “Zarpies” through a story book. The “Zarpies” presented were of different races and genders, and so cut across commonly essentialized groups. Nonetheless, when “Zarpies” were described using generic language (e.g., “Zarpies are scared of ladybugs”) around half of children and a clear majority of adults adopted an essentialist attitude toward “Zarpies,” describing their properties as innate, causal, group-typical, and unalterable. The adult participants went on to use generic language when describing “Zarpies” to their children, thus perpetuating an essentialized view. These results, along with many others (cf. Gelman, 2003; Gelman & Hirschfield, 1999) paint a strong picture of young children as inherently prone to essentialist views of the world.

But why would selection have favored such a tendency when, as discussed above, it is a poor match for the reality of human groups? One proposal is that essentialism

reflects the application of evolved folk-biological reasoning to human populations (Atran, 1993; Gil-White, 2001). Many of the aspects of essentialism that are a poor match for human groups are actually well-suited to reasoning about species: the differences between tigers, butterflies, and eels reflect differences in stable, internal factors that direct their growth and behavior. Thus, an evolved capacity to reason about biological species may bleed over into reasoning about human groups. Moreover, while it is possible that essentialist thinking about human groups is a misapplication of biological reasoning, Gil-White further argues that for much of human history this was actually a valuable heuristic because humans lived in groups with markedly different cultural practices, but little variation within these groups. In such a context, human cultural groups mimic biological species and so the application of folk-biological reasoning to human groups, although ultimately incorrect, was nonetheless an effective way to navigate the social world (Gil-White, 2001). Over time, this tendency was selected for and became an innate feature of human reasoning.

While the folk-biological origins of ethno-racial essentialism is a potentially plausible hypothesis, the relationship between essentialism and biological reasoning is debated (Gelman & Hirschfield, 1999). This is principally on the grounds that it is not clear whether essentialist thinking is limited to biological categories (or pseudo-biological categories in the case of human populations). From this perspective essentialist reasoning is a broad feature of human cognition with no particular link to biological categories. Ultimately, this position is what the current chapter will conclude in favor of, nonetheless, there is evidence linking essentialism and biological reasoning. For instance, children from both Turkey and the USA show remarkable similarity in their essentializing of various human categories, ranging from gender to sports-team affiliation (Davoodi et al., 2020). Specifically, 5-year-olds show a tendency to essentialize across all dimensions, however as children grow up, they maintain or increase their essentialism of categories with a (pseudo-)biological basis (e.g., gender, nationality), but decrease their essentialism of categories that lack such a basis (e.g., socio-economic status, sports-team affiliation). This is the same pattern exhibited by adults (Davoodi et al., 2020). Similar cross-cultural patterns have been documented between adults from China and the USA, where respondents from both nations rated various human categories with the same degree of naturalness (naturalness being a key component of essentialism), and also agreed that categories with a (pseudo-)biological basis (i.e., race and gender) were more natural than those without such a basis (i.e., socio-economic status and religion) (Xu et al., 2023).

3 Essentialism Elsewhere

One limitation of much of the work discussed above, is that it is largely based on data from participants who live in large-scale, industrial societies. Such groups have earned the moniker of WEIRD (an acronym for Western, Educated, Industrialized, Rich, and Democratic; Henrich et al., 2010a, 2010b). Although Chinese and Turkish participants differ from those in the US (Muthukrishna et al., 2020), who

are archetypally WEIRD, they certainly inhabit societies that are much WEIRDer than were human societies for the vast majority of human history. This discrepancy between human participants and human populations is important because WEIRD people are known to reason about the world in distinct and unusual ways (Henrich, 2020; Kroupin et al., 2024). As one example, moral reasoning in WEIRD populations is often rule-based or deontological, drawing on principles like individual rights and a reluctance to cause harm, leading to hesitation about actions that would benefit many individuals by harming one (Awad et al., 2020). In contrast, the Mayangna, a Nicaraguan horticultural community, display much higher use of consequence-based, utilitarian reasoning, prioritizing saving the most lives even if it means causing harm (Winking & Koster, 2021).

On this basis, it is particularly instructive to consider work where essentialism has been investigated in non-WEIRD populations, and indeed, such populations display different patterns of ethno-racial essentialism that often contradict the expectations of a biological model. For instance, one study compared (i) US adults, with adults and children from, (ii) Huatasani, a rural town in the highlands of Puno, Peru, situated along the Aymara-Quechua linguistic border, where most people engage in agro-pastoralism, and (iii) Teci and Dalomo, two neighboring villages on the Fijian island of Yasawa, where people rely on fishing and horticulture (Moya et al., 2015). Participants were presented with adoption and migration vignettes in which a child from one group was adopted by a family in another group or moved with their family to another group, respectively. Participants were then asked whether the child would resemble their birth parents or their adoptive parents/new group in a variety of ways. Around 80% US adults reported that the child would physically resemble their birth parents despite adoption/migration, and adults from the other populations showed a similar pattern which increased across adolescence. Nonetheless, both the Peruvian and Fijian participants expected the child to resemble their birth parents in terms of their beliefs, norms and skills to a much greater degree than did US participants. In this way, the Fijian and Peruvian participants exhibited a greater degree of essentialism than did US participants, but they also violated Western folk-biological expectations by essentializing “non-biological” traits to a greater degree.

Another study used adoption and migration vignettes to test beliefs about the stability of ethnic identity among the Himba and Herero, two groups from Namibia that separated in the last 150 years and have adopted different practices (Moya & Scelza, 2015). The Himba are semi-nomadic pastoralists, while the Herero are more assimilated into the market economy and wealthier. The two groups wear strikingly different styles of clothes, and also exhibit different dialects and ritual traditions. Despite these differences, respondents did not believe that an individual’s identity or cultural practices were stable, and instead they expected migrants would steadily acculturate to their new group with parents having relatively little influence. This position de-essentializes cultural practices, and was characterized as consistent with folk-sociology as opposed to folk-biology (Moya & Scelza, 2015).

Similarly, ethnographic work by Astuti et al. (2004) shows that the Vezo people in Madagascar conceptualize group identity not as something that is fixed by birth or ancestry, but rather as a result of what people do—their actions and way of life. For

example, Vezo people explicitly state that “the Vezo are not a kind of people.” In their cultural understanding, “kind” typically refers to something that is biologically, or ancestrally, fixed, like mackerels being a kind of fish. Instead, being Vezo is defined by living in the coast and engaging in specific activities such as fishing, paddling, and navigating the sea. Thus, the Vezo emphasize that their identity is performative: it is acquired through practice and participation in coastal lifestyle, rather than through descent. As a result, someone who wasn’t born Vezo can become Vezo by mastering these practices, while someone who is born into a Vezo family but doesn’t engage in these activities may no longer be considered Vezo. This performative theory of group identity reflects a non-essentialist view by the Vezo people in their reasoning of social groups, even though they apply more essentialist, folk-biological thinking to other domains like animals and objects.

The flexibility of human reasoning is further illustrated by a study along the Aymara-Quechua linguistic border in Peru (Moya & Boyd, 2015). Participants were asked about their perceptions of different social categories (linguistic categories, communities, socio-economic status, morphology, politics, and religion) and analyses tested for the extent to which they used these categories as the basis for stereotyping, assortment, hostility, and essentialism. The results showed a highly complex pattern where different categories were used in varying ways. For instance, socio-economic status was the basis of stereotyping, while political affiliation mediated assortment and hostility. Interestingly, none of these categories were seen as stable (a central part of essentialism). Moreover, morphology (including skin tone and facial structure, a critical part of many ethno-racial taxonomies and related to folk-biological reasoning) was regarded as unimportant and fluid in their relationship to social identities.

The variability of essentialism, and its sensitivity to local conditions, suggests that, far from being guided by evolved bio-analogical reasoning, humans are instead adept at identifying and adapting to local cultural patterns as they arise (Moya & Boyd, 2015). Such a position is consistent with the hypothesis that essentialism represents a general tendency to homogenize categories of all kinds (Gelman & Hirschfield, 1999), and that humans do so in order to simplify problems and thereby make the most effective use of finite cognitive resources (Callaway et al., 2022; Ho et al., 2022; Lieder & Griffiths, 2020). If correct, this implies that, to the extent essentialism has a dedicated evolutionary basis, its domain of application is likely to be exceptionally broad and its primary function is as a cost-saving measure, where the savings exceed the costs resulting from decreased decision-making accuracy. More generally, it challenges the hypothesis of an evolved folk-biological origin for ethno-racial essentialism because essentialism is broader than, and inconsistently applied to, biological categories.

4 The WEIRD Origins of Folk-Biology and Essentialism

The diversity of beliefs about social boundaries described above begs the question of where this diversity comes from, and, in particular, why data from WEIRD populations often exhibit views consistent with a folk-biological basis for essentialism. We might also ask why folk-biological reasoning is such an intuitive hypothesis for WEIRD researchers, and one that broadly holds true for their own populations. In the remainder of this chapter, we will suggest that, while humans may have a broad tendency toward essentialist reasoning, neither ethno-racial essentialism nor folk-biology (or even their constituent beliefs in the stability, coherence and heritability of biological categories) are evolved reasoning strategies. Instead, we will argue that all are culturally evolved beliefs that have an intertwined history in WEIRD populations. As described below, what we refer to as folk-biology, and its corresponding essentialism, only came to dominate WEIRD thinking in the past few centuries. It thus varies across time and space, and is not a human universal.

The suggestion that folk-biology—a belief in the stability and permanence of biological species—is a relatively recent phenomenon might sound unusual. After all, was not the success of evolutionary thinking preceded by millennia of belief in divine creation and the unchanging nature of species? As it turns out, no, it wasn't. Species fixism is, in fact, a relatively young scientific discovery that emerged in the eighteenth century (Wilkins, 2018) and the idea that the past was dominated by species fixism is even younger (Winsor, 2006b). Prior to that, European folk and scientific beliefs accepted a wide (although not necessarily unlimited) variety of transmutational ideas (Amundson, 2005). These beliefs have been extensively documented by the American botanist and historian of science Conway Zirkle (1946, 1951, 1959). They included the emergence of certain kinds of life from non-life, such as harvested grain and fabrics producing mice (thus explaining the difficulty of keeping granaries rodent-free), and food producing mold, a hypothesis that was only disproved following the development of contaminant-proof insulation devices (Fry, 2000). Some organisms were also believed to be able to switch between what we now recognize as separate species. The most exotic example was the belief that the barnacle goose started life as a literal barnacle (Hacking, 1983), and although it may seem preposterous to modern readers, it was taken seriously enough that multiple historical taxonomists invested energy in putting it to the test (Wilkins, 2018). More mundane transformations were a perennial problem for farmers; domesticated plants often needed to be propagated through cuttings to prevent them transmuting to unproductive wild forms (Zirkle, 1951), domestic animals were believed to degenerate to the state of their wild ancestors if left unsupervised (Gayon, 1998, 2016), and inclement weather was believed to induce species changes in crops (Amundson, 2005). These views depict species identity as unstable, and only partially heritable, a far cry from essentialism. Indeed, the medieval understanding of the natural world was that God had imbued it with life giving powers, and not that God had directly created species themselves (Amundson, 2005).

In the seventeenth and eighteenth centuries, the Enlightenment saw the rise of reasoning on the increasingly exclusive basis of observation (Strevens, 2020). Within biology this produced experimental breeding programs, and it was the careful breeding experiments of the Swedish biologist Carl Linnaeus and other early naturalists that proved many earlier ideas false. In their place was ushered in an era of species fixism, not as folk belief, but as cutting-edge science. Such a suggestion was in no way problematic for dominant Christian practices and the religious interpretation shifted from one of God imbuing the world with creative powers to the familiar tale of divine creation. Moreover, species fixism has an inherent essentialist slant as species are clearly much more stable than was previously thought. Nonetheless, Linnaeus was not an essentialist: he regarded his taxonomic system as a human tool to understand the natural world, not a feature of the world itself (Amundson, 2005; Winsor, 2006a). As such, he based taxonomic affinities on single traits that he deemed useful, yet arbitrary (Ritvo, 1998). Moreover, although he originally endorsed divine creation of species, he later returned to a form of transmutation, arguing that God had originally created only a few forms, the rest of natural diversity arising through repeated hybridization events (Burkhardt Jr., 1977; Winsor, 2006a). Despite this watered-down essentialism, Linnaeus' taxonomic nominalism (Amundson, 2005) did not last long as subsequent naturalists sought to make taxonomy an accurate depiction of real biological relationships, often deriding Linnaeus' methods while keeping his system of binomial nomenclature (Ritvo, 1998).

The creation of a real taxonomy certainly engendered a view of species identity as innate and stable—the species essentialism typical of folk-biological theories. However, this too was short-lived as the recognition of natural relationships between species raised questions of the origin of these relationships. To answer these, within a century, naturalists were turning to theories of evolution; effectively transmutation once more, just over much longer timescales than medieval transmutation.

Despite evolution's transmutational flavor, the phenomenon of heredity—that offspring resembled their parents—implied some sort of internal causal factor consistent with essentialism. The nature of inheritance, however, was mysterious to nineteenth century scientists (Bowler, 1989; Costa, 2021). Early evolutionary theories, including Darwin's, included use inheritance, the idea that the actions, behaviors and experiences of an organism could change their nature in such a way that induced variations were passed on to offspring. This idea is often referred to as Lamarckian inheritance, although this was neither a central nor a distinguishing feature of Lamarck's theory (Burkhardt Jr., 1977). Use inheritance creates a tension with essentialism because it implies an organism's essence is somehow malleable, perhaps even under volitional control. This idea was a common feature of folk-biological beliefs of the time, with maternal impressions being a common mechanism by which a mother's experiences could affect offspring development. For instance, it was thought that a pregnant woman viewing a crab could cause the developing fetus to grow claws instead of hands (Arni, 2016). Within academic biology, Lamarck made reference to a *sentiment intérieur* ("inner feeling") driving evolutionary change. Although he never meant to imply that mental activity directly guided evolution, this line of attack was nonetheless used by his critics (Cuvier, 1835; Richards, 1987). Applied

to humans, use inheritance supported the flexible potential of marginalized groups, including Jews, to assimilate into European societies and so was favored by political progressives (Lipphardt, 2016).

Despite its historical popularity, use inheritance would not survive, and it was displaced by theories of hard heredity in which an organism's heritable material, its essence, was stable and unalterable through experience. This position was championed by the German embryologist August Weismann (Churchill, 2015). His early cytological work convinced him that the germ line cells (those involved in reproduction) were separated from the rest of the organism early in development and thereby insulated from all experiences. With use inheritance unable to drive evolution, Weismann advocated for selection as the only evolutionary cause. Such was Weismann's commitment to selection that he thought it was necessary to explain stability as well as change, that is, without selection continually maintaining a trait, inheritance alone would quickly cause it to regress out of existence (Gayon, 2016). So successful was the switch toward hard heredity that for some time conditions such as fetal alcohol syndrome were dismissed on that basis that they implied maternal alcohol consumption could damage the immutable heritable material (Bonduriansky & Day, 2018).

Hard heredity is a key ingredient of biological essentialism and WEIRD folk-biology. However, it lacks one important feature of essentialism, which is its cohesiveness or the extent to which essences mark out categories in the real world. Indeed, Darwin's position was an individual-centric view of variation in which all individuals were effectively unique and the demarcation of species was an illusion created by the absence of intermediate forms (Gayon, 1998). Nonetheless, through the late nineteenth and early twentieth-century Darwin was an outlier in this regard and most scientists came to regard species as representing real, cohesive natural categories united by a shared essence. This view was promulgated by Darwin's half-cousin Francis Galton (also a founding figure in eugenics) who described biological change with a many sided polygon: while a polygon can be held at any angle, if dropped it will come to rest on one of its sides, and these sides were analogies for biological types (Gayon, 1998; Gillham, 2001; Krashniak & Lamm, 2021). Galton saw the discrete nature of biological types as undermining selection; in his analogy of the polygon, he thought selection was not strong enough to tip it over onto another face, and so selection could not produce significant changes. Others agreed, giving rise to "mutationist" theories in which dramatic mutation, not gradual selection, was key (Bowler, 1992). William Bateson, who coined the term "genetics," was one such example and he documented many examples of discrete variation in nature, remarking that "Discontinuity is not in the environment; may it not, then, be in the living thing itself" (Bateson, 1894). As Mendel's work with pea plants was discovered (Bowler, 1989), and its implications for a general theory of particulate heredity realized (Gayon, 1998), an essentialist "Mendelian-mutationist" view of biology was complete, with species being stable and distinct biological categories and evolution proceeding by occasional mutations between these types.

Such a view was, we now know, wrong: Genetic variation, although particulate, takes the form of many thousands of loci, each of a small effect. The end result

is that discrete alleles produce approximately continuous variation, and species are composed of similar-yet-unique individuals—consistent with Darwin’s view, not Galton’s. Despite these limitations, the Mendelian-mutationist model of heredity and evolution, in which species constituted well-defined biological types, quickly embedded itself into the popular consciousness. It was able to do this because it was extremely well-suited for rapidly industrializing Western nations and it became part of a new, and highly productive, view of the natural world. In particular, Wilhelm Johannsen’s articulation of “pure lines” revolutionized industrial agriculture as traditional breeding programs, in which artisanal herders managed flocks, were replaced with the pedigree breeding technique (Bonneuil, 2016). Rather than imposing steady selection across an entire population, this method involved splitting the population into a vast number of genetically homogenous groups (the pure lines), and then perpetuating the most desirable lineage while extinguishing all others. Such an approach not only allowed enormously fast artificial selection, but also enabled the mass production of standardized biological organisms as needed by an industrial economy (Bonneuil, 2016). Similar techniques with microbial populations enabled the mass production of safe and standardized vaccines (Mendelsohn, 2016), and also enabled brewers to create homogenous yeast strains that guaranteed the quality of beer—Johannsen himself worked for Carlsberg (Bonneuil, 2016; Müller-Wille & Richmond, 2016).

These practices revolutionized how humans interacted with other species, dramatically increasing productivity. They also reshaped how people thought about species, variation, heredity and evolution. The newly identified pure lines appeared to some as “elemental species,” the apparently fine-grained and fundamental types around which variation was shaped (Bonneuil, 2016). The success of the pedigree method in effecting biological change, also engendered the belief that successful wild populations would be genetically homogenous, a mirror of industrial pure lines (Bonneuil, 2016). More abstractly, rather than a series of beads along a string, or a mosaic of multiple alleles, the genotype became seen as a single physical entity, synonymous with a pure line (Brandt & Schloegel, 2016). This typological view of biological variation also entered education with the canonical example of peppered moths, *Biston betularia*. Here, moths adapt not through the steady accumulation of minor variation, but, as emphasized by the English geneticist Reginald Punnett, by switching between different discrete types (Gayon, 1998). This interpretation has held on in the classroom even as subsequent discoveries documented that the dark form of the moth did in fact continue to evolve gradually through the small effects of many genes.

Thus, despite the increasingly understood limitations of the Mendelian-mutationist model, its simplicity and industrial utility made it a social and cultural success. It also happened to be a highly essentialist model, with individuals being of particular heritable types, type affecting appearance and behavior, and, aside from rare mutations, types being stable. The fine gradation between types, as identified by pure lines research, was critical fuel for ethno-racial essentialism as it meant that not only were species biological types, but so were different populations within a species. Advancing to the present day, the Mendelian-mutationist model persists. Organismal standardization remains key to industry, and discrete simplifications of continuous

traits remain common in the classroom, including peppered moths, human eye color and Mendel's peas. It is this cultural background that primes WEIRD researchers and their WEIRD experimental participants with a particular essentialist folk-biological model. Both parties are raised in a culture where essentialist biological thinking is a part of education and economic activity. Not only does this make folk-biological reasoning an appealing hypothesis to study, but it also generates empirical support for the hypothesis because WEIRD participants act in accordance with the essentialist model they were educated under.

5 Conclusion

Above, we have argued that the link between essentialism and biological reasoning, far from being genetically evolved, is a recent product of WEIRD cultural evolution. Empirical support for the priming effect of the Mendelian-mutationist model comes from the documentation of "genetic essentialism" (Dar-Nimrod & Heine, 2011). This is the finding that explanations of human traits or social group differences that invoke genetics, even when the genetic claims are scientifically tenuous, increase the extent to which WEIRD participants view these traits as immutable, biologically determined, and discrete. In keeping with our hypothesis, it is further argued that scientific communication and popular media play a central role in sustaining and amplifying genetic essentialism.

Despite this support, there are three points to note regarding the scope of our argument. First, we recognize that essentialism in WEIRD populations is not limited to biological reasoning. For instance, essentialism has many facets, including beliefs about group coherence (entitativity) alongside beliefs about biological naturalness (Haslam et al., 2000). Thus, we do not seek to explain essentialism in its entirety. Second, the association between essentialism and biological reasoning is not unique to WEIRD societies. For instance, beliefs regarding the non-WEIRD Indian caste system are often highly essentialized (Saini, 2019). Moreover, the examples discussed above show that some non-WEIRD participants essentialize more than their WEIRD counterparts. Thus, the historical account we provide is not the only means by which essentialism and biology can become intertwined. Lastly, our hypothesis does not discount the possibility of evolved reasoning playing a part in human thought. Indeed, we are persuaded by the data discussed above that humans, in particular children, exhibit a tendency for essentialist reasoning in general (i.e., both within and beyond biological questions). Nonetheless, the cultural variation exhibited in this regard makes clear that any such tendency is sensitive to developmental inputs. Here, we have identified the cultural evolution of the Mendelian-mutationist model of biological variation as one such input, and one that has its origins in WEIRD cultural history. As such, rather than painting essentialism as a WEIRD phenomenon, our goal is to outline a hypothesis for how ethno-racial essentialism and biological reasoning coevolved in WEIRD populations. While this belief complex may have

spread across the world, other populations will have their own cultural histories that invoke essentialism to varying degrees and to various ends.

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Part 3: Individuals' Roles in the Construal of Identity and Essentialism

A Functionalist Account of Social Identity



Paul E. Smaldino

1 Introduction

Categorization is a foundational aspect of cognition (Hofstadter & Sander, 2013); creating and applying categories is one of the most basic functions of a brain. The world has so many things in it, and we must deal with those things adaptively. What do we eat and drink? What do we avoid? What does the weather imply about my most urgent needs? What can I use to help in my endeavors? In other words, categories aid adaptive decision-making by allowing us to identify regularities in the world. This reduces our uncertainty and increases the legibility of our environment, helping us to choose appropriate actions based on our circumstances.

Social identity is a type of category used for social decision-making. Social identities help us to determine—based on learned and inferred regularities in the social world—who we should trust, help, fear, dominate, submit to, enlist, or romantically pursue. People vary along many dimensions, and as such there are many possible ways to group them into categories. Because the most useful categories are those that have meaningful consequences for thought and action, identity designations often involve characteristics like gender, sexual orientation, ethnicity, and politics, with relatively little attention given to grouping people by their soup preferences or by the size of their little toes.

The focus of this chapter is on the functional aspects of identity—how salient identity categories have consequences for making decisions. This is not to downplay the sense of belonging people gain by being part of a coherent group, nor the capacity for collective action a sense of camaraderie can engender. Identities form over time through a mixture of circumstance, learning, and strategic choice in a

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variety of contexts (Moya, 2023; Wagner, 2024). Acknowledging that, for the purpose of this chapter I am de-emphasizing the phenomenology of individual identity and the processes by which cultural groups construct the specifics of their shared identities and the worldviews and narratives that accompany them. Instead, the chapter focuses on how people use perceived identity categories for adaptive decision-making, and how they strategically implement signals of identity to manipulate the behavior of others.

Adopting a functionalist view of identity allows us to focus on the forces that shape their use and on the filters that select some variants over others. Natural selection, learning, and culture (especially social transmission, norms, and institutions) are all drivers of what Skinner (1981) called “selection by consequences.” In the remainder of the chapter, I will first make it clear that signals of social identity often encode meaningful information for decision-making. I will then review perspectives on how selection by consequences has shaped the use of identity signals to more adaptively facilitate social learning, partner choice, and coordination. This will be followed by a consideration of how the functional nature of identity has been changing in a world that is increasingly characterized by diversity, political polarization, anonymity, and the Internet. I will end by emphasizing that because identity is constructed for functional purposes, identities are only essential insofar as forming categories and legible cultural artifacts are essential features of human activity.

2 Identity Encodes Meaningful Information

Social categories are useful because the presence or absence of certain traits, behaviors, perspectives, personalities, and affordances can often be meaningfully predicted from those categories. These predictions are not always accurate, of course. When associations are acquired second-hand or deliberately produced as disinformation, they can become quite harmful, taking the form of false and even dangerous stereotypes. From the perspective of cultural evolution, the use of social categories would not persist as an adaptive strategy if it didn’t lead to adaptive decision-making a substantial proportion of the time. Nevertheless, as we proceed with the functional consideration of identity, it is important to remember that the cognitive processes involved in forming and using social categories can be co-opted and exploited to produce harm as well as benefit.

Some social categories are predictive due to certain intrinsic physical properties of the individual. Tall people can more easily reach high places, young people usually need more patience and care, women are more likely to be primary care-providers for children. Other social categories are useful due to the implications about how a group provides education and instills norms among its members.

The world is very complex, and a naïve individual encounters scenarios with a vast multitude of choices, many of which lead to peril and few of which yield great benefit. Our large brains evolved to reduce this uncertainty. We group objects, individuals, scenarios, and even actions into categories. This means that even if

we haven't encountered an exact copy of some scenario before, a well-prepared individual may have some inkling of the types of choices that work best in scenarios of the same sort. While all animals with brains do this to some extent, culture multiplies our power to manage uncertainty manifold. We share information with others, we tell stories and construct narratives—all of which multiplies our ability to learn about useful categories and associate them with adaptive behavior.

Culture also reduces uncertainty by making the world more *legible*, to borrow a term from Scott (1998). Norms about politeness and fairness help facilitate exchange among strangers, as do culturally-learned schemas for behaving in places like schools, restaurants, and courts. Institutional elements like traffic lights, legal codes, and religious prescriptions help us know what is expected of us and give us an inkling of what will happen if we transgress. And because so many of these categories and expectations are culturally learned, cultural groups subsequently differ systematically in terms of norms, perspectives, and shared narratives (Chudek & Henrich, 2011). A cultural group—be it a nation, a subculture, or a friend clique—constructs a shared view of the things in the world, of explanations for the experiences had by its members, and how actions can shape those experiences (Brand et al., 2021). The group's worldview also defines how the group differs from other groups they observe or interact with, and these definitions are often accompanied by reasons for not adopting the behaviors or ideas of those groups. In this way, differences between groups are maintained, solidifying the predictive value of group identity as a social category.

Consider the case example of political identity in the United States, currently a highly polarized nation with stark differences between partisans. In the mid-twentieth century, the party one voted for (typically either the Republican or Democratic parties) was an inconsistent preference and a weak predictor of non-political traits. In the intervening decades, processes of assortment and influence have changed this, and political identity has become a beacon for differentiation (Bishop & Cushing, 2009; DellaPosta et al., 2015; Mason, 2018). These differences are now so strong that cross-partisans can have starkly different definitions for the same words. As an example, consider the Black Lives Matter movement. The movement arose in the wake of the 2012 murder of seventeenth-year-old Trayvon Martin in Florida, and quickly became associated with the online hashtag #BlackLivesMatter. This was quickly followed by a countermovement, #AllLivesMatter. Powell et al. (2023) found that perceptions of #BlackLivesMatter as racist or offensive were strongly correlated with right-wing political orientation, and found comparable associations between #AllLivesMatter and left-wing orientation, indicating that cross-partisan conversations around reducing racism are likely to be fraught with misunderstandings. Similarly, when asked to name “socialist” countries, the top three answers given by Republican voters in the U.S. were Venezuela, China, and Russia, while the top three answers given by Democratic voters were Denmark, Sweden, and Norway (Smith, 2020). These findings highlight that not only do different identity groups behave differently, they may have fundamentally different conceptual understandings of the world, impeding intergroup communication and the dissolution of barriers.

Any grouping of humans into a society—be it a band, tribe, city-state, or nation—is characterized by a shared identity that is held by all of its members and used to contrast their group with other groups (Moffett, 2024). Most social animals live in what Moffett (2013) has called *individual recognition societies*, in which individuals cooperate mostly with others they directly know and recognize. In contrast, humans are nearly unique among vertebrates in the extent to which they live in *anonymous societies*, in which individuals will cooperate with almost anyone who is convincingly marked as a member of their group. Identity signals are therefore critical to understanding human social organization, as are the ways in which humans use identity signals to carry out the basic functions of living in society. In the next sections, I will consider the functional implications for how markers or signals of identity can be usefully employed in decision-making. I will begin with the adaptive value of learning preferentially from ingroup individuals, followed by the use of identity signals for partner choice and behavior selection, with particular focus on diverse societies.

3 Identity Aids Social Learning

There is a large body of theoretical and empirical literature detailing the adaptive value of social learning—acquiring information, behavior, and technology from others (Boyd, 2018; Kendal et al., 2018). Social learning helps organisms acquire adaptive behaviors without incurring the costs or risks of investigative trial and error, and its strategic employment when individual learning is likely to be particularly error-prone can boost the overall fitness of a population (Aoki & Feldman, 2014; Boyd & Richerson, 1985, 1995; Ehn & Laland, 2012; McElreath et al., 2013; Turner et al., 2023). However, even when individuals can readily copy others with high fidelity, social learning fails to provide an advantage when the information one learns from others is not relevant to one's own experience. This can happen when environmental conditions change or when individuals migrate to new places—in both cases behaviors that were once adaptive may no longer be so. Research has shown that certain strategies or heuristics—whether innate or learned—can boost the efficacy of social learning in these conditions. For example, preferences for learning from successful individuals (“success bias” or “prestige bias”) or for ignoring low-frequency behaviors (“conformist bias” or “consensus bias”) can reduce error under many conditions (Aoki & Feldman, 2014; Baldini, 2013; McElreath et al., 2013).

In diverse populations, however, even strategic social learning can run into trouble. Someone who is deemed successful or prestigious in one group may be the subject of scorn or ridicule in another, and copying the majority may be problematic if the overall majority contains relatively few members of one's own group. These concerns are especially important if behaviors that work well for members of some groups don't work well for others. An obvious example is gender, as nearly every culture has institutionalized roles that are typical of males but not females and vice versa—this sort of codified division of labor can readily entrench inequality (O'Connor, 2019).

Similarly, disadvantaged minorities with lower socioeconomic class markers may not have the social capital or clout to successfully perform behaviors that members of dominant majority groups or socioeconomic elites can get away with (Bourdieu, 1986; Bunce, 2021; Carter, this volume; Wagner, this volume). For example, risk-taking behaviors—such as confidently questioning authority figures—may help a wealthy white man land a job or get out of a speeding ticket, while the same behaviors performed by a poor minority individual could lead to charges of insubordination, arrest, or worse (de Courson et al., 2025; Schuck et al., 2008). When disparities like this exist, people might be better off learning behaviors from individuals whose circumstances better match their own (Bowles & Gintis, 2004). The same is true of risk-related attitudes around financial investment. Wealthy individuals with strong safety nets can afford to be much more risk-tolerant than poor individuals without those safety nets, and so thus it can be adaptive (if inequitable) to learn from others within one's own socioeconomic class (Pérez Velilla et al., 2025).

Several researchers have posited the adaptive advantage of parochial or similarity-biased social learning: preferentially learning from others who share one's social identity markers and ignoring information from those who do not (Boyd & Richerson, 1987; Henrich, 2015; McElreath et al., 2003; Montrey & Shultz, 2022; Moya, 2023; Wood et al., 2013). Recent modeling work has formalized this idea and detailed its adaptive value (Pérez Velilla et al., 2025; Smaldino & Pérez Velilla, 2025). In particular, parochial social learning is adaptive in diverse populations if it directs attention to targets most likely to be performing behaviors that will be useful to the learner. The cost of ignoring information from outgroup individuals is outweighed by the signal boost parochialism can provide. This is true even if identity markers are not perfect indicators of aligned circumstances, as long as there is a sufficiently high correlation between identity marker and the probability that a target is performing behaviors that will be useful to the learner. This addresses somewhat the issue of context and the multidimensionality of identity. Individuals have many aspects to their social identities, each of which may be salient in different contexts (Brewer, 1991; Smaldino, 2019). The aspects of identity that should, under ideal circumstances, be most salient are those that best correlate with meaningful decisions and learning domains at the time of decision-making.

4 Identity Aids Cooperative Assortment

Cooperation is central to much of human success, and coordination in cooperative activities is key to producing the benefits of that cooperation (Bowles & Gintis, 2011; Calcott, 2008). However, cooperation can be exploited by free riders and bullies, and coordination can fail when partners have divergent norms, expectations, or goals. Individuals are therefore incentivized to cooperate only with those who are likely to provide cooperative aid to them in return, or else provide aid to those whom the focal individual has an interest in seeing thrive, including family, friends, or community (Apicella & Silk, 2019; Smaldino, 2023). Signals of group identity

are useful in establishing whether or not someone is a worthy recipient of one's cooperative efforts, or is likely to provide aid when one is in need.

However, low-cost identity signals that are easily embedded in language, behavior, or fashion are typically not sufficient to aid partner choice for altruistic cooperation, because they are easily exploited. Dawkins (1976) articulated the problem by considering a hypothetical gene for growing green beards, which would signal a propensity for altruistic behavior. You might think that altruists could avoid being exploited simply by cooperating only with partners who, like themselves, sported a green beard. The problem occurs when non-altruists also adopt green beards and thereby infiltrate and exploit communities of altruists. The same argument applies to signals that can be learned or innovated, rather than inherited genetically. If you cooperated with anyone who shares your love of fresh fruit, a devious thief could earn your trust by simply showing up with a banana. A more reliable mechanism is needed.

Signals that are costly can overcome the green-beard problem and ensure cooperation. This works for several reasons. If signaling successfully incurs a cost that is only worth paying if the signaler's interests are really aligned with the receiver's, stable signaling systems can evolve and persist (Maynard Smith, 1991). Identity signals can therefore work to ensure cooperation if those signals are difficult or time-consuming to acquire (Gintis et al., 2001; Smaldino, 2024). Examples are widespread among religious communities, and include church attendance, tithing, and painful rituals (Henrich, 2009; Iannaccone, 1992; Sosis, 2003). These communicate knowledge of group norms and, critically, a commitment to the community. Mere familiarity with the jargon and norms of a community may be sufficient to signal membership in some cases, if their appropriate use is sufficiently nuanced as to be easily fumbled by newcomers. Costly mechanisms to ensure group membership are often necessary to avoid free-riding or exploitation by those who would take advantage of the benefits of group membership without paying the costs.

Deception is not always a bad thing. For example, "passing"—in which a person of one race, gender, nationality, or sexual orientation adopts the guise of another—may be used by members of persecuted groups in order to achieve freedom or gain the privileges enjoyed by the dominant classes (Ginsberg, 1996), though the moral and psychological costs of passing remain open to debate (Silvermint, 2018). Moreover, information in complex social environments is often more complicated than truth vs. lies. Two people's interests may be partially aligned and partially divergent, which opens the door to strategic misrepresentation (Crawford & Sobel, 1982), such as claiming to be more similar than we really are. We can lie through omission, or by presenting ourselves in ways that are only partly true. Ambiguity is itself a strategic communication tool that provides gaps in our self-representation, which can be filled in by gullible or optimistic partners (Eisenberg, 1984). The risk of being deceived has been countered by cognitive and cultural adaptations for detecting liars and ensuring trust (Boyd & Richerson, 2009; Cosmides & Tooby, 1992; Dunbar, 1999). Nevertheless, just as the Red Queen in *Alice Through the Looking Glass* had to run continuously just to stay in the same place, the rewards for successful deception are such that strategies for detecting deception and strategies for deceiving while

avoiding detection continue to co-evolve (Dunivin & Smaldino, 2024; Van Valen, 1973).

Once the problem of avoiding free riders is largely solved, the remaining problems for successful cooperation are to select partners with whom one can effectively coordinate, and to select actions appropriate to the context and the identity of one's interaction partners (Smaldino, 2019). Identity signals can help solve these problems even without costly indicators of investment or commitment, as long as all individuals involved have a shared interest in finding appropriate partners and selecting appropriate actions. Barth (1969) proposed that ethnic markers (identity signals indicating one's ethnic affiliation) could be used for partner choice and action selection in this way, and further proposed that their use should be most overt and consistent near territorial boundaries where members of different ethnic groups were most likely to interact. This idea echoes those of the fourteenth-century Arab scholar Ibn Khaldun, who proposed that feelings of ingroup solidarity and social cohesion would be strongest along ethnic frontiers separating the territories of two or more communities (Ibn Khaldun, 1958; Turchin, 2003). The plausibility of this idea has been supported with both mathematical modeling (Boyd & Richerson, 1987; McElreath et al., 2003) and empirical research (Bell & Paegle, 2021; Bunce & McElreath, 2017; Wimmer, 2008).

Interaction partners are not always chosen with great deliberation, especially when interaction is necessary and choice is limited (for example, in the context of work or commerce). Even in these cases, identity signals can help us select appropriate actions that facilitate coordination and allow individuals to converge on their preferred outcomes when possible. In a recent simulation study led by Nathan Gabriel, we showed that reliable signaling systems could emerge when individuals with differing preferences had their interaction partners chosen at random, as long as they could send and receive signals before selecting an action and thereby condition their actions on those signals (Gabriel et al., 2025). Even when individuals disagreed about their preferred outcome, signaling allowed individuals with divergent preferences to reach a compromise. However, we also found that that when one group constituted the vast majority of the population, members of that group were often able to ignore signals, and members of minority groups were forced to conform to the majority-preferred behaviors when interacting with majority members, while signaling still allowed them to coordinate on their shared preferences when interacting with members of their ingroup. A similar result was also obtained by O'Connor (2017). Relatedly, Bunce (2021) has shown that when lower-status minorities maintain competence in the norms of the dominant group, they may have an easier time maintaining their own internal norms. Overall, there are likely to be severe asymmetries in the use and efficacy of identity signals based on the relative size and power of various groups in a population. Indeed, identity signaling gets quite a bit more complicated as societies grow larger and more diverse.

5 Identity in Diverse Societies

The functional component to how humans present themselves in public has long been appreciated by social scientists (Akerlof & Kranton, 2000; Barth, 1969; Berger & Heath, 2008; Donath, 1999; Goffman, 1978; Simmel, 1904; Wimmer, 2008), and in recent years the instrumental functions of identity have been increasingly discussed in a cultural evolutionary context using formalized theories of social exchange (Bisin et al., 2011; McElreath et al., 2003; Smaldino, 2022). Much more rarely, however, have theories of identity signaling considered how the nature of society (at least partly determined by its size, diversity, and organization) determines the set of problems that identity signaling is suited to solve.

Suppose one lives in an isolated, small-scale foraging band, with only intermittent contact with members other groups and without the technology for instantaneous long-range communication. The functional uses for identity are fairly limited in this case (Smaldino, 2019), as one effectively lives in an individual recognition society (though seasonal multi-band gatherings may at least temporarily produce an anonymous society). Within one's group, age and gender will be the major categories guiding social behavior, along with more idiosyncratic skills and context-specific roles. Individuals may carry markers of their status within their group, such as ritualized scars incurred as part of a coming-of-age ceremony, but these will likely be minimal since membership in salient categories will often be known directly—for example, you don't need a special signal to determine that someone is a woman or an elder if you know these characteristics from firsthand experience. Interactions with other groups may be guided mostly by stereotypes that are transmitted as part of the culture knowledge packet learned by members of your group. When opportunities for between-group interactions are common, as during seasonal multi-band gatherings, members of each group may conspicuously mark themselves to reduce ambiguity regarding norms, expectations, and allegiances (Barth, 1969; Bell & Paegle, 2021; Schneider, 1990).

This description of life in a small-scale society is an oversimplification, but it helps us to see how the functional purposes for identity signaling grow in number and complexity as societies become more diverse, cosmopolitan, and technological. Individuals now often live in urban centers with hundreds of thousands or millions of other people, and are connected via phone, internet, and social media to thousands or millions of other people around the world, unconstrained by geography. With the greater number and diversity of people with whom one shares one's world comes a greater need to categorize those people for effective partner choice and behavior selection, and to signal in ways that help others categorize us in ways that benefit us. Cultures are divided into subcultures, leading to a more continuous fissioning of groups needing to signal their identity. The multidimensionality of identity leads to a multidimensionality of signaling strategies, due to the fact that the implications of multiple group memberships are often non-additive. And the presence of diverse coexisting subpopulations creates pressures for subtle signals whose meanings may depend on the specific backgrounds of their audiences.

5.1 Subcultures

A subculture is a group of people—an identity group—that exists within a larger cultural society and is associated with values and norms that explicitly differentiate group members from the baseline values and norms of the dominant overarching culture, often in ways that place the subculture’s members simultaneously subordinate to and in rebellion against the dominant culture (Hebdige, 1979). Members of subcultures often engage in signaling that allow themselves to be recognized by members and non-members alike. Yet subcultures do not typically arise fully formed. They must emerge from larger communities around shared values and goals. Sometimes, subcultures co-opt styles and signals from elsewhere due to the perception of sufficient similarity. For example, East German punks in the 1980s adopted the styles and nomenclature of British and American punks and were associated with similar antiestablishment views, yet differed significantly in their rebellion against the “too much future” imposed by the authoritarian DDR regime rather than the ennui of “no future” felt by their anglophone counterparts (Mohr, 2019). The long-term persistence of specific subcultural identities may rely on the perseveration of role models within each community and the strength of vertical transmission in which children born into the community retain their membership into adulthood (Bisin et al., 2011).

As subcultures grow, they may experience further fissioning into contrasting communities, as the punk movement in the United States radiated into communities that congregated around emo, hardcore, and thrash music, among others. The musical styles associated with these subcultures serve both as coordinative activities for building group solidarity and facilitating cooperative interactions (including selecting romantic partners and motivating collective action), as well as outward-facing signals of group membership. How do these styles come to be associated with each subculture? Several models have purported to show how assortment and influence can lead to group differentiation, yet these models tend to be quite fragile and can easily lead to monoculture if individual interactions tend to lead to increased similarity (Axelrod, 1997; Flache & Macy, 2011; Turner & Smaldino, 2018; Yan et al., 2023). In order to understand why behaviors and fashions become signals of subculture mechanism, we need to account for why people adopt behaviors and styles in the first place.

To address this, Greg Bryant and I developed a model of cultural trait evolution based around four distinct drivers of cultural traits (Bryant & Smaldino, 2025). First, some traits are simply better than others at solving some environmental or socioeconomic problem. Second, individuals may derive an advantage from coordinating with their interaction partners by adopting the same traits. Third, individuals may benefit by adopting traits that differentiate them from groups to which they do not belong (Berger & Heath, 2008). And fourth, individuals may preferentially interact with and learn from group members (Smaldino & Pérez Velilla, 2025). If individuals share the same overarching environment, they will face no a priori pressures to adopt different traits. In this case, without specific pressures to differentiate from outgroups, our analyses show that populations will converge to uniformity. With

even slight pressures to differentiate, however, groups will evolve divergent cultural traits as long as one specific trait value is not overwhelmingly superior, and as long as individuals are at least somewhat groupish in their social interactions. Bryant and I frame our discussion of cultural trait divergence around the example of musical distortion. Distortion has the important property in that it is typically unpleasant to the non-acclimated listener, meaning that continued tolerance and displays of enjoyment is more likely to be an honest signal of group membership.

5.2 *Intersectionality*

Individuals typically do not have a single social identity, but many. This is clear from the discussion of subcultures; members identify with their subculture within their larger society, but are also likely to identify with that larger society when brought into contrast with other societies. More generally, identity is typically highly multidimensional (Roccas & Brewer, 2002; Smaldino, 2019). One person may be simultaneously a woman, an American, a Jew, a scientist, and a New Yorker, while another person may simultaneously be a man, a Mexican-American, a Catholic, a Giants supporter, a Democrat, and a hip hop fanatic. Identity in this sense is often context sensitive. Individuals will signal those aspects of their identities that are most salient, most useful for adaptive social assortment, or least likely to get them into trouble. This view contrasts somewhat with “optimal distinctiveness theory” (Brewer, 1991) and related approaches to identity signaling, which focus on the opposing needs to assimilate and differentiate oneself while ignoring the function of identity signaling to solve specific social problems. Yet how an individual signals identity is more than the task of selecting the most salient choice from a set of discrete identities. Identities interact and intersect. For example, the important narratives among Black feminists is not captured by merely adding together the dominant narratives from Black liberation and mainstream feminism (Combahee River Collective, 1977; Crenshaw, 1991).

Nathan Gabriel, Adrian Bell, and I built one of the first formal models to study the cultural evolution of signaling strategies for coordination in a diverse population in which identity preferences intersect (Gabriel et al., 2025). We modeled a population composed of several types of individual, each of which had distinct but overlapping preferences for behaviors on which to coordinate. These behaviors could indicate modes of interaction, communication, or activity preferences. We considered how individuals could evolve signaling strategies to communicate their preferences and thereby facilitate more effective coordination. The model indicates that members of intersectional groups will rarely, if ever, be able to use their preferred behaviors when interacting with others who do not share those intersectional identities, but will instead converge on the norms of one of the larger groups whose identity overlaps with their own. The model also indicates that if the intersectional group is a very small proportion of the overall population, its members may be unable to coordinate effectively on their preferences even among themselves if the intersection is too poorly represented in the larger populations.

These conclusions also highlight the fact that while we often discuss group identities as if they were natural and persistent categories, it is more accurate to say that identities are constructed by pragmatic concerns for decision-making and coalition building. These concerns can, in turn, create frustrations for individuals who do not feel adequately represented by the dominant identity categories. Diverse societies characterized by loose norm enforcement (Gelfand et al., 2017) and low costs for movement or online assortment can provide outlets for intersectional identities that may be discouraged or marginalized in more traditional societies. But the functional lens on identity indicates that such assortment also involves tradeoffs, because there are likely to be more intersectional permutations than coordination can reasonably accommodate. Thus, choices regarding the benefits and costs associated with the intersection of various identity elements are likely to be shaped by cultural evolution in response to their practical consequences.

5.3 *Fashion Cycles*

In a diverse society, membership in different groups can confer different benefits or difficulties to the groups' members. This is especially true when some groups have power or privileges that others lack. In these cases, members of powerful groups may want to honestly signal their status, while members of subordinate groups may have incentives to obscure their status or even masquerade as an elite. In an early sociological theory of identity signaling, Simmel (1904) discussed this phenomenon as a way of explaining fashion. While clothing is obviously useful for providing warmth and protection from the elements, there are also aspects of sartorial expression—clothes, accessories, jewelry, etc.—that appear to serve no instrumental purposes, and may even be detrimental for performing many tasks. Simmel reasoned that these aspects would therefore only be maintained if they served a signaling function. Living in a highly stratified society, Simmel considered the diverging signaling needs of the upper and lower socioeconomic classes. Elites, he proposed, need to signal their wealth and status, along with their familiarity with high society, by adopting expensive fashion trends that separated them from the rabble. The lower classes, on the other hand, could benefit by adopting some of these status markers, and would therefore imitate the fashion trends of the elites. Although they may have been primarily fooling only other members of their own social class, Simmel proposed that the confusion would drive the elites to continually innovate new fashion trends, so as to more effectively distinguish themselves, thereby driving perennially changing fashion cycles.

The logic of Simmel's theory is sound, as has been demonstrated by mathematical modeling (Acerbi et al., 2012; Di Giovinazzo & Naimzada, 2015), though empirical work suggests that its explanatory power may be limited, at least in the modern world. Many fashion trends (as well as musical and linguistic trends), after all, trickle up from the lower classes to the elites. Moreover, social classes are hardly monolithic, and there are often complex group structure within each societal stratum. Style and

fashion aesthetics can also be driven by counter-dominance signaling among communities trying to distinguish themselves from the status quo, whose prestige can then be co-opted by the larger population (Klimek et al., 2019).

An important point here is that the functional use of identity signals may depend on information asymmetry, such that an ingroup has a more nuanced command of the signal's use and interpretation than a competing outgroup. This is especially important when that outgroup is incentivized to either infiltrate or sanction members of the ingroup, and the ability to produce or recognize such signals is an honest indicator of membership. When such signals are made publicly, the information asymmetry is inherently unstable, as members of the outgroup can gradually learn to recognize and even reproduce those signals. To adapt, old signals must eventually be abandoned and new signals must be adopted.

5.4 Covert Signaling

As noted, identity signals help us categorize other people—and help them categorize us—so that we more effectively choose who to approach, avoid, imitate, or attack (Barth, 1969; McElreath et al., 2003; Smaldino, 2019). However, this ability to assort also creates a new problem: that of burning bridges. It may be desirable, as a first pass, to divide people into those whom we approach and those whom we avoid. But in a diverse society, we cannot always divide people so easily. Sometimes we must work and live with people with whom we disagree or diverge severely on goals, norms, and expectations. Sometimes we must even conceal aspects of ourselves that, if revealed, might help us to find compatible partners but might also impede cooperation or even put us at risk of harm. In such cases, humans often rely on the ability of our communication to be ambiguous and indirect.

Covert signaling is the transmission of (identity) information in such a manner that it tends to be accurately perceived by its intended audience but tends to be obscured when observed by others (Dunivin & Smaldino, 2024; Smaldino et al., 2018; Smaldino & Turner, 2022). This contrasts with overt signaling, in which honest signals of identity are widely broadcast. Examples of covert signaling range from humor (Flamson & Bryant, 2013) to fashion (Berger & Ward, 2010) to dog whistles (Quaranto, 2022). If revealing aspects of one's otherwise hidden identity to members of an outgroup entails costs—such as those faced by members of certain ethnic minorities and religious groups, political dissidents, and LGBTQ+ individuals—covert identity signals may be incentivized (Dunivin & Smaldino, 2024; Smaldino & Turner, 2022).

Formal models of covert signaling (Smaldino et al., 2018; Smaldino & Turner, 2022) predict that covert signaling will be more common among communities for which (1) the cost of being recognized as a member of their community is larger and (2) the probability of interactions involving dissimilar or outgroup individuals is higher. The latter condition is more likely to be met when people live in more diverse populations and/or belong to a disadvantaged minority group.

Covert signaling is intrinsically difficult to study empirically, because the meaning of the signals depends on the background knowledge of the receiver. However, two recent studies provide additional support for the model predictions. First, van der Does et al. (2022) studied political messages on (pre-Musk) Twitter, and found that users with more heterogeneous follower networks used more covert signaling. In a follow-up behavioral experiment in which participants were incentivized to choose communication that an audience liked and avoid communication that the audience disliked, they found that participants selected more covert communication when their audience consisted of a larger proportion of cross-partisans. Second, Johnson et al. (2024) used phonetic analysis of recorded interviews to study ethnically-correlated speech patterns among students in two Utah high schools. They found that Pacific Islander students in Utah had more ethnicity-specific vocal intonations when they were attending more diverse schools, even while none of the students indicated conscious awareness of these differences.

Covert signaling relies on information asymmetry between groups. However, the use of covert signals in public settings provides opportunities for members of other groups to learn their meaning, eventually turning them into overt signals. What does this mean for the long-term dynamics of specific covert identity signals? Zack Dunivin and I studied this with a computational model in which ingroup agents learned to converge on signals that could be used to identify other members of their own group. However, their interactions were occasionally observed by outgroup agents, who could also learn the signals' meanings by reinforcement learning, and then use their knowledge to punish members of the ingroup who had publicly revealed themselves (Dunivin & Smaldino, 2024). We found three dynamic regimes, depending on the relative likelihood of being observed by members of the outgroup and on the cost of being punished as a consequence of being discovered. If outgroup interactions were relatively rare and/or not particularly costly, covert signals merely became overt signals, remaining stable identity signals used by the ingroup. When outgroup interactions were more common and/or costly, we observed cyclical dynamics, in which the ingroup established a conventional covert signal and used it until it became sufficiently known among the outgroup, at which point the signal was abandoned and the group had to establish a new signal, *ad infinitum*. Finally, when outgroup interactions were very common and/or costly, public identity signaling among the ingroup became entirely suppressed.

This model indicates that groups with incentives to remain even partially obscured to outsiders may need to constantly invent new identity signals to avoid detection. Further, if identification by the outgroup is very likely and very costly, conventionalized identity signals may never emerge for public display. This reminiscent of situations faced by political dissidents under authoritarian regimes, or even by xenophobic extremists in a well-functioning cosmopolitan society. More mundanely, it could reflect any scenario in which the benefit of coordinating on a particular idiosyncratic identity is outweighed by the social costs of outing oneself as different.

6 Identity in a Changing World

The human mind's incredible plasticity and our capacity for sociality and innovation has helped us adapt to varying and changing environments throughout our history (Boyd, 2018; Henrich, 2015), from the Sahara to the arctic, from nomadic foraging to urban living, from farming to telecommuting. While the capacity for categorization and social inference may be coded in our genes (Cosmides & Tooby, 2013; Lau et al., 2018), strategies for creating and interpreting social identity signals are likely learned from others, as evidenced by the tremendous variation in the nature of signaling across cultures (Contreras Kallens et al., 2018; Moya & Boyd, 2015, 2016). In our deep past, when humans were primarily living in relatively isolated foraging communities and the global population was relatively small, a small set of social categories, shared within a community, likely sufficed. As humans developed agriculture and built large cities in more dense, diverse, and unequal civilizations, we needed to develop richer and more context-dependent social category structures (Bell, 2023; Smaldino, 2019). The previous section explored many of functional uses for identity signaling in these complex environments.

In the last few decades, a new cultural shift has created new affordances and selection pressures for identity signaling (Smaldino et al., 2025). To some extent, online spaces are simply new instances of the same old in-person spaces they arose out of. In any complex society, individuals are categorized into roles that help them determine how to behave and present themselves, and help others manage expectations for social interaction (Goffman, 1978). Online, new social roles such as “trolls” and “newbies” could be viewed as novel in the same way that “party kid” or “nerd” were novel in decades past, as suggested by Golder and Donath's (2004) early analysis of Usenet groups. However, there are also several key differences. The rise of digital technologies and online environments have produced new modes of interaction, detached from many of the features that have characterized nearly all social interaction in the past: geographical localization, temporal synchronization, and identity continuity. Instead, widespread adoption of the internet and smartphones have spawned social interactions that are geographically diffuse, temporally extended, and that, perhaps most importantly, involve fragmented and even anonymous exchanges.

The internet has made communication and assortment less local. In the past, norms were enforced within local cultural communities, which ensured the legibility of the community for its members and leaders (Scott, 1998). Deviations in such communities were punished passively by failing to successfully coordinate and actively through direct sanctioning of deviant behavior. The subsequent cultural coherence could be beneficial, facilitating norms that created public goods (Boyd & Richerson, 2002), but it could also be costly or repressive for individuals interested in deviating from the norm. Consider the burning of “heretics” and Galileo's coerced recanting of heliocentrism by the Pope, the forced baptism of Jewish children in nineteenth-century Europe, or the forced sterilization of homosexuals in mid-twentieth-century England. The internet has provided opportunities for unusual people to find communities in which their interests can be viewed as normative, from LGBTQ+ sexual

preferences to live-action role-playing. These new opportunities for assortment have clear benefits for people in these communities, but they also carry potential societal costs, as with the increased avenues for conspiracy-based paranoia from groups like QAnon.

A key feature of identity signaling in most of our historical and prehistorical past is that identities had to be linked to a physical personage that was not only geographically localized but also carried over from context to context. If someone proclaimed themselves a Christian in church, they were likely to be beholden to that commitment at the market or at home. Now, one can form relationships on various online platforms that have minimal influence on others. For example, people regularly construct personas on social media sites like Facebook, Instagram, or TikTok, or on online dating sites like Tinder, Bumble, or Hinge that may bear little relation to the personas they use with their friends, families, and coworkers (Bullingham & Vasconcelos, 2013; Donath, 1999). The lack of geographical localization and separation from local communities also means that online content is rife for the misinterpretation of identity signals. All communication occurs in context, with commitments and implicatures that rely on shared experiences to ensure interpretations consistent with the signalers' intentions. Devoid of context or familiarity, many behaviors seem odd, foreign, and even amoral. Such misinterpretations can then be used as beacons for rallying or even constructing other identity groups in opposition to these perceived moral slights (Ronson, 2016). Platforms that allow for the creation of anonymous pseudonyms—including Instagram and TikTok as well as Reddit, X, Bluesky, and YouTube—take this a step further by allowing individuals to create influential personae unconnected to their quotidian lives. These personae nevertheless rely on identity signals to communicate to potential audiences the commitments implicitly held by the creator, so as to determine the sort of content they are likely to find by returning to the creator's account or channel (DiResta, 2024).

Recall that traits that become useful for identity signaling will typically be those that provide a category-based advantage in adaptive decision-making. However, our proximate feelings of satisfaction when assorting with similar others online, and our outrage when seeing norm violators may be examples of cultural mismatch (Nunn, 2022), a relic of reaction norms optimized for an in-person world.

Indeed, it seems reasonable to speculate that the presence of online social media platforms and smartphones that make engagement with those platforms easy and accessible contributes to overall feelings of unease and fear that cause people to cling to their identity groups, exacerbating feelings of widespread polarization. Three key mechanisms work in tandem to produce this phenomenon. The first is the ease of assortment on arbitrary traits. The low caloric and cognitive costs of online engagement mean that the satisfaction of online identity formation can be more appealing and less effortful to achieve than the deeper connections to community, especially when the latter is rife with the conflicts inherent in long-term, multi-context relationships. The second is the reduced power to enforce local norms in online communities. Although local norm enforcement can lead to oppression and conservatism, the need for localized groups to thrive across many domains ensures that many norms will be group-beneficial (Boyd & Richerson, 2002; Lansing, 2012; Wilson, 2002).

Online interactions can be restricted to single contexts, and their separation from local community means that many of the norms that develop in these contexts can be deeply antisocial, discriminatory, and uncivil. Indeed, given the intense competition for attention online, extreme positions driven by demonizing outgroups often thrive most successfully online (DiResta, 2024). The third mechanism is the aforementioned ability to easily view, share, and discuss the communication and behavior of others without sufficient appreciation for the contexts in which they were produced. This lack of context allows online posters to capitalize on the confusion, fear, and disgust people often feel when presented with behavior that appears to violate their expectations for moral or normative behavior. Due to the vast quantities of online content produced daily throughout the world, its ubiquity provides fuel for motivated individuals to demonize almost any group. When such motivated individuals are elites with interests in manipulating a populace to allow them to more deeply entrench their wealth and power, society as a whole suffers. Our ability to avoid perennial cycles of polarization, exacerbated inequality, and the continuing entrenchment of neofeudalism (Varoufakis, 2023) depend in part on our ability to stymie these forces of polarization.

7 Conclusion: Essentialism and Identity

Identities are categories, and like all categories, we use them because they help us make sense of the world, make predictions, decide how to act, and communicate with others. Every human is unique, but we can also be clustered into types along a multitude of dimensions. The identities that we choose to emphasize, perceive, signal, and discuss are the ones that *matter*, whether because we believe they are important or because we know that others do. Understanding this allows us to emphasize the instrumental functions of identity in terms of decision-making, learning, and signaling, as well as how the nature of those functions are shaped by the structures of our social and physical environments (Smaldino et al., 2025). The instrumental nature of identity means that it is probably useless to consider any particular identities as *essential*. What *is* essential is that as long as humans live in sufficiently large or complex cultures such that categorizing people by type is useful for decision-making, identities will continue to emerge and evolve.

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Essence and Class: Conceptualising the Experience of Intergenerational Social Mobility in the UK



Neil Carter

1 Essentialism and the Socio-Economic Domain

Within the folk-sociological domain, research on psychological essentialism has traditionally been focused on social categories in which group membership and category-typical characteristics are commonly perceived to be biologically determined, e.g. race, ethnicity, gender and sexuality. Very few studies explore the role of essentialism in perceptions of socio-economic categories, and those that do have typically been conducted in cultural contexts where the concept of ‘class’ is either conflated with the overtly naturalising logic of the Hindu caste system (e.g. Mahalingam, 2003), or submerged beneath a strongly egalitarian and meritocratic ethos, such as in the United States or the Nordic regions (e.g. Kraus & Keltner, 2013; Råty et al., 2017)—yet even here the emphasis has remained largely on questions of innate potential and natural kind-like beliefs.

One reason for this may be what has been argued to be a ‘pars pro toto’ fallacy, in which essentialism and naturalisation are often assumed to be coextensive (Haslam, 1998; Kanovsky, 2007). This is perhaps unsurprising, given that much early research on psychological essentialism was primarily concerned with folk-biological reasoning, wherein it was understood to be a domain-specific modular adaptation facilitating the cognitive processing and categorisation of biological taxa (Atran, 1990; Medin & Atran, 1999). The essentialisation of social categories, meanwhile, was believed to result from either a form of analogical transfer or exaptation of this process from the folk-biological to the folk-sociological domain, or from an autonomously evolved module specific to folk-sociological thinking, which nevertheless tends towards naturalisation (Hirschfeld, 1994). However, neither of these hypotheses account for other common forms of essentialist reasoning, for example with regard to non-living natural kinds, such as chemical elements or compounds (Keil, 1989), significant, unique artefacts or individuals (Hood & Bloom,

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2008; Horne & Cimpian, 2019), or for the asymmetries and inconsistencies that have been observed in the essentialisation of both biological and social categories across and within various cultural contexts and according to different ontogenetic stages (Gelman, 2003; Hussak & Cimpian, 2019), all of which appear to exceed the explanatory scope of a single domain-specific modular view.

By contrast, Gelman (2003) has proposed that essentialism may in fact arise from the convergence of a number of more fundamental domain-general psychological mechanisms, that its manifestation may vary considerably across different contexts and domains, and that putative essences may be believed to be transmitted by a range of processes, but that these beliefs are invariably united by three particular features: the essence is understood to be transferable; this transfer takes place early in development so that category members acquire their characteristics during a formative period; and once this transfer has taken place it is very difficult to remove or change. A number of significant developments in research on psychological essentialism broadly appear to support this view, most recently the notion of a domain-general ‘inherence heuristic’ underpinning essentialist (and many other internalist) biases (Cimpian & Salomon, 2014), and building on this, the theory of a ‘general essentialism’, comprising both casual and ideal (or ‘Platonic’), category-based and individual forms (Newman & Knobe, 2018).

However, more directly relevant to this chapter is Haslam et al. (2000) identification of nine conceptually related but distinct components of essentialist reasoning common to the psychological and philosophical literature, which in their small-scale yet highly influential US study they found to be clustered along what they claim are two apparently independent dimensions: a ‘natural kind’ dimension, closely resembling folk theories of biological species; and an ‘entitativity’ dimension, thought to capture notions of group coherence, intrinsic similarity, common fate and naïve categorical realism, for example. And echoing this distinction between independently social or cultural, and biological or otherwise natural forms of essentialism, Rangel and Keller (2011) have subsequently produced evidence in support of the concept of Belief in Social Determinism (BSD)—an alternative or complementary form of the essentialisation of social categories to Belief in Genetic Determinism (Keller, 2005)—consisting of the notion that an individual’s fundamental character is profoundly and permanently shaped by exclusively social factors pertaining to their background and upbringing. This concept neatly exemplifies what has been referred to previously as a ‘social mode’ of essentialism, in which group identities ‘are perceived to be transmitted through socialisation but become an essential part’ (Mahalingam, 2003: 737). It also has a clear parallel in the concept of ‘cultural essentialism’ (Verkuyten, 2003), which has been used to describe similarly deterministic, immutable and even quasi-biological representations of the influence of socialisation within specific cultural settings. As Wagner et al. (2009: 371) point out, ‘whether the features distinguishing the categories are seen as biological, as in the case of the two sexes or race, or whether they are socially constructed in the course of many generations, as in the case of culture and ethnicities, does not make much difference for the individual. Biology is inescapable and culture is unavoidable as long as a child lived within its ethnic “ecology” long enough for cultural imprinting to occur’.

Nearly all of the twelve items in Rangel and Keller's (2011) BSD scale—which is significantly correlated with conventional measures of essentialism and associated with many of the same socio-cognitive and epistemic motives—are explicitly concerned with an individual's 'social origin', and one refers unambiguously to socio-economic background. Since 'class' is traditionally depicted as a peculiarly British obsession (Cannadine, 1999), where it is often understood to be an ascribed rather than achieved form of category membership or identity, and where efforts at increasing social mobility are still commonly perceived to be impeded by rigid class distinctions (Payne, 2017), the UK is an ideal cultural context in which to examine essentialist beliefs about socio-economic category membership in detail. And despite the persistence, well into the twentieth century, of biologically deterministic accounts of poverty in the UK, often used to justify support for eugenicist policies (Bottero, 2004), as well as the concept of 'blue blood' (Wagner et al., 2009) which continues to be invoked in popular representations of British and European aristocracies even today (Carter, 2021), the present research is motivated by the supposition that a methodology attuned to social determinist beliefs may be more equipped to capture essentialism with regard to socio-economic categories in the UK than one exclusively focused on naturalising and folk-biological beliefs.

Haslam et al. (2000: 123) observe that 'people's representations of social categories are clearly embedded in explanatory theories—social ontologies—that are consequential for their evaluations of them'. However, while their study remains one of the most comprehensive approaches to identifying the structure of essentialist beliefs, their own questionnaire method is barely able to sketch the vaguest outlines of these 'social ontologies', which inevitably require a qualitative analysis. Though interview studies have seldom been employed in research on psychological essentialism (e.g. Buhagiar et al., 2018; Verkuyten, 2003), they nevertheless enable the complex logic of these representations to be probed and analysed far more thoroughly than is possible with naturally occurring data. Finally, since beliefs about particular categories are often revealed via intuitions concerning the crossing of category boundaries, this study investigates participants' judgements regarding both the nature of socio-economic categories or 'classes' themselves and of the possibilities for movement between them, i.e. social mobility. And with the aim of ensuring a greater degree of personal relevance and evoking rich and detailed representations arising from personal experience, rather than the purely abstract conceptualisations that are characteristic of the experimental literature in this field, the participants selected for this study are all socially mobile individuals themselves.

2 Methods

The topic guide for the interviews consisted of two parts: the first part, following the model of recent sociological studies on the experience of social mobility (e.g. Friedman, 2015), was designed to develop an understanding of the type of mobility trajectory experienced by the interviewee (i.e. whether it occurred primarily via

educational attainment or a change in occupational status, for example, or by an accumulation of economic or cultural capital); the speed and range of the trajectory (i.e. whether it was felt to be abrupt or gradual, and how far they perceived their current social position to be from their family background); whether it was experienced in isolation or alongside friends or other family members; the socio-economic composition of interviewees' past and current social circles; and their sense of group belonging and identity. Additionally, each interviewee was asked whether 'class' was a meaningful term for them or whether they preferred to use an alternative category label, such as 'socio-economic status/background' or 'social position/origin', for example.

However, whereas the sociological research on which these questions were based is often focused on (a sometimes rather homogenising and deterministic treatment of) the concept of 'habitus',¹ the present study analyses these responses instead through the conceptual lens of psychological essentialism, or more specifically its nine constituent components as identified by Haslam et al. (2000). As Naudet (2018) has shown, the subjective experience of social mobility is often affected not only by the compatibility or otherwise between the pre-reflexive dispositions internalised during an individual's primary socialisation and that typical of their destination group, but also by the shared representations or narratives that predominate within particular cultural contexts, concerning the relationship between different socio-economic categories, and therefore of what may be entailed or required in the process of moving between them.

The second part of the topic guide then specifically addresses beliefs and judgments about the nature and logic of socio-economic categories and individual category membership, according to each of the separate components of essentialism. In spreading the focus across the individual components in this way, rather than attempting to directly identify evidence of essentialism per se based on either a nebulous or merely partial definition, this study aims to build on the comprehensiveness and clarity introduced by Haslam et al. (2000). However, close scrutiny of their descriptions of several of the components in isolation highlights some of the significant weaknesses in their methodology. Although Haslam (2014: 491) appears to support the idea that inference is a 'key element of essentialist thinking', the treatment of each of the components as equally independent and potentially separable from one another means that most of their definitions make no distinction between inherent and extrinsic or 'structural' factors (Vasilyeva & Lombrozo, 2020)—i.e. enduring socially constructed, rather than innate or internalised, sources of immutability or stability, for example. These definitions therefore may easily be interpreted in ways that have little or no bearing at all on essentialism, and the purely quantitative procedure employed here provides no means of sifting or even identifying such responses. This in turn has obvious implications for the validity and generalisability of their independent clusters, not to mention the fact that these statistical findings are in any

¹ Defined by Bourdieu (2005, p 43) as "a system of dispositions, that is of permanent manners of being, seeing, acting and thinking, or a system of *long-lasting* (rather than permanent) schemes or schemata or structures of perception, conception and action."

case derived from a sample of only 40 American undergraduate students. Indeed, if inference is taken to be a necessary ingredient of an essentialist construal then, somewhat counter-intuitively, only those beliefs corresponding to their 'entitativity' dimension would truly constitute essentialism, whereas the natural kind beliefs would not.

With this in mind, and with recourse to other examples in the experimental literature (e.g. Kraus & Keltner, 2013; Rangel & Keller, 2011; Williams & Eberhardt, 2008), several of the component descriptions that inform the questions in the second part of the topic guide have therefore been somewhat modified (see Table 1).

Immutability, for example, in the present study is more specifically concerned with perceptions of the determining power of socio-economic background and the potential for 'authentic' category change, rather than simply the possibility or otherwise of category members becoming non-members in a general sense, which may accommodate relatively superficial causes. Similarly, the definition of stability has been slightly expanded to include a cross-cultural as well as temporal notion of category stability, in order to be able to capture intuitions about category realism and universality, rather than just intergenerational structural immobility or cultural tradition, while the mention of characteristics—which in this domain is liable to be perceived as both largely superficial and easily mutable—has been removed. Informativeness has also been expanded to incorporate the perceived possibility of categorisation from an individual exemplar to the category, along with the inductive potential of the category label itself. And finally, exclusivity is defined here specifically in reference to other categories within the socio-economic domain alone, rather than to different, notionally independent and overlapping categories, such as sex, ethnicity, nationality or religion. Haslam et al.'s (2000) description makes no such distinction between inter- and intra-domain exclusivity, despite the fact that these are likely to elicit very different responses: the latter—mutual exclusivity between contiguous, alternative or even oppositional categories (e.g. 'black/white', 'male/female')—is clearly associated with the logic of discreteness, yet these components were found to be uncorrelated in their study, suggesting that exclusivity was perhaps more commonly interpreted in the former sense. Though essentialist representations of race or ethnicity may preclude recognised membership of certain other categories, based on religion or nationality, for example, and vice versa (Rothbart & Taylor, 1992), it is far more difficult to conceive of a sense in which socio-economic category membership may be understood to actually exclude—rather than there being merely a perception of weak correlation or uneasy compatibility with the stereotypes of certain categories—individuals from simultaneous membership of any of the many alternative types of groups included in Haslam et al. (2000), other than occupational categories, which at least from a sociological perspective are usually thought to be the primary determinants of socio-economic category membership in the first place. While all other component descriptions remain largely faithful to those employed in Haslam et al. (2000), the semi-structured nature of the interview process and the ensuing qualitative analysis enabled the present research to focus directly and exclusively on representations that are relevant to an understanding of essentialism.

Table 1 Component Descriptions

Component	Description from Haslam et al. (2000, pp 117f)	Description for topic guide
Discreteness	Sharp category boundaries, membership is clear cut, definite, either/or	There are clear boundaries or gaps between socio-economic categories; membership is either/or, rather than by degrees
Exclusivity	Category membership excludes individual members from belonging to other categories	An individual cannot belong to more than a single socio-economic category at any given time
Informativeness	Category enables many judgements to be made about individual members, tells us a lot about them	It is possible to tell an individual's socio-economic category membership just by looking at them (even if everyone were dressed the same); Socio-economic category membership can tell you a lot about an individual
Uniformity	Category members are very similar to one another, uniform, have many things in common	Members of the same socio-economic category have more in common with each other than they do with others
Inherence	Category has an underlying reality or sameness, members have similarities and differences on the surface but underneath are basically the same	Members of the same socio-economic category are more similar to each other on the inside/'deep-down', even when they appear very different on the outside
Immutability	Difficult for category members to become non-members	Individuals are permanently and profoundly influenced by their socio-economic background; It is not possible for an individual to authentically change their own socio-economic category membership (in either direction, or at any age)
Stability	Category is stable over time, has always existed, characteristics have not changed much throughout history	Distinct socio-economic categories and systems of socio-economic classification exist everywhere, have always existed, will always continue to exist
Naturalness	Versus artificial	Socio-economic categories tend to reflect natural (e.g. inherited or otherwise innate) differences between people
Necessity	Category has necessary features or characteristics, without which an individual cannot be a member	Socio-economic category membership is determined by necessary features/ characteristics, without which an individual cannot be considered a member

Though this study is concerned with conceptualisations of both ‘upward’ and ‘downward’ social mobility, the selection of participants is nonetheless confined to those who have experienced only the former. This is consistent with the majority of qualitative sociological research in this area but was also determined by the fact that since social mobility is very often equated with ‘upward’ mobility alone (Payne, 2017), the ‘downwardly’ mobile are considerably more difficult to identify and may be far less likely to identify themselves in such a way. While this might deprive the following analysis of a number of interesting and valuable insights, it also seems probable that given their relatively higher status of social origin and the fact that ‘downward’ mobility is more typically associated with a decline in economic capital and occupational status rather than a depletion of embodied cultural capital, it may be considerably less prone than ‘upward’ mobility to pose a significant challenge to what Friedman (2015) terms the ‘ontological coherence of the self’.

Therefore, a total of 20 ‘upwardly’ mobile interviewees were recruited from three main sources: the alumni of a programme run by a major educational charity in the UK dedicated to improving social mobility; student members of a university social mobility society in London; and representatives from two different organisations promoting social mobility in the legal profession, one composed of solicitors and the other of barristers. The latter was chosen not only due to the particular prominence and accessibility of both of these organisations, but also because in quantitative studies of social mobility the legal profession continues to be regularly cited as one of a small number of highly esteemed, coveted and exclusive areas of employment (e.g. Friedman & Laurison, 2020).

The majority of individuals from each of these three main sources had online profiles and were able to be contacted initially via email or social media, and a small number of further interviewees were subsequently recruited by snowballing. Eleven of the participants were female, nine male; six were full-time students (five undergraduates and one doctoral student), seven lawyers, two academics, while the remaining five worked in secondary education, the arts, journalism, the charity sector and the civil service; ages ranged from 18 to 58 years old; four interviewees were of ethnic minority backgrounds, but with only one exception—who emigrated to the UK as an infant—all participants were born in various regions of England and Wales; and all but one explicitly identified as originating from a low socio-economic or working-class background.

Interviews were conducted in London, Oxford, Cambridge and several locations in the Midlands, and lasted between 50 and 95 minutes. Permission was requested in advance to audio-record the interviews which were then transcribed verbatim and anonymised. The transcripts were coded using NVivo 12 software and subject to a thematic analysis, focusing on the individual components of essentialism. And since the objective of the analysis was not simply to scrutinise the interviewees’ responses to each component-based question in isolation, but rather to examine the potential manifestation of all of the components across both parts of the interview in their entirety (and indeed it quickly became apparent during the interviewing process that answers to questions in the second part often implicitly or explicitly referred to

other components beyond the one directly suggested by the question itself), the same coding frame and analytical procedure was applied across the transcripts as a whole.

3 Results

In order to facilitate the presentation of results, the following analysis is organised into four component-based groups—(i) discreteness and exclusivity; (ii) informativeness, uniformity and inherence; (iii) immutability and stability and (iv) naturalness and necessity—which simply reflect certain elementary logical relationships between the components, as they have been defined here. For example, the notion of a sharp boundary separating contiguous categories may simultaneously cause them to be perceived as mutually exclusive; similarity in some form appears to be a necessary basis for induction—indeed perceptions of uniformity predictably exert a powerful influence on beliefs concerning a category’s informativeness (Gelman, 2003)—and inherent category-determining features can be expressed, as they are both here and in Haslam et al. (2000), in terms of intrinsic or ‘underlying’ similarity; while immutability concerns individual category membership, stability refers to the immutability or inevitability of the category itself; and for many categories, the particular character of its purportedly natural (biological or otherwise) basis constitutes a necessary casual feature for membership. Only the first of these pairings, discreteness and exclusivity, is inconsistent with the division of components assumed by Haslam et al.’s independent dimensions, however none of them are intended to either corroborate or contradict these or any other empirically derived associations, but rather merely to provide a coherent and relatively concise logical structure within which to discuss the findings. All of the components, though semantically distinct, are clearly conceptually related in one form or another and very often several of them may be invoked simultaneously, as many of the following examples illustrate.

3.1 *Discreteness and Exclusivity*

Among interviewees who expressed the belief that socio-economic categories are discrete, it was typically only those who endorsed a unidimensional definition, determined solely by occupation or income, for example, who also perceived them to be ungraded. More commonly, classes were described as internally continuous and the boundaries between them fuzzy, though several thought this pertained predominantly to the middle portion of the social structure, whereas the extremes are far less permeable.

However, some perceived there to be sharp boundaries between classes throughout society. For example, Anne (57, barrister and King's Counsel²), whose father had been a coal miner, specified significant gaps between several distinct social groups, which she sees as being even 'more fragmented and polarised' now than when she was younger. Though, of course, these group boundaries are not only represented in abstract terms depicting the relationships between different categories but are also seen to be reflected at an individual and interpersonal level. Despite her exalted professional status, Anne claimed that she will always be working-class, but has 'learnt to adapt to the new Martian society in which I live ... It is like learning a different language, and it's like coming from Mars. But you get there',

A number of others mentioned the 'alienness' of some of their peers' experiences at university and the apparent lack of contact between people from different socio-economic backgrounds prior to their matriculation, indicated in part by frequent expressions of surprise at the extent of this difference on both sides. For Ciara (18, undergraduate student), when she immediately arrived at university in London, there appeared to be a very stark contrast in terms of thought and behaviour between those who had attended state schools and those who had been educated privately, something she first witnessed when she and a childhood friend were sent to different secondary schools in the North West of England.

This view was also echoed by Helena (55, solicitor), who in fact perceived it to be one of the main fault lines running through society, making it very difficult to 'cross over' the boundaries between different classes. She believes that those educated at public schools³ have an 'innate' and in fact inimitable sense of entitlement and self-belief:

I see them as clear divisions. I think that which school you go to, whether you go to public school or state school, makes a huge difference [...] people who went to public school have an innate belief – you can call it, in a nice way you can call it self-confidence, verging on arrogance – and inherent sense of, that the world owes them something, and that is something that you can't mimic. Doesn't matter how hard you try, never going to do it. (Helena)

However, for Aisha (19, undergraduate student), the most profound differences between members of different classes are a consequence of their dramatically different experiences of socialisation more generally. Aisha, whose family are of South-Asian origin, grew up in a notoriously violent and extremely impoverished area of urban Lancashire, and it is the vivid juxtaposition between her own childhood experiences and those of her relatively privileged peers that supports her belief in what she describes as 'a lot of controversial things about the personalities of working-class people being very different to the personalities, generally speaking, of middle-class people':

² 'King's Counsel' (KC) is an honorific conferred on the basis of merit, following a stringent application process, upon a senior barrister usually after around 15 years practice or more.

³ In the UK, the term 'public school' generally refers to a prestigious, exclusive and typically highly expensive, fee-paying independent school, rather than to a form of publicly funded education (see Turner, 2015).

... it's a traumatic thing to be working-class, really, when it means such economic deprivation, especially in Britain. So yeah, I think that very much shapes the working-class personality to be very, very different to the middle-class personality [...] of course it makes different people, and of course there are personalities that are working-class in nature and, sort of, personalities that are middle-class in nature. (Aisha)

Interestingly, the majority of the interviewees who did not subscribe to a monistic definition of socio-economic category membership agreed with the idea that it is possible to belong to more than one simultaneously, according to different dimensions or forms of capital—e.g. occupation, income, wealth, education, or cultural pursuits and interests—and many continued to identify strongly with their working-class backgrounds, while acknowledging that their occupation and income now technically rendered them middle-class. On the other hand, those who endorsed a unidimensional understanding tended to believe that membership is mutually exclusive, and several suggested that it would be ‘ridiculous’, ‘disingenuous’, ‘fraudulent’ or even ‘disrespectful’ to claim to be working-class now.

Sian (36, senior teacher and research school director), described herself at one stage in her social mobility trajectory as being a mixture of working-class and middle-class, but now considers herself to be firmly in the latter category; she believes that these two identities can co-exist to some extent, but not without conflict. Like a number of other interviewees, Sian had experienced significant discouragement from members of her own family before going to study at Oxbridge, particularly from her unemployed father. Similarly, Helena said that when she revealed to her parents that she was pregnant in her late twenties they expressed relief at the prospect that it might thwart her plans to enter university as a mature student; when she eventually graduated with a first-class degree an uncle complained that she was ‘too good for the likes of us now’. Both women described the feeling of having to ‘dumb down’ or ‘contract’ the range of their personalities in order to communicate and maintain relations with their families.

However, while Sian has subsequently been able to make successful efforts at reconciliation, Helena instead took a conscious decision to leave much of her past life behind her, even changing her first name during her mid-twenties—though she says that this was partly at the suggestion of her parents, who felt that her given name no longer suited her and regretted calling her by it, because although it was ‘quite uncommon’ when she was born, it has since become associated with stigmatising working-class stereotypes. She also deliberately concealed her background from friends and colleagues and indeed mentions ‘coming out’ as having been socially mobile only relatively recently. She says that her biggest fear was always the possibility of people who know her by different identities coming together in the same location and alluded to a number of awkward and embarrassing encounters between the very different social spheres she inhabited. Likewise, Anne described at length what she felt at the time to be an excruciating meeting between her mother and step-father and one of her earliest employers over lunch, which revealed to her “the chasm between where I’d got to and where I’d started”. She says that she has nothing at all in common with her family, who in turn regard her as an entirely different person between her professional and personal life.

By contrast, Samuel (21, final-year undergraduate student), who had recently been admitted onto a postgraduate law programme at an American Ivy-League university, had received consistent and enthusiastic support from his family, who originate from West Africa, yet experienced each stage of academic achievement so far as 'like an explosion of different identity' which sometimes created clashes in his relations with different social groups, between which he found himself having to 'code switch'. On the occasions these groups came together, rather than causing him embarrassment, however, he felt more keenly the difficulty of reconciling their very different expectations of him:

... I will interact differently with different people, and when groups of different people who are normally separate, who I normally interact with separately come together, it creates a difficulty and I feel myself trying to appease both sides. And the people who haven't heard me speaking that way think, you know, who's this, this, almost like a completely different person ... (Samuel)

In spite of this discomfort, both he and Sian appeared to demonstrate a high degree of versatility in their interactions with different social groups and like a number of other interviewees they were very conscious of modifying their accents according to different contexts. But while for Samuel and Sian this adaptability often seemed to be an asset, Anne attributed her own 'inconsistency' as a younger woman to her lack of self-confidence, sense of inferiority and her 'desperation' to be liked, whereas now that she is older and more confident, she sees herself as far more stable across different social contexts and interactions.

Though the focus here is on representations of mutual exclusivity between socio-economic categories alone, inter-domain exclusivity was also implied obliquely on a few occasions by the notion that those who are not born in the UK remain largely impervious to classification. Helena, for example, described her husband as 'almost classless' by virtue of his half-Nordic, half-Celtic parentage and his early upbringing overseas, and notwithstanding the fact that both sides of his family also happened to be, from her perspective, 'very, very posh, what I would call posh, very middle-class, lots of money'. And while Aisha emphasised the importance of an 'intersectional' view, she also believes class to be ultimately identity-defining:

... as someone who associates with many different identities and sort of has many labels, you know, in accordance to how we label demographics, class is the most important, in my opinion, as a determinant for who you will become or who you are. (Aisha)

3.2 Informativeness, Uniformity and Inherence

Very seldom did interviewees suggest that class categories are not informative at all, although some believed that they only have inductive potential at the extremes or in certain 'clear-cut' cases. Rebecca (32, Ph.D. student, and founding director of an arts organisation in London), says that during her first year as an undergraduate at university she didn't notice that many of her peers, including some who quickly became (and remain) her closest friends, came from backgrounds that were 'quite

elite', 'quite posh', and very different from her own. In fact, she says it wasn't until she began to 'engage with sociology and theory and read people like Bourdieu' that she became fully attuned to those differences, until eventually 'the more I became aware of class, the harder it was for me to let go of seeing that'. She believes now that 'I really need to let go of that, because it isn't helpful', in that it sometimes causes her to pre-judge people. Yet, for Alice (44, professor at an Oxbridge college), class has been a very important concept at a 'kind of psychic, emotional level', often enabling her to make sense of other people's behaviour towards her that might otherwise have appeared irrational. For example, she believes that not being admitted to Oxbridge as an undergraduate, and, in more recent years, the opposition to her election in a senior role at her college, were both due to her class background.

In terms of specific characteristics, socio-economic categories were generally assumed to be informative about—or more or less reliably inferred from—an individual's accent, clothing, hairstyle, level of grooming, the presence of tattoos, their tastes, interests, consumption and political persuasion. In most cases these inferences were expressed generically and in probabilistic terms, however for Helena both category labels and characteristics were believed to enable relatively accurate prediction at an individual level, particularly with regard to consumption and culinary habits. Several also mentioned physical features, such as skin condition, weight and height, to the extent that they may be visibly affected by health and diet, though Alice was one of very few interviewees to agree with the notion that in certain cases physiognomic characteristics might also be informative in this way:

... I remember once when I was in my twenties having, holding a conference and a couple of women came to it who were from quite well-known political families, very, very affluent, and I said to my mum, 'Gosh, it was like being in the room with, like, thoroughbred race horses, you know, you could tell there hadn't been acne for generations, and she said, 'Oh my god,' she said, 'that's what it used to be like in court,' she said. She'd become a probation officer briefly in the early seventies, and she said the barristers would come in and she said, you'd just look at them like, woah, you know, the cheekbones, you know, it was like, yeah, yeah! And so, and you think, yeah, you know, generations of, you know, the right kind of leisure, enough sleep, the right diet. Yeah, it does, it does show on your person very often.
(Alice)

However, she adds that although her students are still usually 'carrying traces' of their upbringing when they first arrive at the university, she can't always distinguish their social origins—except for "the ones who come from upper-class or very wealthy backgrounds and have done so for generations"—because 'people from well-off backgrounds will sometimes, you know, dress down'. And yet, some suggested that an individual's class background is often conspicuously reflected in their bearing or gait. For example, Amy (28, government policy advisor), who is originally from Lancashire, referred to a 'Mancunian walk' that she associates exclusively with working-class men in Manchester, and which she suggests is perhaps influenced by working in certain labour-intensive occupations, although she also thinks that the informativeness of particular 'micro-behaviours' is largely a consequence of a heightened preoccupation with class in the UK generally.

Claire (47, solicitor), for whom class-based differences in embodied dispositions were seen as more likely to be reflective of contrasting levels of self-confidence, believes that there are always certain characteristics or behaviours, however subtle, that are capable of immediately and unambiguously revealing an individual's class background:

... there's still things that catch you out, that are annoying, whether it's that you don't know something or you don't pronounce something a different way or whatever it is, there's always those tell-tale signs that you think you never quite get away from your roots. (Claire)

But while Claire—whose father, like Anne's, was also a coal miner—later acknowledged uncertainty as to whether others actually notice those 'signs' that she is so acutely aware of herself, Anne had no doubt; she claimed that on each and every occasion in the past that she committed what she subsequently believes to have been a breach of etiquette she 'might as well have had a big neon sign over my head, saying "I'm not like you"'. And that although the internet might be consulted for 'things like which knife and fork to use' or 'understanding how to pronounce wine ... what you can't look up is the things you don't know you don't know. And so, you're always marked out in some way or other. Things catch you out'.

Most agreed, almost as a matter of course, that individuals of the same class or socio-economic status will have more in common with each other than with others—usually interpreted in terms of interests, perspectives, attitudes and values, based on similar experiences and living conditions—and that they would also be more capable, on that basis, of empathising with each other than with members of a different socio-economic category. Anne described her current social circle as consisting largely, on the one hand, of members of an Asian immigrant community in an area of the East Midlands where she lived for many years previously, and, on the other, 'white, upper-class, hunting, shooting, fishing people', most of whom are her colleagues in the legal profession. She argued that although she herself is white, she actually has far more in common with the former because 'they're going through the same transition that I had to go through', whereas the latter have 'no concept of the disadvantage suffered by those who simply haven't got the ability to do what they've done'.

Uniformity was already clearly implied by those features that were understood to be reliably inferred from category membership, but it is also strongly suggested by the assumption of fully shared social norms or 'codes', the 'unknown unknowns' that Anne referred to, which she firmly believed to be universally known to those of a different background. Likewise, Helena alluded to particular aspects of practical knowledge that are possessed exclusively (and apparently instinctively) by middle-class families, for example: 'nobody teaches you how to fill in a [...] UCAS form, or how to send your kids to public school, you don't know—if you are middle-class you just know these things'. Just as she perceived those educated at public school to have an 'innate' or inherent self-belief and sense of entitlement, on the basis of her own experiences she also, like Claire, typically associated working-class identity with a lack of confidence and ease in their social surroundings, often irrespective of context and even when this might appear to be contradicted by observable behaviours:

... I was driving around yesterday and there were these two guys and they were, you know, obviously working class, young men, they, just in their kind of shell suits, or whatever it was equivalent, and they were just so obviously – and they thought they were really tough, and I was sort of thinking, you know, I know what they're feeling inside, they're not feeling that tough. They're just feeling uncomfortable most of the time. (Helena)

While Matthew (28, charity worker) and Yasmin (19, undergraduate student), whose parents emigrated to the UK from the Middle East when she was four, both believed that having similar backgrounds would tend to unite people more deeply through a shared feeling of nostalgia, Aisha's convictions were rather stronger; she often characterised individuals of the same class as subject to the 'same experiences', which would therefore ensure a significantly more profound connection, even a kind of fraternity, due to the determining force of their shared background:

I think your experience, which shapes exactly who you are, when you can find people who have faced the same experience, of course you're going to have a deeper connection with them because they've sort of, they've existed the same way you've existed for so long, so that creates a sort of, a sense of sort of brotherhood ... (Aisha)

And although Aisha was alone in referring explicitly to distinct class-based 'personalities', Helena often described a seemingly internal, immutable and, once again, inimitable, 'true' class identity:

... you never lose it, you know, you can take the girl out of [the Midlands], but you can't take [the Midlands] out of the girl. Really, it's still there. And that, yeah, you can't fake that. (Helena)

...you can change the way you look and the way you talk, and the way you even interact with people, and you can change your job and even your levels of confidence can change, but somewhere inside us there is still that working class girl ... (Helena)

Many at least appeared to share Claire's conviction that a person's class background constitutes 'the building blocks of your character'. Both she and Matthew spoke of continuing to identify, 'in my heart', with particular working-class traits, and although the latter said he 'definitely wouldn't be able to describe myself as working class now', this nonetheless made him feel reluctant to 'remove that label' from himself entirely. In fact, he believes that your class background 'modulates how you think then for the rest of your life' and that 'you can never really escape how you interpret something because that's just based on whatever has come beforehand. It's always kind of, you know, going to imprint itself on you'.

3.3 Immutability and Stability

These allusions to an inherent, internalised class identity or to the profound and permanent influence of socialisation according to a particular socio-economic background, of course also simultaneously illustrate beliefs concerning category immutability, since these factors are perceived to preclude members from becoming non-members by continuing to determine either partial (i.e. non-exclusive) or full

membership of the category of origin. Representations of mutual exclusivity and immutability are therefore sometimes implicitly opposed to one another.

Like Alice, who at one point related the notion of subjective identification and self-categorisation to popular contemporary debates surrounding gender identity, Paul (58, university vice-chancellor and former professor) also drew upon the example of another social domain—in this instance, race—to emphasise that there is ‘more ballast to it than just like an ephemeral thing, that class, you can just be [...] I can be something I’m not because that’s my right to be it, which is, I think, bullshit’. He says that ‘being comfortable with yourself and where you’re from, no matter what class, quote unquote, you’re from is really important in life’:

... you can get very confused if you start to fret too much about it, trying to fight your background, either – at any level in society – and I’ve seen people who’ve done, from both sides, have tried to do that and they just end up a bit, you know, with some mental health problems, you know, you just drive you round the bend in the end, trying to constantly be something that you’re not. (Paul)

Similarly, Martin argues that if you’re ‘pretending to be something’, you’ll have a ‘stress problem [because] you’ve got to remember to wake up and put that face back on’, otherwise you’ll be ‘found out’:

You can’t act, right – the world is a stage, but you can’t act, you’ve still got to know what you are. So, the thing is, if people are trying to change because they’re just becoming emotionally mature, if they’re trying to change because they’ve built some self-confidence, belief, right, then they’re still authentic, they’re just becoming better versions of themselves. If what they’re doing is aping the behaviours of what they think is someone else’s success formula, that’s shit. They’ve still got to be, at their core, “this is me and I know what I want from life, and this is how I’ve matured who I am, and this is how I’ve become stronger and a better version of myself.” (Martin)

Martin evidently places a high value on a form of stability over transformation, yet while in this instance the process of self-improvement he describes clearly involves more than merely superficial changes, they appear to represent neither a ‘reinvention’ of nor a departure from an individual’s ‘core’, but rather the gradual development of a ‘better version’ of their ultimately stable ‘authentic’ self:

... the most flattering thing people can say to me, which they still do, is ‘Well, you haven’t changed.’ I have, but at my core I haven’t had to reinvent myself, what I’ve had to do is take the weaknesses of me, my immaturity, my lack of social skill, my lack of emotional maturity, and fix it. And it’s part of growing up, I mean, if there is a purpose to life, it’s to become reconciled and comfortable in your own skin. (Martin)

It was widely believed among the interviewees that there are limited windows for significant or authentic change during an individual’s lifetime. For example, Tom (41, barrister), who described himself as coming from a lower-middle-class background, quoted the Jesuit proverb, ‘Give me the child until he is seven, and I give you the man’. However, opinions varied considerably as to upper age limits, ranging from only five years-old to twenty-five. An important element in many of their intuitions regarding the authenticity of individual mutability was the question of choice, particularly since choice itself is often one of the key factors that individuals from low socio-economic

backgrounds are understood to be relatively deprived of, significantly restricting their potential for 'upward' social mobility, and therefore automatically rendering any ostensibly intentional form of 'downward' mobility inauthentic:

... as much as they may sort of adopt, whatever that looks like, a sort of working-class type life, they still have the education, and therefore the experiences, the mindset. They made a choice, is perhaps the point, and that choice is a consequence of having more privilege and more access, which is one of the whole problems of, perhaps, some lower-socioeconomic groups is actually not having choice and access, so I don't think it's a very authentic transformation. (Claire)

Claire says that although she feels a 'merge' of identities, she could never 'authentically say I'm truly middle-class—no, I'd feel a faker if I said that. Because I'm, you know, because I'm not, I'm, I've got these other experiences, and these are the tastes and, you know, peccadillos that are working-class'. However, in spite of the anxieties she has sometimes experienced in the past about being 'caught' or 'found out', like Martin and Nick, she also says that her intention has never been to 'recreate' herself in any way and has always been keen to maintain a strong connection with her working-class background and her family. In fact, she thinks that if someone fully immersed themselves in a different social milieu, they could potentially feel 'in their heart' that they belonged to a different class from the one they were raised in, if they wanted to. But for Aisha, who also believes that subjectivity is a fundamental aspect of class identity, this is impossible. Referring to a conversation she had several years ago at a summer course with an eminent speaker, who had herself experienced a form of long-range social mobility, she says:

... the understanding I got from her was that it's even, you know, having been the head of a think-tank, even with the jobs and the money that she's had in her life, even the degree that she holds to her name, she'll never be, or she never has felt truly middle-class, and she never has been able to do that. And if she can't, you know, who is anyone else to play-pretend that they have? If I can't, who is anyone else to play-pretend that they have? I can't see any situation in which I could possibly see myself as fully middle-class, and I don't see how anyone could pretend to themselves that they are. (Aisha)

The notion of 'true' or 'full' class membership or identity, which was expressed by many of the interviewees, is clearly incongruous with a sociological definition of class based on occupation or income, or indeed any other purely objective measure. As mentioned earlier, despite being a KC, Anne believes she will always be working-class and doesn't think 'you can change the product of your childhood, you just add layers onto it and adapt a bit [...] you don't shed one skin and go into another one, you're just the sum of your parts and those parts remain'. Again, this idea of an inevitably partial transition and hybrid identity is expressed most vividly by Aisha:

I don't think it would ever be a full transition. It's like, it's like a half-way, sort of 75% at best. I mean, again, you could have everything, but until you can completely eradicate the experiences of your past and take those, like, out of your personality, you're never going to be fully middle-class. You can't, you physically cannot erase those memories. (Aisha)

The significance of individual psychological continuity was also emphasised by Paul, who believes that 'unless you've had some sort of, kind of, total reset—what I mean

by that is like some sort of, you know, you've been bumped on the head and you've sort of had a whole, there's been a physiological reason why you can't remember who you are', then an individual's identity will be 'pretty much determined' by their class background.

Despite this sense of individual immutability, several of the older interviewees had no hesitation in describing their own children as firmly belonging to a higher socio-economic category than themselves. Yet, whether or not the categories were seen to be either intra- or inter-generationally permeable, their fundamental existence was typically assumed—no less perhaps than is the case with intergenerational social immobility—to remain largely unaltered and unalterable. Although some expanded upon this notion of category stability in predominantly structural terms—for example, as the particular product of a capitalist society or monarchy—many of the interviewees believed that there have always been social classes in one form or another in all times and all places. A recurring representation was the inevitability of socio-economic stratification and social classes either as a consequence of a universal competition or struggle for status, or, as in Yasmin's 'functionalist' description, simply as a result of specialisation and the division of labour. This view was also shared by Helena ('in sociological terms, you always need people at the bottom doing the donkey work'), who in spite of referring to the 'classlessness' not only of her husband but also her son, in fact believes that classes exist everywhere, and even strongly subscribed to a notion of the intrinsic or objective value of certain forms of cultural capital.

In clear contrast to the tendency to defer to specialist opinion rather than folk knowledge regarding categorisation—commonly found in relation to natural kinds and biological categories—Anne suggested that social scientific definitions of class membership based solely on occupational or income measures are in fact contradicted by 'reality', arguing that someone who had experienced exactly the same trajectory as her would be deluded if they were to describe themselves as middle-class:

I would accept that that's what they thought. I wouldn't accept that was the reality of the situation, because they might think they are, but everyone around them would know that they're not. So, I think you would fool yourself. (Anne)

And while Amy perceived the propensity to categorise others by class to be particular to the UK, Paul regarded it as a specific manifestation of a more or less universal phenomenon:

... [people] like to sort of size them up really quickly and sort of get the position for, feeling for where they are in the social spectrum, I don't think it's just unique to this country, I think, I imagine for an anthropologist, you'd say the same thing about tribes in the rainforest or something. (Paul)

3.4 *Naturalness and Necessity*

Representations of naturalness were often implicitly invoked in these discussions of the stability of socio-economic categories, and sometimes even foregrounded

overtly by the description of social stratification as an inevitable consequence of human nature:

... I think it's human nature. It is, absolutely, human nature, and I think that sort of, whether it's a class system or not, the idea that, 'Oh, we're doing better than you ...', that's human nature, we always want to create some divide to think 'Where am I in the pecking order? Am I doing okay?' [...] and then, therefore by definition, I suppose, it creates a system of some sort, doesn't it, a structure which is, we're, I think we're always going to have that. (Claire)

Notwithstanding the occasional references mentioned earlier to informative physical and even physiognomic features that might result from markedly different lifestyles and conditions of existence, all interviewees rejected the idea that there is any underlying natural basis to socio-economic stratification and category membership, at least in a genetic or otherwise biological sense. Yet a broader and more complex notion of naturalness was sometimes raised in relation to the subject of individual class identity, mutability and authenticity. Yasmin's conception of what constitutes naturalness in this context is clearly not something that is independent of social and cultural influences, but, like the notion of 'second nature', is rather intertwined with them throughout the process of primary socialisation, during which she believes an individual becomes 'fully formed' and their class identity is determined, rendering any subsequent change 'unnatural':

... I think that your primary socialisation is what's key in terms of your, your class identity. And by the age of eight, seven, eight, I think you're fully formed. I think you know who you are in this world and you'll never forget the fact that there were times during childhood where you wanted things and you couldn't access them. Or potentially that you were taught things that maybe your wealthier counterparts weren't taught, were taught differently. It just doesn't feel natural. And the reason why it doesn't feel natural is because it occurred during your primary socialisation which is how you formed as an individual. (Yasmin)

Similarly, Aisha described the idea of an 'upwardly' socially mobile individual identifying as middle-class as 'not a natural occurrence'. For Samuel, meanwhile, the feeling of 'unnaturalness' in his own social mobility trajectory is explicitly connected with the conscious and intentional modification of his behaviour, for example in the way that he now speaks, which he describes as being 'cultured, in that I've really taken time to work on what I say and how I say it'. He acknowledges that this deliberate process of cultivation may mean that, however far it takes him, in the eyes of some of his peers he—and even, he suggests, the next few generations of his family—will never be recognised as a 'natural' equal:

... it is a conscious effort to break the mould of what you've previously been. I mean, even if I think of myself as an example, yeah, you know, I haven't naturally made a change from what I previously was, I've had, I have had to work on it, to act the way I am, and I recognize that even in a, let's say, so even in like ten, twenty, thirty years [...] there will always be some people who won't see me as a natural, their natural counterpart, their natural friend, and they will, they might see differently [...] whether it's for me or for them, it's not, it doesn't feel natural, and it won't, and I don't think it will feel natural until maybe the, the next [of his descendants to bear his name] in a hundred and fifty years, you know, with the benefit of a large dynasty behind him, will feel like, yes, you know, Grandpapa got me here, or something like that. (Samuel)

Many of the interviewees, and not only those who endorsed a unidimensional sociological definition of class, believed that a certain volume of economic capital and degree of financial security is a necessary, although not necessarily sufficient, characteristic for category membership. For Samuel, this is reducible to individual choice, whereas from Alice's dichotomous 'Marxian' perspective it is rather a matter of power in relation to others. Similarly, Tom had argued earlier in another context that 'at the risk of sounding like a Marxist [...] where you are economically is where you are in terms of class, because otherwise to use the term 'class' in a really sort of fluid way to basically mean what kind of social hats do you wear, that empties it of most use'. However, when considering the question of necessity directly, he noticed that he instinctively found himself thinking of class in the latter sense, according to which he then conceptualised necessary characteristics no longer in terms of particular sortal features but rather as a group-specific placeholder instead. Indeed, as has already been illustrated, objective social scientific definitions are often rejected in favour of lay understandings in which notions of necessary (and indeed even polythetic) features vary considerably—including characteristics such as accent or language skills, for example, according to Helena and Anne, respectively—and, as appears to be the case in Aisha's description, may be represented by a conjunction of socially shared and subjectively formed prototypes:

I think to be middle class you need to have, you need to have encouraging parents [...] you need to have some sort of academic motivation from home. That's a very middle-class thing. And I think to be working-class you need to have trauma. You need to have faced quite a bit of adversity. You need to know what it's like to experience quite a few things and quite a few fears from a very young age, that other people don't experience. (Aisha)

And it is clearly implicit in several of the interviewees' perceptions of the immutability of category membership—in Yasmin's belief that an individual's class identity is determined by their primary socialisation, and both her and Anne's conviction that they will always be working-class, irrespective of their occupation or income, for example—that without the relevant background and past experiences an individual cannot be considered, nor can ever become, an 'authentic' member of a different social class from the one they were raised in:

Like I said, when you go through working-class experiences, you develop a working-class personality and working-class traits, because it's a huge thing to go through. And so, no, it's never going to be authentic, unless you can, like, the night before cram sort of exam-style, you know, the experiences that I've had, which is very unlikely because it's going to be a hard night ... (Aisha)

4 Discussion

The objective of this study has been to examine how the individual components of psychological essentialism may be manifested in conceptualisations of socio-economic categories and social mobility in the UK, through an exploration of the perspectives and experiences of socially mobile individuals themselves. In focusing

attention on its constituent components, rather than simply seeking to identify examples of essentialist thinking *per se*, the study also aims to avoid the tendency to draw conclusions based on a vague or partial definition of essentialism, by which it may be conflated with only one or two components alone—for example, naturalness or immutability—and potentially overlook more compelling, though perhaps less well documented, forms of essentialist thought. The UK was assumed to be an ideal cultural context in which to conduct this analysis, given its longstanding reputation as a country ‘obsessed’ by class distinctions, and indeed the very rich and vivid testimonies offered by Samuel, Yasmin and Aisha in this study, clearly demonstrate that those from ethnic minority backgrounds are far from immune to the particular salience and significance of socio-economic background in the UK.

One might reasonably expect that those who have already successfully traversed the boundaries between socio-economic categories, or are currently in the process of doing so, might be more likely to reject a deterministic and essentialist view of category membership, but for several of the interviewees this was evidently not the case. In fact, paradoxically, for many it was the experience of social mobility that reinforced their belief in the immutability of their own and others’ underlying ‘class identities’. Given that social mobility is usually defined in sociological terms as a movement between social class categories—which are themselves defined primarily according to occupation or income (Payne, 2017)—it is obvious that these interviewees simply do not share this definition, either of social mobility or of class.

There were clear indications in some of their responses that an individual’s socio-economic background is often believed to be identity-determining and that this identity is ultimately immutable, not simply in a superficial or structural sense but rather inherently. This was illustrated most vividly, for example, in the idea expressed by Yasmin that class identity is determined by primary socialisation and that any subsequent change would be ‘unnatural’; in Aisha’s notion of clearly distinct and starkly contrasting ‘class personalities’ and the impossibility of an individual achieving ‘full’ or ‘true’ membership of a class they were not raised in; and by Helena’s belief in her own internal, inimitable and immutable working-class self, which remains unaffected by any number of significant superficial transformations. Other notable representations that appear to have some bearing on a social determinist form of essentialism were the informativeness of certain enduring physiological—and perhaps even physiognomic—features; the idea that socio-economic background may profoundly and permanently influence how an individual thinks or their ‘mindset’; the assumption of unanimously shared class-based social norms and codes of behaviour; and the notion of class identity as a feature of an apparently universally-known objective reality, contrasting with and repudiating social scientific analyses.

And yet it was also evident from very many of the interviewees’ experiences that, whether as a result of conscious adaptation or otherwise, ‘upward’ social mobility can sometimes involve quite significant modifications in an individual’s observable behaviours and characteristics; a fact that therefore often brings it into conflict not only with the belief in a deep, non-obvious, and immutable class identity, but also with the high value that is commonly placed on the notion of a single, coherent and, above all, ‘authentic’ self that is impervious to context and the demands of different

social interactions, and remains identical across space and time. This phenomenon has been acutely observed by Lahire (2011: 15): ‘We well know how “lunatics”, “weathercocks”, “opportunists” or “chameleons”, those who change their opinion and their behaviour depending on their interlocuter or the situation, are not well thought of: at the opposite pole are those whose behaviour is “frank” and who proudly display their pride at not being moved (“influenced”) by the most varied situations they encounter. Everything happens as if there were a specific symbolic and moral profit (as the very terms of inconstancy, versatility and unfaithfulness to oneself suggest) in believing oneself “identical” or “faithful” to oneself at every time and place, whatever the events experienced or tests undergone (‘I’ve not changed’; ‘I’m always the same’).’

But the inevitable tension caused by a simultaneous pull towards both transformation and stasis that social mobility often seems to exert is also particularly well-captured in these interviews by the experience of Martin, who evidently takes pride in both his own ‘self-improvement’ and the stability of his identity in the eyes of others, and reconciles them with each other through the idea of an aspirational but ultimately unchanging ‘core’—in contrast to merely ‘acting’ or ‘aping’ the behaviours of others, or in Paul’s words, ‘pretending to be something you’re not’. The difference, therefore, between the behavioural changes undergone or enacted by Martin, on the one hand, and Samuel, for example, on the other—who described deliberately altering the manner of his interactions with others according to the social context, consciously cultivating his speech and attempting to ‘break the mould of what he had previously been’—is less perhaps the actual extent of these changes, or even whether they initially involve imitation (as opposed to being somehow purely and spontaneously self-generated), than the degree to which they are perceived to symbolise a change in category membership. If an individual’s identity is understood to be profoundly shaped by their class background then any alteration in behaviour that is widely recognised to be symbolic of a different social class appears to signify a transformation of (or an ‘inauthentic’ and therefore futile attempt to transform) their own individual identity. Category-based and individual essentialism—corresponding respectively to the philosophical concepts of quiddity and haecceity (Hood, 2014)—are typically studied in isolation as if they were entirely separate forms (Newman & Knobe, 2018), yet this study’s focus on the experience of category change at an individual level illustrates how they tessellate. It also provides a useful reminder, against the tide of much of the social psychological literature in this field, that essentialism is not merely a rhetorical weapon employed in the service of pernicious, derogatory and dehumanising representations of out-groups, but is in fact a far more pervasive and flexible cognitive resource which may also be invoked in self-representations (at either individual or group levels) to fulfil a variety of psychological and emotional functions, such as the promotion of in-group identification and solidarity, collective organisation and action, or perhaps simply as a way of understanding the vast differences that sometimes appear to exist between different categories of people and the great difficulties that are often involved in trying to bridge them. While some of the representations documented here clearly envisage a refusal of recognition or acceptance from the destination out-group, in others the charge of inauthenticity

or self-delusion appears to come predominantly from within the in-group itself, an example perhaps of ‘policing the exit option’ (Brubaker & Cooper, 2000: 33).

In-depth semi-structured interviews have rarely been used in research on psychological essentialism despite the possibilities they afford for probing the intricacies of essentialist thinking, as has been well-demonstrated by some of the ethnographic data gleaned from cognitive anthropological research (e.g. Gil-White, 2001; Regnier, 2015). The richness and complexity of many of the conceptualisations revealed in the present study alone also highlights the weakness and imprecision that frequently attends experimental studies, not least Haslam et al. (2000), whose own generalised descriptions of the individual components of essentialism fail to preclude interpretations based on purely external or structural factors, yet have been used to make bold assertions concerning fundamental relationships between the components (see also Haslam, 2014). A useful illustration of the significance of this oversight may be provided by Kanovsky (2007) who, combining participant observation and experimental procedures, showed that although his informants believed that an individual could have multiple ethnic identities in a relatively superficial, formal or technical sense, at a deeper level ethnicity was largely understood to be mutually exclusive. Insights such as these suggest that qualitative approaches in general can make a contribution to research on psychological essentialism far beyond simply identifying, in a facile diagnostic fashion, its strategic and ideological manifestations in an ever-expanding array of different social and cultural contexts, but can instead enrich an understanding of the concept itself by shedding further light on the vagaries of its nature, structure and logic, in turn stimulating further experimental research.

To conclude with an example from the present study, as well as testing the prevalence of some of the beliefs outlined here in a much larger and more varied population, thought experiments—such as ‘adoption’ or ‘transformation’ tasks, for example, which regularly feature in the experimental literature—could potentially examine the particular significance of both psychological continuity and stage of socialisation on intuitions regarding socio-economic category membership and questions of mutability. The emphasis on ‘social origin’ already referred to in Rangel and Keller’s (2011) BSD scale indicates that primary socialisation is a very important factor in social determinist beliefs, clearly distinguishing it from what has been described elsewhere as ‘historical essentialism’ (Brubaker, 2018), in which category membership appears to be determined by ‘lived experience’. Origins are also a significant aspect of essentialist beliefs about artefacts, where the putative essence is arguably equivalent to a particular historical path (Gelman, 2003), yet some of the discussions of the impact of early socialisation illustrated in this chapter resonate with the profound and complex interaction of biological and social factors understood to be entailed in the process of enculturation (Wagner, 2024). Future research could therefore explore further the extent to which social determinist beliefs represent an exclusively social form of essentialism (merely given emphasis by explicitly naturalising representations), or whether they are in fact embedded in implicit theories that involve an intertwining of biological and social processes.

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The Limits of Essentialism Within and Across Territories



Adrian Bell and Cristina Moya

1 Introduction

The evolutionary social sciences have largely emphasized the threats posed to individuals, and to groups, from interactions with outgroup members. This literature encompasses multiple arguments, including that outgroup individuals are likely to; 1) defect on public good contributions while taking advantage of them (Cimino & Delton, 2010), 2) carry pathogens to which others have little immunity (Fincher & Thornhill, 2012; Navarrete et al., 2007; Park et al., 2003), (3) cause coordination failures during interactions given their culturally different norms (McElreath et al., 2003), (4) be aggressive, especially in the context of warfare (Chagnon, 1988; Mathew & Boyd, 2011; Schaller & Neuberg, 2008; Tooby & Cosmides, 1988), and (5) compete for mates (Sidanius & Pratto, 2001), or other resources (Sozou, 2013). These perspectives emphasize the importance of guarding group boundaries. Psychological mechanisms or cultural norms that are skeptical of people's ability to change group membership (Bastian & Haslam, 2006; Gil-White, 2001) can function to avoid such costly interactions. Such intuitions that group identities are stable are often considered part of a package of essentialist beliefs.

However, phylogenetic, historical, and ethnographic evidence make us wary of accounts that strongly emphasize impermeable group boundaries and unmitigated essentialism to the exclusion of positive sum intergroup interactions (Glowacki, 2024; Pisor & Ross, 2022). While both our closest relatives, chimps and bonobos, guard group boundaries, females of both species migrate out of their natal group at reproductive maturity and fully integrate into new groups (Wilson & Wrangham, 2003). This obligate sex-biased dispersal and integration into new groups is common to

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nearly all primate species. Phylogenetic comparisons are unlikely to get us much stronger inferences about the nature of evolved human intuitions for intergroup interactions; while coalitions of male chimps do aggress against outgroup males during border patrols, bonobos do not, and researchers have even witnessed different groups of bonobos intermingling, grooming, and copulating without aggression (Pisor & Surbeck, 2019). We also know that intergroup migrations have been prevalent for much of the human past (Bellwood, 2014). This can be inferred from genetic, (Hellen-thal et al., 2014), archaeological (McBrearty & Brooks, 2000), and historical (Bernstein, 2009) evidence. The ethnographic literature shows similar patterns, even among small scale societies (e.g., over 20% of marriages were estimated to be intertribal among Western Australian aboriginal people; Tindale, 1953) and highlights mechanisms whereby ethnic boundaries may look fixed while individuals migrate or interact across them (Barth, 1969; Bunce & McElreath, 2018). This means that beliefs that people cannot change their group identity would often map on poorly to the empirical reality of human social worlds.

The evolutionary literature on outgroup avoidance largely ignores the potential individual and group benefits to intergroup interactions and of allowing migration. There are group-level benefits to immigration or allowing identity shifts, that may, but need not, conflict with individual interests (Moya & Scelza, 2015). The most straightforward group-level benefit to allowing migration is population growth itself since populations can expand faster via migration than natural reproduction. By definition, cultural groups that have norms that encourage and assimilate immigrants will expand relative to ones that do not, all else equal (Boyd & Richerson, 2009). The success of proselytizing religions serves as one such example of cultural group-level success through the diffusion of ideas (or incorporation of believers into cultural groups) rather than through reproduction (e.g., Stark & Neilson, 2012). Extreme cases of groups that persisted through adoption such as Shakers in the US (Paul, 2015) and the Marind of South New Guinea (van Baal, 1966) illustrate the power of this mechanism. Norms of allowing and assimilating migrants could be particularly beneficial in cases where there are returns to scale either because numerical superiority leads to further expansion, as is often the case through warfare, or even in the absence of territorial expansion, if migrants expand a society's economy by specializing in new or underserved niches. The benefits of migrant niche specialization and economic expansion have been documented robustly in modern economies (Smith, & Edmonston, B. (Eds.), 1997), though there is limited evidence on the matter for societies with less complex economies beyond the spread of innovations. Migration or intergroup contact can bring group-level benefits by introducing technology (e.g., plant domesticates) and sparking innovations via cultural recombination (Beheim & Bell, 2024; Creanza et al., 2017; Derex & Boyd, 2016). This probably explains why societies of the Pacific with historically higher rates of intergroup interaction developed more complex technologies (Kline & Boyd, 2010). This line of evidence suggests that migrants may have had some of the same material benefits in pre-industrial societies as they do in modern economies.

At the individual level, it is easier to understand the benefits of intergroup interaction in terms of increased mating opportunities (Kramer et al., 2017), informational exchange, trade (Bunce & McElreath, 2018), and risk buffering (Pisor & Gurven, 2016). However, the average individual has little actual stake in whether new outgroup individuals become a member of their group. The marginal costs or benefits of having an individual join a group are likely negligible for any one person in a reasonably sized group. Insofar as the migration rate does affect individual payoffs via the group-level costs and benefits discussed above, a given individual likely has little influence, and policing the border or encouraging migration turns into a collective action problem. This means that individual actions regulating migration rates likely need to be motivated through institutional support (e.g., reputational benefits or payments to proselytizers or border patrol).

In this paper, we model such a context where individual incentives for regulating migration are aligned with group interests. This means that having a belief—be it aversion to, or approval of, outgroup migrants to shift identity—has a small cost or benefit to the individual, but its frequency in the population has consequences for everyone's payoff and therefore on population-level dynamics. This formalization captures dynamics such as some outgroup-averse individuals taking risks to patrol the border, while non-averse individuals pay them to do so (meaning that they both do equally well relative to each other). Similarly, outgroup averse individuals could be subsidizing non-averse proselytizers.

We build and analyze two models to illustrate the circumstances under which selection favors outgroup aversion in a population. That is, we examine which demographic pressures favor residents of a group to take actions that prevent migrants from becoming ingroup members. Cost and benefits follow from work on optimal group size theory and the demonstrated effects of population size on individual incentives to join/include additional others (Brown, 1982; Smith, 1985). Thus, we first focus on how a society's size and resource context influences the extent of outgroup aversion. This first model only considers the benefits to residents in the host group. We then expand the model by adding a cultural difference between the host group and the group from which immigrants arrive. This adds a possible cost to individuals who miscoordinate with someone with some cultural differences. In this case, we consider benefits shared between residents and recent migrants and costs to each subculture. While it would be difficult to empirically weigh the costs and benefits of outgroup actions and beliefs that thwart migration over evolutionary time, modeling these dynamics makes explicit the parameters that can favor outgroup-averse psychological tendencies or cultural norms. This is one way of operationalizing essentialist intuitions or ideologies, insofar as they govern the possibility that migrants become group members.

2 Model Description and Analysis

2.1 *Verbal Description of the Models and Analysis*

We start with a simple, general model of the evolution of outgroup aversion and build-in terms that capture the within and between-territory dynamics around resource pressures and social coordination. The outgroup aversion captures one possible behavioral consequence of essentialist ideas—an unwillingness to accept outgroup members to the ingroup. Note the model in Sect. 2.2 is agnostic about the underlying cause of outgroup aversion. As such evolutionary processes here can be conceptualized as happening over genetic or cultural time. However, when we get to Sect. 2.3 and add cultural heterogeneity between groups, the model more readily captures a cultural evolutionary dynamic.

We model a single population subsisting off a territory, or patch. We assume the environment for this population fluctuates between two states: (1) an expansionist one, where individuals experience greater returns with a larger population because of economies of scale in warfare or production and (2) recession, where patch quality or economic resources support a set number of individuals via a reduced carrying capacity. The environment is in each state with a constant probability. Population size is determined by growth parameters within the patch and migration flow from outside the patch. We assume the rate of natural increase is exogenous, such that the population within the patch can only evolve to regulate its size by affecting migration flows from a constant outside source, not by changing its fertility rate. We do not consider emigration from the population to an outgroup.

The ability of the group to accept more migrants is a function of individuals' outgroup aversion trait which we let evolve. The frequency of outgroup-averse individuals in the population is inversely proportional to the number of immigrants allowed to enter the population. We frame the evolution of outgroup aversion as a continuous strategy, meaning we ask if there are levels of outgroup aversion that can invade a population full of people with the common type levels of aversion. Note that as is the case with continuous strategies, the level of aversion can also be interpreted as a discrete strategy—i.e., as the proportion of outgroup averse individuals in the population.

Two further variations of the first model add cultural content to the populations that were previously only defined by patch origin. That is, we move from modeling simply territorially defined groups (Sect. 2.2), to territorially and culturally defined groups (Sect. 2.3). This allows us to consider the role of within-patch benefits of coordination between residents and between migrants with different cultural expectations. We ask what level of out-group aversion would invade a population with a common-type level of aversion among migrants and residents. We combine the results of the first game theory model of resident outgroup aversion with this second model of outgroup aversion evolving among residents and recent migrants. This yields an analysis of the dynamics of out-group aversion using two different mechanisms, the former acting across, and the latter within a group's territory.

2.2 Outgroup Aversion Across Territories

Let the individual-level payoffs to an expansionist state be $\pi_s = \beta P$, where P is the population size and β translates population size to a per capita benefit. Then in a recession the payoff is $\pi_r = P\beta(1-P/K)$, where K is the carrying capacity during a recession. This means that during a recession, payoffs are directly proportional to the unused fraction of the carrying capacity $(1-P/K)$. The fitness of an individual in this population thus becomes,

$$v = (1 - u) \cdot p\pi_s + u \cdot p\pi_r \quad (1)$$

where u is the fraction of time the population spends in a recession, otherwise the population experiences an expansionist state.

Payoffs are contingent on population size, P , which is governed by internal growth and migration. For the sake of simplicity, let's say internal growth for a time period yields a population size of P_I and growth from migration is $P_M(1-x)$, where P_M is the number of people attempting migration and x is the proportion of individuals in the population occupying the patch who have outgroup averse beliefs, thus $P = P_I + (1-x)P_M$. This assumes the outgroup aversion phenotype directly mediates immigration, allowing all immigration when outgroup aversion is absent ($x = 0$), and preventing all migration when everyone is outgroup averse ($x = 1$), and otherwise preventing migration in proportion to the frequency of people with outgroup averse beliefs (x). That is, the total number of outgroup averse individuals, xP_I , prevents xP_m individuals from entering. We assume this per-capita cost is distributed across all residents, supposing a potential cooperative dilemma has been solved through other mechanisms. With components of (1) defined, the value of x that maximizes (1) is:

$$\hat{x}_1 = 1 - \frac{K - 2uP_I}{uP_M} \quad (2)$$

The outgroup averse phenotype becomes more common as potential migrant flow (P_M) increases relative to internal growth (P_I). It's equilibrium frequency also increases under more frequent recessions (larger u values), and when recessions have higher impacts, meaning a lower carrying capacity (K) when a recession occurs. The meaning of this result illustrates a general feature of the model. The outgroup averse phenotype frequency depends on how a population's payoffs are affected by environmental or economic demands (i.e., their carrying capacity, K), and the frequency with which they must do so.

One could reasonably argue that even in expansionist contexts we are unlikely to see positive returns to having infinitely larger populations. More realistically, let's assume that the density-dependent effects of a recession or an economy of scale can be represented by contrasting carrying capacities K_r and K_s , respectively, where $K_s \gg K_r$. The economy of scale condition gives greater payoffs to larger populations

than under the recession condition. Under this scenario, using the same procedure as above, we find the optimal level of outgroup aversion:

$$\hat{x}_2 = \frac{P_I + P_M}{P_M} - \frac{K_s K_r}{2P_M(uK_s + (1-u)K_r)} \quad (3)$$

This equilibrium highlights the following factors as important to immigration: 1) the relative ratio of internal growth (fertility) to immigrant flow, represented in the first term, where more immigrant flow leads to more outgroup aversion and 2) the effects of economic fluctuations either favoring or not more population growth, described in the second term.

Figure 1 illustrates this result. With a more significant economy of scale relative to current population growth we see less outgroup aversion, so the curves on the right panel rise earlier with the probability of a recession. However, Fig. 1 shows that a very large fraction of immigrants is needed to increase the equilibrium frequency of outgroup aversion. In either the large or low economy of scale increase condition, if migrants are one-tenth of the total population, the population would have to be in a recession over 80% of the time on average for outgroup aversion to increase. In other words, the evolution of outgroup aversion requires very high rates of migration and of economic/environmental recessions. Up to this point the model analysis of migrant flows and recession probabilities suggests either no outgroup aversion or a mixed equilibrium, allowing migrants the opportunity for group membership change.

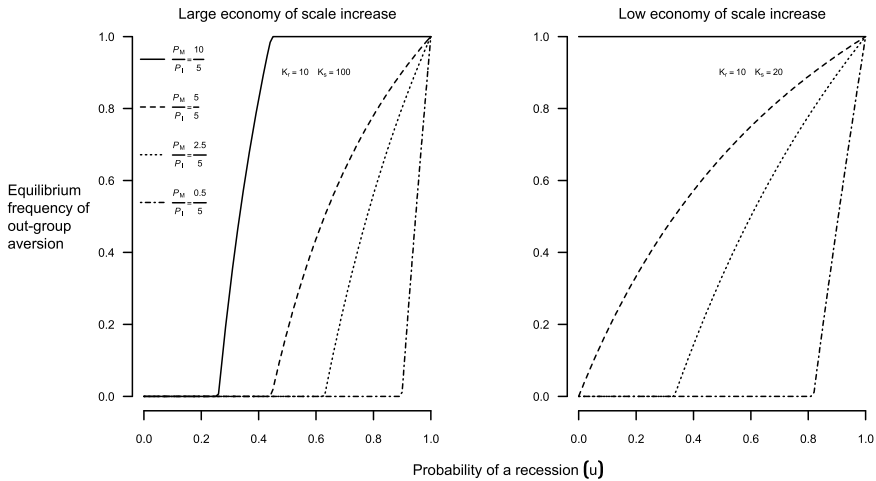


Fig. 1 Plot of Eq. (3), the equilibrium frequency of the outgroup aversion under varying probabilities of recessions. The two panels illustrate two scenarios, on the left panel when the economy of scale condition is high such that greater population size provides greater rewards ($K_s = 100$), and on the right panel when the economy of scale condition prescribes only a modest increase in population for greater rewards ($K_s = 20$). Within each plot the curves represent different relative contributions of immigrants (PM) and endogenous growth / fertility (PI) to population size

Now we consider the level of outgroup aversion expected with contrasting levels of internal population pressure across fast and slow population growth trajectories. At the equilibrium outgroup aversion phenotype shown in expressions (2) and (3), the fraction of migrants in the population becomes,

$$\hat{m}_1 = 1 - u \frac{P_I}{K} \quad (4)$$

for the single carrying-capacity model and,

$$\hat{m}_2 = 1 - (1 - u) \frac{2P_I}{K_s} - u \frac{2P_I}{K_r} \quad (5)$$

for the two carrying capacity formulation. Both results highlight the fraction of internal population growth and size (P_I) to carrying capacities in the resource-limited (K_r) and abundant resource environment (K_s), remembering $K_s > K_r$. This result suggests that we will see varying levels of migrant composition as populations grow, and since $K_s > 0$ and $K_r > 0$, this proportion will be more strongly affected by internal growth.

Figure 2 illustrates this dynamic from result (5), showing that populations with fast and slow logistic growth curves build up levels of outgroup aversion at greater and lesser rates, respectively. The latter reflect similar dynamics to populations in expansionist states. This provides a clear prediction of what level of immigrant acceptance we may expect at contrasting levels of population pressure—populations will remain non-averse if far from population pressure points. This could be reflected in, for example, higher rates of marriage exogamy when far from a carrying capacity, when internal fertility rates are low, and when recessions are rare. Note also that as a result, migrants make up the majority of individuals at the beginning and early-stages of the growth curve.

2.3 *Outgroup Aversion in a Culturally Heterogeneous Resident Group*

Up to this point we have considered a culturally homogenous resident population, where recent migrants assimilate instantaneously to the resident population in terms of any interaction-relevant behavioral trait and in terms of fitness. This assumption may bias our results against the outgroup aversion phenotype as migrant groups often retain distinct cultural traits that can lead to resident-migrant miscoordination. To investigate, we will briefly consider how traits used for coordination affect outgroup aversion.

Let's assume individuals coordinate on cultural norms to (e.g., to mitigate costs to scarce resources during recessions, or start joint ventures in times of plenty). As the suite of cultural traits between migrants and residents differ, recent migrants may be

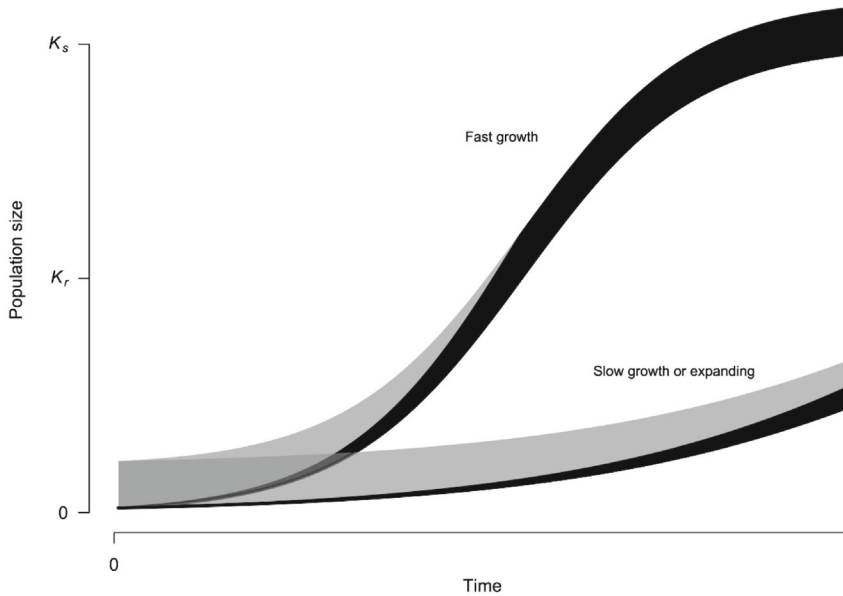


Fig. 2 Fraction of the population that are immigrants under fast and slower growing populations due to internal (e.g., fertility) rates, upper, and lower curves, respectively, from result (4). The lower curve also captures the dynamics for a population in an expansionist state. The gray shaded regions illustrate the fraction of the population that result from immigration, versus from internal growth (black), when the outgroup aversion phenotype is shaped by selection (see main text for model description). Parameter values across curves is $K_s = 1000$, $K_r = 500$. The growth parameter value for the upper curve is $r = 0.05$, and the lower curve is $r = 0.02$

the targets of outgroup aversion after coordination failures due to divergent norms. Thus, we relate the outgroup aversion phenotype not just to guarding borders, but to possible cultural conflict within the group.

First, we examine the payoffs for residents. Assume a cultural trait is common among the resident population but is not found among recent migrants. Individual-level payoffs in part derive from returns to a coordination game based on the cultural trait during a recession, $\pi_r = P\beta(1 - P/K) + \delta P_I/P$, or during an expansionist period, $\pi_s = \beta P + \delta P_I/P$. The modified term to (1) gives an additional payoff of δ to residents who successfully coordinate with other residents.

In conditions of frequent recession, the addition of the coordination game causes outgroup aversion to go to fixation (i.e., reach 100% of the population) where before a mixed equilibrium existed. While the probability of a recession still governs the general shape of the fitness landscape—coordinated benefits under frequent recessions creates a fitness peak for aversion to go to fixation. We see this when analyzing the condition for $dv_r/dx > 0$ when $x = 0$, or when outgroup aversion can invade:

$$u_r > \frac{K}{2P} \left(1 - \frac{P_I \delta}{P^2 \beta} \right) \quad (6)$$

The minimum recession frequency required for outgroup aversion to increase is lower when 1) populations approach the carrying capacity, 2) population growth is driven more by internal resident growth, 3) the coordination benefits (δ) increase, and 4) the benefits to an economy of scale (β) decline.

We now incorporate coordination consequences for both residents and recent migrants into the model. If the coordinating trait can be changed by an individual, whose presence in the group depends on the level of outgroup aversion at the time, then this suggests a coevolutionary dynamic by which out-group aversion and coordinating traits coevolve. If we assume that the coordinating trait changes quickly relative to the aversion phenotype and immigration is a small fraction of the population, then we can also recover condition (6) more generally for when outgroup aversion is favored among residents. As before, high population pressure expands the scope for aversion among residents. We now see that cultural coordination between residents has the same effect, though tempered by economy of scale benefit to larger populations. As we did for residents above, we can define a fitness function for recent migrants based on coordination among migrants during recessions, $\pi_r = \beta P(1 - P/K) + \delta(1 - x)P_m/P$, and during economies of scale, $\pi_s = \beta P + \delta(1 - x)P_m/P$. As calculated above for residents, the minimum frequency of recessions required for outgroup aversion to invade a population of non-averse *recent migrants* becomes:

$$u_m > \frac{K}{2P} \left(1 + \frac{P_I}{P^2 \beta} \right) \quad (7)$$

It is easy to see that the threshold recession rate which favors preventing future migrants from entering is higher for recent migrants than for residents ($u_m > u_r$). This is because we are assuming migrants come from the same cultural background and therefore experience migrant-migrant benefits to coordination. The key question is how much difference is there between the migrant and resident conditions, as greater differences suggest greater *within* patch conflict between residents and migrants over the threshold. The difference between the two thresholds (6) and (7) is:

$$u_m - u_r = \frac{\delta}{\beta} \frac{KP_I}{P^3} \quad (8)$$

If there is a benefit to coordination, conflict between residents and recent migrants will increase if populations are farther from carrying capacity ($P < K$) and if more of the population are residents ($P_I > P_m$). Conflict will decrease if the economy of scale benefits (β) increase.

Adding this result, we illustrate in Fig. 3, the extent to which outgroup aversion will arise across and within a territory or boundary. The two darker regions in Fig. 3 show aversion evolving as a result of greater population pressure and/or coordination benefits. There is little scope for outgroup aversion in intermediate lighter regions.

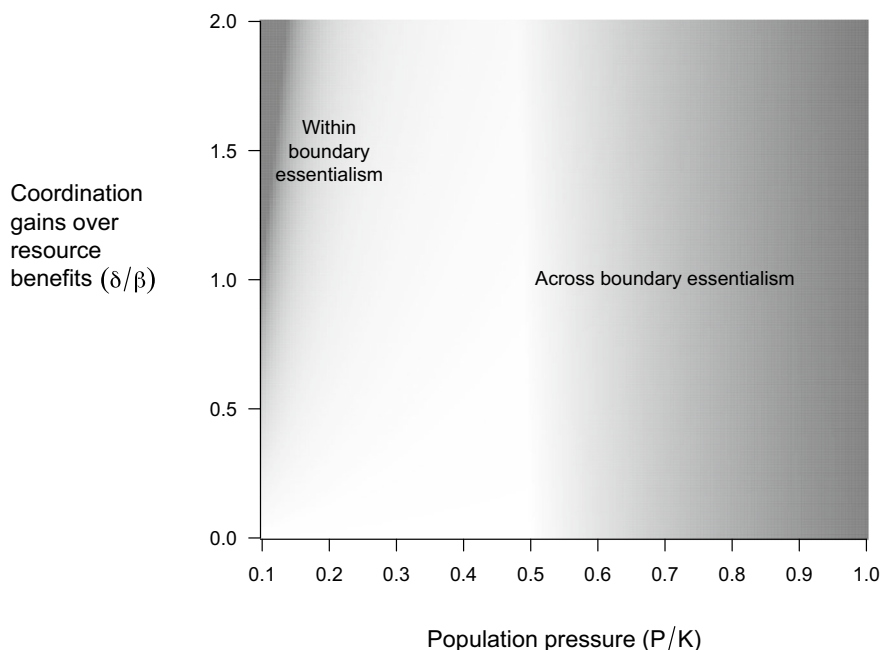


Fig. 3 Parameter space for outgroup aversion to evolve as a function of cultural coordination to economies of scale benefits ($\frac{\delta}{\beta}$) and population pressure ($\frac{P}{K}$). Darker regions show a greater scope for selection favoring identifying outgroup individuals and recent migrants for exclusion or conflict. The two darker regions illustrate separate mechanisms for the evolution of outgroup aversion (coordination costs between recent migrants and previous residents in the top left, and resource pressures on the right). Plot of result (6), the scope for aversion across territories overlaid on result (8), the extent of aversion conflict within a territory between residents and recent migrants

Unless a population is constantly restricted by a carrying capacity, very high population pressure is required to favor the outgroup averse trait. In contrast, within-patch conflict, between residents and recent migrants, is favored at low population pressure with even relatively moderate benefits to coordination.

3 Discussion

Our model analysis outlines two mechanisms that could favor the essentialization of a group boundary through an outgroup aversion phenotype. The first mechanism is a cross-border interaction that allows or prevents outgroup members from joining a population. At the beginning of the growth curve migrants make up the majority of the population growth. As the population approaches carrying capacity our model predicts an increase in mechanisms that reduce the proportion of immigrants that

enter the population. High rates of recessions and large potential migrant flows further increase the scope for outgroup aversion to evolve.

The second mechanism selecting for outgroup aversion stems from within-patch coordination. In this case, if residents and recent migrants have different cultural norms of interaction, conflict can arise regarding further immigration. While in the first model the benefits from a shared economic activity limited outgroup aversion, the addition of a cultural coordination game allows aversion to be favored under a wider set of conditions. This includes very low population pressure scenarios. Counter-intuitively, low population pressure scenarios show a greater discrepancy between resident and recent migrant outgroup aversion beliefs. This is because very high population pressure aligns resident and recent migrant interests to protect an economic base subject to frequent recessions. In the absence of such pressure, migrants favor greater co-ethnic coordination with other potential immigrants—if there is a significant coordination benefit. This creates a conflict of interest between residents and the recent migrants.

These two mechanisms operate in separate parameter spaces (Fig. 3) and unify evolutionary reasoning on outgroup aversion based on coordination failures and resource competition. The former can be thought of as a pressure arising from within the group as a consequence of culturally different migration. The latter can be thought of as a motivation that stems more directly from boundary maintenance motivations for securing resources. Both can result in an essentialism-like outgroup averse trait under some parts of the parameter space. These are more likely when coordination benefits and population pressure are very high. Furthermore, both sources of outgroup aversion require limited economies of scale and limited synergistic benefits of new members. Thus, the parameter space favoring aversion may be empirically restricted.

Many of the dynamics illustrated by these models have empirical support. For example, economic recessions are often accompanied by increases in anti-immigrant attitudes (Kwak & Wallace, 2018), and are patterned in ways that suggest perceived direct labor competition from migrants. Furthermore, the shifts in outgroup aversion often target immigrants with similar skill levels to the respondent, suggesting that the threat of economic competition rather than cultural distance, drives recession-related changes in attitudes (Goldstein & Peters, 2014). Similarly, pro-immigrant policies are often proposed—e.g., by politicians (Ley & Hiebert, 2001) and demographers (Simon et al., 2012), as solutions to low fertility rates within countries, suggesting that outgroup aversion is more likely when populations perceive themselves to be nearer a carrying capacity or an ideal population size. In line with this interpretation, anti-immigrant sentiments are often stoked by concerns about immigrants' higher fertility (Huang, 2008). However, the idea of regulating population with immigration is controversial, even in many countries with below replacement fertility (Kippen & McDonald, 2004). This suggests that factors such as concerns over cultural differences resulting in coordination costs, like those captured in the second model, indeed moderate outgroup aversion. In fact, cross-sectional data across European countries suggests this is the primary motivation for most people supporting restrictive immigration policies (Ivarsflaten, 2005; Sammut & Mifsud, this volume). Migrants are not only viewed with an economic lens by residents, but also in ethnocultural terms

(Brettell, 2016). In summary, the empirical literature supports the need to consider demographic, economic, and cultural factors in tandem when modeling the evolution of outgroup aversion.

Some of the model's assumptions may limit its broader application. New group members are assumed co-ethnics and receive coordination benefits among themselves. However, multi-ethnic inflow will lower co-ethnic coordination benefits that influence outgroup aversion, while the effects via population pressure would remain the same. This may increase the scope for outgroup aversion, particularly among migrants. On the other hand, we assume random interactions in this model whereas people often assort with others who have similar norms. Assortment between migrants, residents, or generally anyone with similar norms should decrease the scope of outgroup aversion. Similarly, the ability to strategically adjust interaction norms in the context of a coordination game should mitigate motivations for origin-based assortment.

Finally, for generality of argument and simplicity the evolutionary equilibria of the models are studied here. Since people are unlikely to always perceive environmental conditions and feedback accurately, it will be important to consider learning dynamics when applying similar models to real cases. This may include studying convergence or non-convergence to equilibria given rates and modes of learning. Further, stochastic properties of other parameters in the model may lead to different expected outcomes or outcome variance.

4 Conclusion

Rather than universal expectations of outgroup aversion and unmitigated essentialism, our model suggests closer attention to the conditions under which multiple groups interact and the tradeoffs involved in allowing or preventing group shifts. We illustrate two empirically plausible mechanisms whereby essentialist beliefs or ideologies may arise; resource competition in a given territory and coordination costs with culturally different migrants. Human demographic history has likely crisscrossed the parameter space favoring or disfavoring outgroup aversion multiple times, and we may expect mixed strategies in a population. Outgroup aversion is not expected to evolve at all for a large part of the parameter space. In such a case, the focus of inquiry should shift to the dynamics regulating group affiliation and acculturation rather than boundary maintenance.

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Part 4: The Collective Construal of Identity and Essentialism

Mutual Maltese and Arab Representations in Malta: A Project of Reconciliation



Gordon Sammut and Rebekah Mifsud

1 The Problem of Diversity

Intergroup and intercultural relations have dominated the political landscape in many Western democracies for decades. The rising tide of far-right sentiment has resulted in a scramble for populist votes that has put integrationist aspirations on the back foot. In the political domain, the once alluring prospect of building peaceful and multicultural global cities has been relegated to the ranks of the naïve. In an era of overt military escalation and extremist political rhetoric, the problem of living alongside radically different others takes on a confrontational dimension in everyday life as citizens are called upon to take sides for or against the Palestinian cause, the war in Ukraine, the conflicts in Sudan, in Myanmar, in the Chagos islands and others, and to assume a stand for or against immigration, the integration of asylum seekers and so on.

At the heart of all these issues is the social psychological problem of reconciling discordant views. Whilst on some issues a diversity of views is largely unproblematic, in other domains this might matter a great deal. It is one thing to agree or disagree that Chicken Tikka Masala is the national dish of Great Britain; it is another thing altogether to allow or disallow polygamy, female genital mutilation, child marriage and so on. Different practices may be justified by intricate cultural beliefs and value systems that determine how individuals incline themselves towards elements in their social environment. At the same time, as Giddens (1991) has famously noted, no one today can hold any belief without knowing at the same time that others sharing our environment believe altogether different things. For instance, whilst many Muslims decry the consumption of alcohol, the Christian belief of transubstantiation justifies the use of wine in religious ceremonies. This simple example strikes at the heart of two key social psychological notions which we proceed to unpack in this chapter, that is, the challenge of social representation and the balance of reciprocity in social

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relations. We argue that taken together, these theories describe current tensions in intergroup and intercultural relations. They also, however, provide a blueprint for identifying conciliatory projects that can stand to bridge discordant views.

2 The Challenge of Social Representation

First things first: is wine a good thing or a bad thing? There is only one way we can answer this question, that is, it depends. Crucially, however, for the man in the street immersed in everyday life, the answer to the question we posed does not depend on anything at all. It merely follows from their personal beliefs. If that individual is Catholic, they will claim that wine is a good thing because of its traditional use in their faith; if they are Muslim, they will claim that it is a bad thing, due to religious restrictions. We only say it depends if we admit the possibility of a plurality of views about which we can be sceptical and non-committal. If we do this mental exercise, we recognise that wine, in itself, is good for some and bad for others. But for the man in the street who thinks wine is good, the reality of Muslims claiming that wine is bad is resolved in a very simply manner: Muslims are wrong about wine! Likewise with Muslims who contend that Christian beliefs about wine are wrong and outdated, they have since been superseded in the Qur'an. At this point, we can take a step back and agree to disagree. Indeed, in everyday life this is what many people typically do. But society, or the policymaker, does not afford such passive relativism. If wine is a bad thing, then it must be banned like heroin and cocaine. If not, then people might choose it by virtue of the weakness of their nature and society will be all the worse for it. But if wine is a good thing, then it must be liberalised like soft drinks. That will enable people to use it for their own personal, social and spiritual aspirations, which helps their individual wellbeing through which society thrives. Between these polar opposites, there is a third option that is arguably less extreme. That is, there is some truth to both accounts. Wine can be great fun when socialising, it has a legitimate use in controlled spiritual ceremonies, but it needs to be regulated like steroids or antibiotics because it is prone to individual misuse. What this example serves to illustrate is that society necessarily faces the challenge of a plurality of social representations.

Social representations are evoked any time different subjects interact. When they do, they bring their individual points of view to bear on the relations that ensue between them (Sammut, 2015). They could agree unproblematically, in which case the social representation (of the object or event they are in interaction about) would correspond to their individual private beliefs. Alternatively, the social representation might have to accommodate some discrepancies between the distinct points of view held by the subjects concerned. This might not necessarily result in disagreement. Human communication allows for the interpenetration of views (Asch, 1952; Sammut, Mifsud & Brockdorff, 2024), which allows subjects to imagine how things look like from somebody else's perspective, and to adjust their own thinking and beliefs accordingly. This ability has been identified as the cornerstone of human

evolution since it permits the achievement of shared intentionality (Tomasello & Carpenter, 2009). In this way, I am able to realise that the twig that lies in front of me is actually a venomous snake, because I understand that you can see it much better than me from where you are sitting (I have a restricted view), so I best heed your call: the twig is a snake, even if I do not perceive it to be so! Finally, social representations may be invoked but do not arise in cases where discrepancies between subjects are too large and points of view are not reconciled. But this also means that the subjects concerned no longer interact.

The notion of social representations was proposed by Serge Moscovici (2008) to account for the fact that different conceptions of psychoanalysis circulated in the French public domain at the time. Moscovici observed that distinct groups understood the practice of psychoanalysis in wholly different ways. According to Moscovici, three social representations of psychoanalysis circulated in France at the time. One was elaborated by Communists in Marxist terms, involving descriptions of the class struggle and the role psychotherapy played in its maintenance; another by Catholics, involving distinctions between psychotherapy, pastoral work and confession; and a third by Liberals, who elaborated a social representation of psychoanalysis in individualist self-enhancing terms. According to Moscovici, therefore, there is not one 'psychoanalysis' in itself, but three representations of it that circulated in the same public at the same time. Interacting individuals elaborated these different representations in terms that made good sense to them, but what was good sense to some was nonsense to others (Sammut & Bauer, 2021).

Different groups elaborate different representations of elements in their environment in characteristically self-serving ways (Hopkins, this volume). According to Bauer and Gaskell (1999), social groups mobilise for the purpose of achieving projects based on shared interests (Sammut, 2011). They thus involve a minimal interacting triad of two subjects concerned with an object that is pertinent to a project in which the subjects are involved at a given point in time. The subjects' common concern with the same object represents their mutual interests (Sammut, 2011) and justifies their involvement in the project. Social representations enable projects to survive and evolve over time by representing objects, elements and events in project serving ways (Sammut et al., 2012). This is how interacting parties come to determine whether objects, as in the wine example above, are good or bad. That is, by representing it as such. In this way, projects survive the lifespan of interacting subjects that give rise to them, by recruiting similarly interested parties to sustain the effort (Sammut, 2011) and by adapting their social representations to challenges posed by competing representations (Sammut et al., 2012). A recent example of this is reported by Sammut, Mifsud, and Brockdorff (2022), who identified three social representations of cannabis in Malta, that is, (i) as a gateway drug involving criminal activity, (ii) as a medicinal drug involving relief of particular symptoms and regulated by the medical profession and (iii) as a recreational drug, by appeal to individual choices and preferences. Sammut, Mifsud, and Brockdorff's (2022) study is critical in showing how the clash of competing social representations in the same public acquires political moment. As Asch (1952) pointed out, society cannot have different definitions of what constitutes a crime.

3 The Balance of Reciprocity

Aside from social representations, the triangular interaction that occurs between two subjects mutually oriented towards a common object is fundamental to another social psychological theory concerned with attitudinal orientations. Attitudes are commonly defined as individual evaluations of attitude objects. My attitude towards wine, for example, represents my valued inclination towards it. I might be favourably or unfavourably inclined towards it, that is, either I like it or I do not. In attitudinal terms, I might have a positive or a negative personal attitude towards it, regardless of its social representation. Attitudes are typically measured in degrees of intensity, ranging from highly unfavourable to highly favourable ratings. Attitudes, however, do not include a reference to other subjects with whom one interacts. So, whilst I might have a certain attitude towards wine, my partner might or might not share the same attitude.

Fritz Heider (1958) noted, however, that the balancing of attitudes in social relations matters a great deal. To the extent that my partner and I share the same attitude towards alcoholic beverages, we will be able to converge in relational terms. In simple terms, if we both enjoy a drink then we will both happily hit the pub for a fun night out. Similarly, if we both harbour negative attitudes towards alcohol, we will both be better satisfied chilling out in a juice bar. Heider (1958) noted how our attitudes towards objects of common concern also impinge on our social relations. In the above example, it will be easy for my partner and I to develop a positive relation with each other, given our similar inclinations. To the extent that our attitudes diverge, however, the balance of reciprocity in our relationship will be frustrated. According to Festinger (1957), this constitutes a state of cognitive dissonance. That is to say, my partner and I will both experience personal frustration over our discrepant attitudes and we will both be motivated to change our own to restore balance between us. To the extent that this can be accommodated, then positive relations between us can ensue. To the extent that the balance cannot be restored, however, we might end up with negative relations: you enjoy whatever juice you fancy, I'm heading to the pub!

The crucial point here is that holding individual attitudes towards objects we encounter in our personal lives also positions us socially, relative to the people we interact with in pursuit of shared interests (Sammut, 2011). In social relations, therefore, we have an eye on objects of concern and another eye on people around us. Sammut (2015) conceptualises this as a 'point of view'. How others position themselves relative to objects that concern us matters to us, and how we position ourselves relative to objects that matter to others matters to others too. We negotiate our social relations by calibrating our attitudes towards objects of concern and towards others with whom we share our social space. In this way, the unfolding attitudinal triangle constituted by two interacting subjects with regards to an object provides a nested social psychological model of social relations (Fig. 1). In this model, attitudes are nested within points of view, which also include a reference to attitudes subjects hold towards other subjects. And in a further extension, points of view are nested

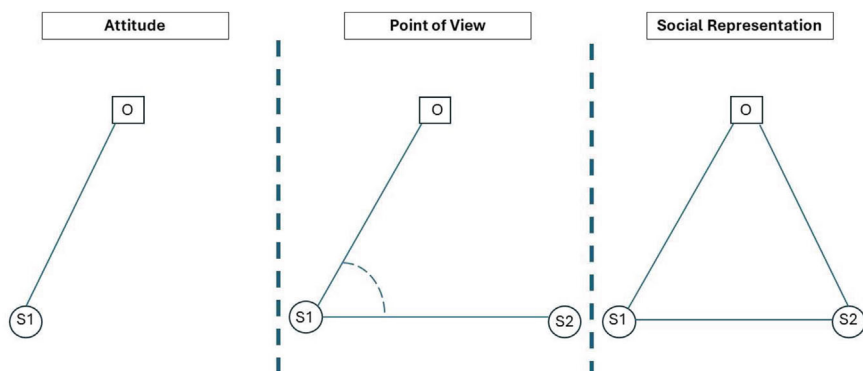


Fig. 1 Nested model of social relations

within social representations, which further include other subjects' relative orientations towards the object in question. It is at this level that the balance of reciprocity is achieved or broken.

4 Intergroup Relations and the Project of Integration

The study of intergroup relations requires sensitivity to the notions we have described above. There is no single and unitary meaning associated with any given object; meaning is contingent on cultural beliefs that serve interested practices—including our own. Wagner et al. (2012) have shown that the meaning associated with wearing the hijab varies between majority-Muslim and minority-Muslim communities. In Indonesia, a Muslim majority country, women report veiling for pragmatic reasons such as convenience and fashion. By contrast, in India, some women reported veiling for self-affirming reasons. And by extension, we can understand how citizens of Western democratic countries that oppose Muslim attire, Muslim cultural practices and other outgroup characteristics, do so on the basis of social representations that make sense to them given their own vested interests. We can only understand the social representations of objects in light of the projects those social representations seek to fulfil. To understand French resistance towards veiling in schools or public institutions today, one needs to understand the French national project of *laïcité* and the value French culture places on secularism dating back to the French revolution.

Needless to say, there are differences of opinion within any group as well. Not every French citizen opposes veiling to the same extent. Some will adhere to their native principles more strongly than others, some will be more flexibly inclined and others yet might have changed their views and come to oppose the national project altogether. In the study of intergroup relations, we must contend with intra-group as well as intergroup diversity. These may at times be masked by statistics

that rely exclusively on single-point estimates, such as the mean. These risk reifying intergroup distinctions by masking intra-group diversity around the mean. As shown, not every Muslim woman veils for the same reason. Should we assume that the minority-Muslim women we encounter in our societies are representative of the worldwide category ‘Muslim’ and proceed to oppose Islam in general on that basis, we risk instituting our misperceptions and misunderstandings. We will have more to say about this later on in this chapter.

Our task in studying intergroup relations involves mapping the diversity of opinion within and between groups towards identifying particular convergences and divergences that can resolve a relational impasse. In Wagner’s (1995) terms, and applied to the studies we review hereunder, the majoritarian reflexive group of Maltese citizens projects the holomorphic features of its own social representation of the project of integration onto the minoritarian reflexive group of Arabs in heterodox Malta, and vice-versa for the Arab group relative to the Maltese. Wagner (1995) reports that high ingroup projection is accompanied by low outgroup projection and vice-versa. Applied to the present case, we would expect Maltese respondents to assume that their opinions about integration are widespread amongst the Maltese but not so amongst the Arab groups, and vice-versa.

It follows that we also face the task of understanding the reasoning (or logic, see Raudsepp, 2005) behind the diversity of opinions. As we have seen, social representations do not arise out of thin air; they arise in communicative interaction that serves particular purposes. However, much we might disagree either with the project entailed (e.g. the establishment of a Muslim caliphate) or with the sensibility of the practices involved (e.g. wearing a burka), we cannot simply assume that what does not make sense to us makes no sense at all (i.e. nonsense, Sammut & Bauer, 2021). As Raudsepp (2005) notes, a social representation ‘includes knowledge of what other groups believe [...] it is necessary to have an overview of alternative representations within a community and the logic of their social distribution’ (p. 459, emphasis added). Should we project our own logic onto other reflexive groups, we risk attributing ignorance to a perspective we do not understand (e.g. why should Muslim women wear a burka at all? Burkas make no sense!), in which case the ignorance would be all ours. As shown, Muslim women veil for different reasons (Wagner et al., 2012).

Our task in figuring out intergroup relations, therefore, is to study how social representations are fabricated within particular groups to serve which projects on the basis of what sense in the Maltese ‘meta-system’. ‘Only on the basis of such metaknowledge can a person position him- or herself appropriately within the representational field’ (Raudsepp, 2005, p. 459). Furthermore, we must also query mutual attributions to understand how one group perceives another group’s project. In this way, we can make sure that we neither prioritise one group’s common sense over another’s, nor that we misunderstand one group’s intent relative to another.

In the following section, we will review findings from our studies concerning the integration of Muslims in Europe—a subject of intense debate and political contestation across the whole EU and beyond. In doing so, we have departed from the traditional procedure of studying social representations of particular objects in specific

contexts. We have sought instead to implement an action-oriented formula that gives priority to a grand project (Buhagiar & Sammut, 2020) which, for better or worse, has brought the two groups together (in conflict). The Muslim presence in Europe has not been actively solicited; it has manifested in response to migratory movements and the corollary stances assumed by migrants and hosts in managing relations between them once in contact. The key debate in policymaking is how to integrate immigrants (Muslims in particular), that is, whether immigrants should be assimilated into the laws and politics of the land that receives them, or whether their native practices should be safeguarded like those of their hosts (Moghaddam, 2008). The former strategy is held to risk alienating immigrants who might respond by radicalising, whilst the latter is held to risk naïve acceptance that could be opportunistically exploited by immigrants seeking to impose their own alien ways.

5 Attitude Polarisation and the Spiral of Conflict

A direct effect of the political freedoms associated with democratic governance is that internal strife is vented in public rather than suppressed by the state and confined to the private domain. One of the ways this manifests is through public protests demanding some form of social change. Examples abound and involve issues such as climate change, austerity measures, animal rights, pro-war and anti-war movements and so on. Such movements also include emancipatory efforts aimed at redressing social injustices, such as female and gender rights, racial discrimination (e.g. Black Lives Matter) and religious persecution. One of the persistent fault lines that has risen to the fore in recent decades is the recognition and treatment of Muslims. This has been complicated by international relations that have precipitated armed conflict in Muslim countries (e.g. Palestine, Iraq, Afghanistan, etc.), resulting in mass migration for displaced citizens (e.g. the Libyan & Syrian refugee crises in 2011), as well as retaliatory retribution by external agents on home soil (e.g. the Twin Towers bombing in 2001 & the London bombings in 2005).

The net effect of these various animosities is the stereotyping of Arabs and Muslims in general (categories which are commonly confounded, see Helbling, 2012) as potentially dangerous people. In other words, Islamophobia (Helbling, 2012). The latter is further justified by theories concerning population demographics that claim that Muslims in Europe and other Western countries are breeding themselves to a majority. This is argued to set the stage for eventual Muslim domination at the polls that would be swiftly followed by the Islamification of democratic institutions. That is, Muslims are generally expected to want to do in future what Catholics and other Christian denominations have done in the past, that is, inscribe their own religious beliefs and practices exclusively into national law (e.g. Malta: the Catholic faith is constitutionally inscribed as the official religion of the state; abortion remains illegal under any circumstance). The question about how to integrate Muslims has emerged thus as a preeminent concern in many countries worldwide. It has selectively targeted Muslims for the fact that Islam evokes fears of domination that

other religious denominations do not. Consequently, various social representations of Islamic beliefs and practices have been hotly contested in various publics, such as the hijab, the burkini, the height of minarets, the building of new mosques, satiric cartoons of the Prophet and so on. Ironically, this has further fuelled the politicisation of Islam, as marginalised Muslim communities pursue emancipatory aspirations through political means. Moscovici's (1992) work on group polarisation is instructive in this regard. Moscovici noted how group-based consensus breeds polarisation by converging people who share some consensual view to oppose other groups who do not. Consequently, social issues become points of convergence for group cohesion, as different groups push for conformity with their own social representations of those issues (Sammut & Bauer, 2021).

In our studies on acculturation preferences and orientations amongst different socio-ethnic groups in Malta, we identified polarisation of attitudes towards Muslims in Malta over a ten-year period 2010–2020, following Malta's accession into the EU in 2004 (Sammut, Buhagiar, et al., 2022). Whilst Malta has a long history of trade and tourism with neighbouring Arab countries, Sammut and colleagues report a convergence of antipathy towards Muslims in Malta by the native Maltese population as well as by every other socio-ethnic group surveyed on the island across the study's time interval. In a subsequent study exploring the roots of this antipathy, the authors identified a cultural essentialisation of Muslims that are reducible to and determined by their cultural background (Buhagiar et al., 2018). In contrast to biological and racialised forms of essentialisation that stereotype others on the basis of biological traits rooted in genetic predispositions, Muslims in Malta are held to be biologically equivalent to the local population but culturally distinct. It is Islamic culture, particularly in its violent manifestations worldwide that predispose Arabs to violence rather than their racial heritage. Respondents argued that Arabs are indoctrinated into a violent Muslim faith that oppresses women, restricts basic human freedoms and promotes jihad. By virtue of this, Arabs become incapable of democracy during their socialisation, resorting to oppressive authoritarian practices that they experience growing up under dictatorial regimes. Even when the best of them migrate and settle successfully in democratic countries, they retain a latent potential for extremist violence (by European democratic standards) that can be triggered if and when things go wrong. This heightened potential for violence is witnessed in the Twin Towers attack in New York City, the London bombings, the Charlie Hebdo assault and other terrorist attacks undertaken by Muslims on European soil. Consequently, respondents argued that there is no such thing as a good Muslim (Buhagiar et al., 2018).

As argued above, however, social representations involve a diversity of opinion both within and between groups. Moreover, no essentialised stereotyping will make the Muslim presence in Malta disappear given its rooting in geopolitical, commercial and touristic interests. Like any other country, Malta faces the challenge of integrating its Muslim population. To chart a strategy for doing so, we undertook a series of argumentation interviews (Buhagiar & Sammut, 2023a) with native Maltese to map the diversity of opinion concerning Muslim integration in Malta (Sammut et al., 2018). We identified arguments both for and against Arab integration, as expected. In Kashima and Kashima's (Chapter 6 of this volume) terms, our study tapped beliefs

concerning how Arabs fit into Malta's metaculture. Whilst some respondents noted benefits associated with the presence of Arab immigrants, primarily in commercial terms, arguments promoting Arab integration were relatively less supported than those that expressed opposition. Notably, Maltese respondents provided no favourable views of the Islamic faith, suggesting a lack of resources for representing Islam in a positive manner. In a subsequent study with the Arab-Muslim minority in Malta utilising the same argumentation protocol (Buhagiar & Sammut, 2023a), we identified a similar range of views from pro- to anti-integration perspectives (Buhagiar & Sammut, 2023b). The argumentation themes we identified amongst the Arab minority reflected three key patterns, that is, (a) that integration was perceived as necessary but difficult to achieve by the Arab community, (b) that the Arab community perceived the Maltese majority as resistant to the project of integration and (c) that both ingroup and outgroup were de-essentialised and treated in largely individualistic terms with varying views and temperaments. This is in line with Wagner et al.'s (2009) claim that de-essentialising strategies might be politically advantageous for stigmatised communities. The authors show how essentialisation is a representational tool that can be used for the ingroup as well as for outgroups, and that it serves to enhance a social representation's pragmatic function of permitting quick inferences and corollary action in social encounters. In this manner, essentialising strategies are fundamental to the construction and reconstruction of the intergroup relationship.

Given the diversity of views in both samples, we proceeded to thematically analyse the list of claims concerning integration that were advanced and justified separately by the two groups, retaining only those claims that emerged in both datasets. This provided us with a list of claims that were differentially supported across the intergroup divide. Following expert ranking, we compiled a list of twelve claims that recurred across both samples ranging from anti-integration to pro-integration statements, six claims for each. We then administered these claims in a survey with a representative sample of Maltese respondents and a purposive sample of Arab respondents, to chart the distribution of opinion across both groups (Buhagiar, Mifsud, et al., 2020). The findings showed that both groups favoured integration over other alternatives, although the Arab group expressed significantly more support for pro-integration items than the Maltese.

We also made two crucial findings concerning the distribution of opinion between and within the two groups. Firstly, the survey also included a meta-representational component where we asked respondents what they thought the other group would report for each of the argumentation claims we presented them. The Arab groups' attributions to the Maltese were on mark and followed the same trajectory as that reported by the Maltese, that is, relatively more anti-integration sentiment and relatively more pro-integration sentiment than that reported by the Arab group albeit with a higher preference for integration than not (i.e. an upward slope from anti- to pro-integration, with a steeper slope for the Arab group than the Maltese group). This finding is in line with Wagner's (1995) predictions. Crucially, however, the attributions the Maltese respondents levelled at the Arab group did not correspond to the genuine responses provided by our Arab participants. In other words, the Maltese

group misrepresented the Arab group's intent, attributing significantly higher anti-immigration sentiment and significantly lower pro-integration sentiment than was actually the case amongst our Arab participants. Secondly, we found a convergence of views regarding the claim: 'As a minimum, there should be no discrimination between Maltese and Arabs'. We observed in participants' responses for this statement that differences between the two groups were the least amongst all the items. These findings provide a clear locus for intervention. In the first instance, the primary concern that emerged in the course of these studies was the misunderstanding of the Arab community's intent on the part of the Maltese. There is no point in promoting the integration ideal amongst the Maltese and the Arabs; they already both express a clear preference for this option. The social representation of Arabs held by the Maltese, however, misunderstands their intent and wrongly assumes that Arabs do not wish to integrate as much as they actually do. Such a representation could be due to the negative portrayal of Muslims over the media rather than real-life experiences (Buhagiar, Sammut, et al., 2020). In fact, Maltese respondents in our argumentation studies claimed to be acquainted with nice Muslims, whom they regarded as exceptional and who bucked the general Muslim trend. As detailed above, the Maltese essentialise Arabs in negative cultural terms, holding them to be intrinsically more prone to violence due to their upbringing in a hostile cultural climate.

Additionally, in the present study, the Maltese also misperceived the manifestation of integration in everyday life, arguing for instance that adopting European clothing styles demonstrates a willingness to integrate (Buhagiar et al., 2018). By the same logic, merely wearing a headscarf is deemed evidence enough for the Maltese that the Muslim community does not wish to integrate. The Maltese population evidently requires education in this regard. Secondly, the claim that there should be no discrimination between Maltese and Arabs emerges as an ideal starting point for conciliation as this claim is strongly supported by both groups. It therefore stands to be endorsed rather than opposed, bringing the two groups in agreement over a claim concerning their mutual relations. Any further work to reconcile disparities in other issues stands to benefit from the common ground this claim stands to establish. It is worth noting that this, as well as every other claim, is differentially justified across the two groups and any attempt at promoting one claim or another should rely on justifications provided by the respective groups during the argumentation part of the study. Arabs stand to be convinced by Arab logic, whilst the Maltese will respond to Maltese logic. As detailed above, common sense is community bounded and does not transcend the intercultural divide (Sammut & Bauer, 2021).

6 Conclusion

Cultural diversity, by its very nature, poses a political challenge to the normative order by showing that things can be done differently, and if they can be done differently, maybe they can be done better than they currently are. Diversity makes differences manifest in public and provides an opportunity for social actors to consider

alternatives that they otherwise might not have apprehended. Given a choice, people proceed to opt in or out of social representations that go on to realise political projects, advancing some alternatives over others. For this reason, the competition between social representations co-existing in the same public is not neutral. Extending the right to worship to Muslim communities also requires allowing communities to congregate, which might require the building of mosques, which changes the flavour of the local environment. Those who place a value on personal choice, therefore, will be inclined to support diversity even if they do not effectively choose that preference—I might like the fact that my town boasts a cathedral, a mosque and a synagogue, but I only attend church services as I identify as Christian. This might not necessarily mean that I do not support the same liberty for Muslims. Whether I support building a mosque instead of a new stadium, however, might be a different story. In the end, individuals join forces with others to advance their own interests over those of others (Sammut, 2011).

Political Islam is caught up in the quandary of using democratic means to achieve what are generally perceived to be anti-democratic ends. Other religions might be equally guilty of similar charges; e.g. the Catholic clergy is exclusively male, the Maltese nation is fundamentally Catholic. Neither of these is currently the object of street protests in European countries. But the Catholic church is not actively trying to challenge the social order at this point in history, albeit wherever its dictates contradict those of the state, it resorts to political action like Islam (e.g. abortion in Malta, Poland and Italy). Most of the time, however, it does not need to be political in the same way because its own dictates and interests are already instituted. The same cannot be said for Islam, which currently faces numerous restrictions on personal religious liberties. As we have seen, many will argue that this is rightly so. They dig their heels and claim that this is not the way we do things here. Muslims do the same and claim that we are here, we do things differently. The tussle between them is what we observe at the polls and in the news. Breaking the conflict spiral requires bridging intergroup differences forged on intra-groups solidarities.

Raudsepp (2005) argues that cultural diversity: ‘also has a negative side: it may evoke symbolic conflicts and intolerance. In order to control violent and protracted social conflicts, it is necessary to coordinate the functioning of different SRs [social representations] in society (e.g. to develop awareness of different SRs, to cultivate tolerance and empathy towards other positions). In case of conflicts, special strategies for peaceful coexistence of antagonistic SRs should be developed. A socially relevant research question could be: How can different/opposing SRs of the same object be coordinated/conciliated?’ (p. 465). In our studies above, we hope to have answered this call. In this chapter, we have presented a theoretical and methodological rationale for empirical strategies that can contribute towards conciliatory ends. We have argued that differences are based on distinct common senses; what seems nonsensical or illogical to us might be merely non-common sense (i.e. not nonsense) in the restrictive environment which we inhabit. A conciliatory effort must start by acknowledging diversity and plurality of beliefs, values and practices, rooted in social representations that are geared towards advancing alternative projects. It then requires a genuine understanding of views in terms of their legitimate sensibility.

This exercise reveals symmetries as well as contrasts. Some beliefs and practices might turn out to be sticking points, requiring efforts at forging new social representations (Chryssides et al., 2009). Others, however, stand to bring conflicting parties together on a common ground. Our proposal is to start from here. In this chapter, we have articulated a methodology for doing so. We contend that this exercise serves to establish the solidarity needed to find solutions together (i.e. new social representations to serve new, inclusive projects). It is contra-indicated for the purpose of achieving exclusionary or privileged goals.

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Identities as Projects, Essentialism as Rhetoric



Nick Hopkins

1 Introduction

Wherever one looks, one finds evidence of people's psychological investments in group-based identifications. Sometimes this takes the form of selfless heroism, sometimes violence (for 'identity can also kill—and kill with abandon', Sen, 2006, p. 1). Such is the social significance of these investments that it is all too tempting to assume they must have a base in 'real, substantial entities with their own cultures, their own identities and their own interests' (Brubaker et al., 2004, p. 12). How else could those in Yugoslavia or Rwanda (and countless other settings) turn upon their neighbours? Small wonder the literature on conflict is peppered with references to the 're-emergence' of primordial ethnic loyalties and inherent cultural differences (see Jovic, 2001, on explanations of the Yugoslavian experience).

Such ontological assumptions are doubly problematic. Analytically, they detract attention from the group-making processes and practices that establish our investments in particular identifications. Socially, they normalise and naturalise the adoption of these identifications and so limit our political imaginations. None of this is to dismiss the psychological reality and consequentiality of group-based identifications. They provide the vantage points from which we interpret the world, identify our interests, judge the significance of events and decide how to act (Reicher & Hopkins, 2016). Indeed, our ability to act in the world is contingent upon our being able to represent the social context and our place in it, and this necessitates the categorisation of ourselves and others (Reicher & Hopkins, 2001). Rather, the point is that from an analytic perspective we must refuse the 'folk sociological ontology' (Brubaker et al., 2004, p. 12) that permeates so much talk of group identity. Rather, and as Brubaker et al. continue, analysts need to problematise the tendency to assume the given existence of 'discrete, sharply differentiated, internally homogenous and

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externally bounded groups as basic constituents of social life' (2004, p. 12) and shift analytical attention to the social processes that make particular social identifications possible and meaningful. This highlights the ongoing human social activity involved in the production and reproduction of particular identities, and in so doing, draws our attention to the politics of identity construction. More specifically, we are drawn to consider the social significance of identity construction as a means to motivate support for particular behaviours and projects, and the ways in which essentialising rhetoric can ground such constructions so as to capture our imagination and psychological investment (Reicher & Hopkins, 2001).

2 Social Identifications

There are good empirical grounds for rejecting essentialising assumptions about identity. Over many years, enormous energy has been devoted to identifying the necessary and sufficient criteria with which group memberships can be identified. However, comparative analyses reveal no tangible characteristics essential to the maintenance of national consciousness (Connor, 1994). Similar issues surround the defining features of 'ethnic' identities (Chandra, 2006, 2012) where all manner of descent-related criteria (e.g. common ancestry, common region of origin, common culture and myths concerning these commonalities, etc.) have been postulated. Such definitional issues alert us to the problem of assuming the 'given' nature of ethnic groups and the utility of ethnicity as an explanatory tool (Carter & Fenton, 2010). Indeed, speaking of sociological research, Carter and Fenton describe the analytic challenge to be 'not so much "rethinking ethnicity" as rethinking sociology by not thinking with ethnicity' (p. 2). As a corollary, they argue that ethnicity is 'a way of making up people' and that it is possible to explore the social effects of this process without losing sight of 'the fact that ethnicity is simply a way of making up people' (Carter & Fenton, 2010, p. 10, original emphasis).

Given these issues, analysts have been drawn to the cognitive processes of categorisation and identification (e.g. Brubacker et al., 2004). Early indications of the value of such an approach are apparent in Emerson's reflections on the challenges involved in defining nations, and his conclusion that 'the simplest statement that can be made about a nation is that it is a body of people who feel that they are a nation; and it may be that when all the fine-spun analysis is concluded this will be the ultimate statement as well' (1960, p. 102). This draws our attention to the psychology of self-categorisation, and it is striking that Emerson is cited approvingly in Tajfel's early social psychological writing on nationalism (Tajfel, 1970) which led him to consider the necessary and sufficient conditions for group behaviour. As is well-known, this work came to focus on the social psychological processes (and corollaries) involved in adopting a social categorical identification.

Developing these observations, Tajfel and Turner (Tajfel, 1981; Tajfel & Turner, 1979; Turner, 1982; Turner et al., 1987) argued that although we sometimes focus on our individual uniqueness, we also identify in social categorical terms such that our

beliefs about these categories' boundaries and values shape who we see as our fellows, the norms we subscribe to, the nature of our interests, etc. (Reicher & Hopkins, 2001). This logic applies to groups whatever their scale – whether face-to-face or what Webber (1967) calls 'communities without propinquity' (e.g. a nation, religion, class etc.). Accordingly, as group behaviour depends upon categorical identification (such that one's behaviour is shaped by one's understandings of group-defining norms and values) rather than pre-existing inter-personal bonds it becomes clearer how large-scale group memberships—what Anderson (1983) calls 'imagined communities'—can capture our imagination and shape our behaviour.

If emphasising issues of subjective identification sounds individualistic, Brubaker et al. (2004) argue the domain of the 'psychological' is different from the domain of the individual and that investigating people's self-categorisations does not necessarily imply a psychologism in which what goes on in people's heads is privileged over what goes on in the wider social and material context. Rather, the promise of a cognitive approach to identity is that it 'may help connect our analyses of what goes on in people's heads with our analysis of what goes on in public' (Brubaker, et al., 2004, p. 46). Put simply, it encourages attention to the group-making activities that support our self-categorisations (without which they would not exist). These group-making activities can be organisational (as when colonial authorities categorise those they wish to subjugate into different communities). They can also be observed in more informal interactional processes in which people are addressed and positioned in particular ways rather than others. Whatever the precise nature of the practices and processes 'we know we are witnessing instances of ethnicity when we observe people classifying people according to their origins' (Levine, 1999, p. 168).

Three aspects of these group-making processes stand out. The first concerns the processes that make particular social identifications possible. The second concerns the processes by which the boundaries to such social identifications are constructed. The third addresses the processes whereby one's social identifications are attributed specific contents (beliefs, values and norms). Addressing each of these sensitises us to their significance for people's representation of the social context, their place in it and how they should act. It also alerts us to the human agency involved in identity construction and how this is permeated by strategic considerations such that all politics (whether involving ethnicity, nation, class, 'race', gender or whatever) can be conceptualised as entailing struggles over identity construction and thus as form of identity politics (Hopkins & Kahani-Hopkins, 2004).

In what follows, I consider these three features of the social construction of identity. Each reveals the analytic inadequacy of working with essentialising conceptions of identity and I then turn to the significance of essentialist rhetoric as used by social actors as they seek to recruit support for particular social and political projects. As we will see such social actors' rhetoric is significant for what it accomplishes by way of concealing the constructed nature of these identities and providing people with a plausible and psychologically engaging representation of the social field (i.e. who they are and where they stand in relation to other social actors).

Yet, if essentialising conceptions of identity are analytically weak, they can be psychologically potent. They imply an inherent fixity of category boundaries and

cultural contents, which can (as with essentialised visions of national identity) convey notions of supra-individual entity (an ‘enduring “we”’: Holy, 1996, p. 117) with its own agency that moves through time. Such conceptions of collective continuity can contribute to the feeling one’s group membership has an ontological reality to it which protects against feelings of anomie, contributes to collective self-esteem and engages one’s investment and identification (Sani et al., 2007, 2008).

3 Invoking Social Categories

As national and ethnic identities do not exist apart from or beneath their social representation and the conditions of their own making (Macdonald, 1993), much can be gained through exploring the practices that make thinking about oneself in terms of particular group memberships possible. This requires an historical perspective concerning the emergence of those practices (on nationalism, see Anderson, 1983) and an exploration of the everyday social practices which maintain these identifications.

3.1 *Everyday Practice*

The everyday practices sustaining socially relevant categories are diverse. Consider the humble cigarette card routinely inserted into cigarette packets as a (collectable) marketing device. Featuring pictures of sporting heroes, historical events, flora and fauna, etc. they often featured a national dimension (such that the celebrated figures, events and objects were national). For example, in 1928 the Sarony cigarette company produced a 36-card series entitled ‘National Types of Beauty’ with each card featuring a photograph of a ‘national beauty’ and a few words on her qualities. The card representing Sicily bore the following: ‘The dark hair, eyes and complexion of the Latin type of beauty is impressively portrayed in this photograph of a Sicilian beauty’. The card for Turkey referred to a woman ‘said to possess every Oriental charm’.

Analytically speaking, the social significance of these cards is that even the everyday routine of having a cigarette became a context in which national categories could be invoked and attributed distinctive qualities. Moreover, the rhetorical vehicle through which these categories are defined requires analytic attention. Women have featured prominently in the construction of national identities (Banet-Weiser, 1999) and these cards, with their well-established patriarchal beliefs (Cooper, 2019) reproduce the idea that the world is divided into national units each having its own distinctive physiognomy and beauty (Hopkins, et al., 2006).

Although the cigarette card has passed out of fashion, there are many other vehicles with which national categories are routinely invoked and made psychologically relevant, and Billig (1995) coined the term ‘banal nationalism’ to make the point that even in the most established of nations, the ‘nation’ is routinely ‘flagged’ in

everyday life such that the citizenry is ‘unmindfully reminded of their national identity’ (Billig, 1995, p. 154). As Billig explains, the nation is presupposed as the frame for everything—from what counts as ‘the news’ to what we understand as ‘the weather’. At first sight, the notion that talk of ‘the weather’ could be conceptualised as politically significant in invoking national categories may seem fanciful. Yet this reflects scholars’ tendency to focus on only some manifestations of nationalism—typically the ‘outbreaks of ‘hot’ nationalist passion’ (Billig, 1995, p. 44) apparent in scenarios characterised by emotionally-charged intergroup conflict. However, as Calhoun emphasises, Billig’s analysis reminds us that more dramatic action on the basis of national categories ‘depends on the seemingly apolitical deployment of the rhetoric of nation; “hot” nationalism depends on “banal nationalism”’ (Calhoun, 2017, p. 27).

3.2 *Situated Practice*

A sensitivity to the significance of the everyday group-making practices we experience highlights another point. As we move through contexts characterised by different practices, we can expect people’s self-categorisations to be many and varied (Turner et al., 1987). This challenges any assumption that we are defined by a singular identity which inescapably captures our investment—an assumption that can suggest the inevitability of a particular intergroup representation of social relations (e.g. Tutsi vs Hutu), and thus the inevitability of intergroup conflict. Speaking of the Rwandan genocide, Sen observes that a Hutu labourer from Kigali ‘may be pressured to see himself only as a Hutu and incited to kill Tutsis, and yet he is not only a Hutu, but also a Kigalian, a Rwandan, an African, a labourer and a human being’ (Sen, 2006, p. 4). In other words, nothing about our identifications is inevitable and this potential plurality of identifications alerts us to the significance of human agency in social categorisation with Sen arguing ‘there is a critically important need to see the role of choice in determining the cogency and relevance of particular identities which are inescapably diverse’ (Sen, 2006, p. 4).

However (and as Sen notes), such choices are not unconstrained. There is more to identity than one’s self-categorisation in terms of a particular group membership. For an identification to be viable, it must be one that has some adequacy in terms of making sense of one’s environment. So too, it must be possible to act in terms of that identification. Assessing the degree to which these conditions are met requires close attention to the social and material practices that constitute one’s social context and the degree to which these scaffold one’s abilities to act in terms of particular social identifications (Hopkins, et al., 2019; Reicher et al., 2021; Yalcin & Hopkins, 2024). Indeed, it is precisely because the viability of any self-categorisation is contingent on such social support that mass gatherings have been identified as so important in revivifying particular collective identifications (Durkheim, 1912/1995; Khan et al., 2016; Hopkins et al., 2019; Reicher et al., 2021). This contingency on social practice also explains why those seeking to advance new identifications invest so much effort

in establishing identity-sustaining social practices (as when new festivals were established during the French Revolution to facilitate the enactment of Republican citizenship: Ozouf, 1989). Again, the point is that emphasising processes of social identification should not be conceptualised as privileging what goes on in people's heads over what goes on in the wider social context. To the contrary, an anti-essentialist emphasis on the contingency of social categorisation on social practice challenges such a voluntarism.

3.3 *Power and Practice*

The opportunities for identity-affirming enactment depends upon the distribution of power across social actors. This is not equal: some are better placed to invoke and make their preferred social categorisation a feature of their (and others') lived reality. Most obviously, the authorities are relatively privileged in organising the practices that structure the physical and social environment. This can be highly visible—as when authorities stage mass, choreographed cultural events which draw participants into enacting a particular vision of community rather than others (Petkovski, 2024). To make this concrete, consider the Islamisation of the Iranian revolutionary movement through the incorporation of Islamic motifs into May Day celebrations. This functioned to channel potential action in terms of a class-based identification into action based upon a new (religious) Iranian revolutionary identity (Morgana, 2018, 2019). However, the power to invoke specific identities (rather than others) can also be manifested in less immediately striking practices. Even activities such as the authorities' naming of streets and buildings can accomplish the 'iconic structuring of "public" space' and so make a particular version of community, its history and culture 'palpable in everyday life' (Alonso, 1988: 41).

Issues of power and control are also manifested in people's routine interactions which make certain self-categories (rather than others) relevant. For example, one may find that out of all of one's various identifications, one is repeatedly positioned by others in terms of a particular identity such that the opportunity to think and act in terms of one's other identifications is curtailed. Even if the identification prioritised by others is valued, the experience of being categorised in terms a singular identification can be a painful form of essentialisation (Sen, 2006) and misrecognition (Hopkins, 2011; Hopkins & Blackwood, 2011; Ryan et al., 2023). Thus, referring to Jews who valued their Jewishness (and had organised around it to resist antisemitism), Sen observes that it 'would be a long-run victory of Nazism if the barbarities of the 1930s eliminated forever a Jewish person's freedom and ability to invoke any identity other than his or her Jewishness' (Sen, 2006, p. 8).

4 Constructing Boundaries

Inevitably, any exploration of social categorisation practices invites questions as to who belongs and on what terms. Typically, ethnicised categories involve what can be characterised as ‘descent-based attributes’ (ranging from notions of genetic inheritance through to various forms of cultural and historical inheritance) regardless of whether such an association really exists (Chandra, 2006, 2012). National categories may also share such features, and it is commonplace to differentiate between constructions of national belonging that invoke more deterministic criteria (e.g. ancestry) than others which prioritise civic engagement in which membership is ‘handed out as a reward for loyalty and not on the basis of un-chosen criteria such as race’ (Manzo, 1996, p. 19). In reality, differentiating between nations in terms of ‘ethnic’ vs ‘civic’ criteria is simplistic—most countries using a mix of criteria (Poole, 1999) such that the key issue concerns their weighting, when and how these criteria are invoked, and how they are consequential (Hopkins et al., 2015; Wakefield et al., 2011).

Addressing such issues, research shows that to the degree national identity is imagined in ethnicised terms, ethnicised minorities are judged more negatively (Pehrson et al., 2009a, 2009b). Moreover, even if such minorities are not subject to explicitly negative treatment (e.g. derogation), the adoption of ethnic versus civic criteria for belonging can limit the degree to which they can enjoy the myriad everyday benefits of community membership such as the ability to be heard as a co-national (Hopkins, 2011, 2022; Hopkins et al., 2015; Wakefield et al., 2011).

4.1 *Contesting Boundaries and Belonging*

Such weightings are not fixed and immutable but are sites of public dispute. If the Sarony cigarette cards presented essentialised visions of the nation grounded in patriarchal notions of women’s beauty, beauty (and thus belonging) can be contested, even in public events that continue the deeply sexist tradition of judging such ‘beauty’ (Banet-Weiser, 1999; King-O’Riain, 2008). For example, the 1996 televised Miss Italy competition became a context in which a black woman born in the Dominican Republic won with nine million votes from the television audience. However, not everyone was convinced of her eligibility to wear the national crown: she received whistles of disapproval from some in the studio audience with one official complaining ‘A black girl can’t be Miss Italy. It’s not in the rules’ (cited in Meyers & Nidiry, 2002).

This public event illustrates several points. First, it underscores the point that category boundaries are not fixed, rooted in an objective reality. They are constructed (such that people can and do hold different views on who is or is not a category member). Second, it emphasises that although subjective identification with a category is important, it requires validation by others (and this cannot be assumed) such

that ‘social identity is never unilateral’ (Jenkins, 1996, p. 21). Third, it illustrates the importance of attending to the many and diverse sites in which belonging is debated and boundaries drawn. So-called ‘beauty pageants’ are just one such site, providing ‘a field for debates about culture whilst also creating the culture and collective meaning that is to be debated’ (King-O’Riain, 2008, p. 82).

4.2 *Orchestrating Exclusion*

Arguments about belonging are not theoretical abstractions. They are heavily implicated in organising the social world and defining who should be judged to be ‘at home’. The consequentiality of such boundary-making constructions should not be trivialised—a point well made by the Russian Zionist Leo Pinsker when reflecting on the fate of Russia’s Jews: ‘Though you prove patriots a thousand times... some fine morning you find yourselves crossing the border and you are reminded by the mob that you are, after all, nothing but vagrants and parasites, outside the protection of the law’ (Auto-Emancipation, 1882, cited in Morris, 2001, pp. 16–17).

Typically, such exclusionary mobilisations entail boundary-making rhetoric which implies some hold values antithetical to one’s own group membership. Take for example, Hindu nationalists’ characterisation of Indian Muslims as ‘Babur ki sanfan’ (i.e. the children of Babur, the sixteenth century Muslim leader who conquered lands in present day northern India). This depicts India’s Muslims as an alien and threatening other (Puriyani, 2003) and takes on particular significance when articulated in relation to campaigns around religious practices or contested religious sites (e.g. the Babri Masjid, Ayodhya). Understanding the contemporary power of such rhetoric requires an historical perspective to category construction. This shows contemporary constructions of Indian Muslim and Hindu identities have their roots in the idea that these communities have different (homogenously defined) cultures with very different histories (Tharpar, 1999). Moreover, the production of such group-defining histories has its own history – one which reflects the input of British orientalist ‘scholars’ and colonialist administrators working to maintain Imperial power through a strategy of ‘divide and rule’ (Puriyani, 2003).

Again, the analytic point is clear, rather than explaining intergroup relations (e.g. conflict, exclusion) as rooted in ‘given’ intergroup differences, we should conceptualise these visions of difference as the products of ongoing human social/political activity. Rather than difference being ‘essential’, it is constructed in the social process of organising and choreographing conflict (Kaldor, 2019), with exclusionary action (including violence) being represented as virtuous self-defence of one’s culture (Reicher et al., 2008).

4.3 *Orchestrating Inclusion*

If category boundaries can be represented to mobilise exclusionary practice and violence, so they can be contested and re-represented to promote a very different project. For example, at a time when Jewish communities across Europe were subject to the exclusionary group-making practices driving the Holocaust, inclusive boundary-making activity saved many Bulgarian Jews from deportation (Reicher et al., 2006). Countering antisemitic rhetoric and practice which defined Jews as aliens, large-scale national demonstrations across Bulgaria championed a vision of national belonging in which Bulgarian Jews were defined as fellow nationals, deserving of all the protections associated with national citizenship (Todorov, 2001). This does not mean that there were no Bulgarian antisemites. Rather, it reveals again the importance of human agency in countering exclusionary boundary-making. This agency was apparent in the rhetorical construction of national boundaries and belonging. So too it featured in the choreography of mass demonstrations which allowed this alternative vision of the nation to be translated into practice that could be experienced and witnessed.

5 **Constructing Identity ‘Contents’: The Essentialisation of Culture**

Essentialist visions of identity take many forms. If they are sometimes accomplished through invoking quasi-biological referents, they can also be accomplished through invoking notions of cultural transmission which result in sharply drawn group differences rooted in their longstanding cultural values (see Tharpar, 1999, above). Such essentialising visions of culture typically work hard to represent group cultures as homogenous when they are not (Phillips, 2010). Take Huntington’s (1993) ‘Clash of Civilisations’ which positions enormous sections of the world’s population into different categories because of assumed differences in Western and Muslim core beliefs and values. Such a contrast is analytically problematic, drawing on Orientalist (Said, 1995) perspectives on Islam which approach a ‘heterogeneous, dynamic and complex human reality’ from ‘an uncritically essentialist standpoint’ (1995, p. 333). Indeed, as Abdel-Malek (1963, translated 1981) explains, such an approach is ‘at once “historical”, since it reaches back into the depths of history, and fundamentally a-historical, since it fixes the being, the “object” of study, in its inalienable and non-evolutive specificity’ (Abdel-Malek, 1963, translated 1981, p. 77).

Yet, the features that make the ‘Clash of Civilisations’ thesis analytically weak are exactly those underlying its ability to capture our imagination. An essentialising conception of culture ‘casts culture as a protagonist’ such that “‘Culture” becomes the explanation, and people’s activities the explanandum’ (Phillips, 2010, p. 54). In turn, this sharply drawn contrast between the West and the Islamic world provides an interpretative lens through which events are read and given meaning. Moreover,

subsequent action on the basis of such interpretation re-produces the very tensions implied in the rhetoric of ‘cultural clash’ such that these category constructions have a self-fulfilling dynamic (Bottici & Challand, 2006).

5.1 *Conceptualising Culture*

The challenges involved in developing an analytic understanding of culture that avoids essentialising assumptions are significant because:

the very idea of culture has been elaborated in terms of boundedness, homogeneity, and the idea of immutable natural essence. We speak more readily of culture as a noun — ‘a’ culture, ‘this culture’, ‘our culture’ — than as a verb indicating process, intercommunication, and the ongoing reconstruction of boundaries that are symbolic and not naturally given. (Handler, 1994, p. 29)

Handler’s critique implies that rather than a group’s culture being conceptualised as a ‘given’, anterior to, and determining of behaviour, we should conceptualise culture as a topic of dispute and ongoing construction. Viewed from this angle ‘culture’ is less an analytic resource (explaining behaviour) than a practical resource which provides social actors with a wide range of referents with which to ‘work up’ quite different visions of their identity. That is, cultures constitute ‘reserves’ (Reszler, 1992) of symbols which are to be (re)interpreted, (re)appropriated and (re)deployed by social actors as they argue about their community’s collective values and future.

This logic can be illustrated through reference to the use of history in contemporary identity construction. As Friedman (1992) explains, the past does not impose itself on the present, rather people in the present ‘fashion the past in the practice of their social identity’ (p. 853). Moreover, as those in the present have different views about this identity and how it should be practiced, it follows history is likely represented differently to warrant (and mobilise support for) different identity enactments. Illustrating this logic with the example of Czech national identity and how it was conceptualised during the struggle for independence from the Eastern Bloc, Holy (1996) explains that from the multiplicity of past historical events only some were selected as significant (and authentically Czech) and others (e.g. those associated with the Soviet era) were judged as ‘anomalous discontinuities’ (p.120). That is, although the logic to nationalism ‘makes history a necessity and generates thinking in historical terms’ (Holy, 1996: p. 117), histories can be narrated differently such that nationalism ‘can be seen as a discursive agreement that history matters without necessarily agreeing on what that history was and what it means’ (Holy, 1996, p. 118). If such arguments over which history is relevant to a particular community are most obvious in periods of dramatic change, they also permeate more everyday debates about the nation’s values and future. Thus, whilst some in contemporary Scotland invoke a history of Scottish working-class activism (e.g. Red Clydeside), others invoke a history of capitalist entrepreneurship, and they do so to recruit support for very different visions of Scotland’s identity and how it should be realised in practice (Reicher & Hopkins, 2001).

Yet it is not simply that different elements of a community's past can be invoked to promote different understandings of identity-appropriate future: the same historical events can also be invoked to different ends. In Scotland, the 1314 battle of Bannockburn (which saw Scottish victory over an English army) can be invoked to argue the contemporary case for Scottish independence. Yet, it can also be invoked to assert that the Union with England is one in which Scotland entered as a strong and equal partner (Reicher & Hopkins, 2001). Similarly, the same historical figures are routinely appropriated by all. In Scotland, it might be the national poet—Rabbie Burns—who is invoked by both 'left' and 'right' to advance quite different visions of Scotland's cultural 'essence' (Reicher & Hopkins, 2001). In France, it might be Joan of Arc who has featured in rhetoric envisioning France as Republican, as Royalist and as Catholic. So too, at different times she featured in the mobilisation of French antisemitism and French resistance to Nazi occupation. Moreover, Joan has not only featured in the construction of French national identity—she also featured prominently in the representation of women in diverse national campaigns for women's suffrage (La Vere, 2023). Such a diversity of usage should not surprise, for as Kilgore (2008) explains, 'Propagandists always come back to the strong symbol, and Joan of Arc is one of the strongest symbols available to the French people and the rest of humanity'.

5.2 *Myth in Identity Construction*

The narratives that feature in community members' imagination of their collective identities cast historical events and characters in a dramatic form. As such narratives develop and become embedded within a community, they take on a 'mythical' character (Tudor, 1972) which is not to imply that their defining feature is their falsity, but rather their importance as 'mapping devices through which we look at the world' (Bottici & Challand, 2006, p. 321). National myths such as that concerning Polish messianic martyrology (Zubrzycki, 2011) or the American Dream (Wolak & Peterson, 2020) are potent dramatisations of a nation's history, culture and values, and as they are familiar to all within the community, feature prominently in community members' deliberations as to how community members should behave. However, the shared nature of such myths does not imply a singular meaning: as community members routinely have different visions of their future and how it should be realised, analysts should expect such cultural commonplaces to be interpreted and used differently (Kahani-Hopkins & Hopkins, 2002; Hopkins & Khani-Hopkins, 2004; Hopkins et al., 2003; Reicher & Hopkins, 2001).

The polysemic nature to such familiar-to-all narratives is well captured in Tudor's (1972) observation that 'a myth has no determinate existence apart from the versions of it put forward in argument by various interested individuals' (p. 47). In turn, as such arguments are invariably responses to a particular state of affairs or opposing alternative, Tudor emphasises that a myth's interpretation is inevitably coloured by

the context of its usage such that ‘an individual stamp will be left upon it no matter how orthodox the narrator tries to be’ (Tudor, 1972, p. 48).

Take the popular Scottish saying ‘we’re a’ Jock Tamson’s bairns’ (i.e. ‘we are all the children of Jock Tamson’). In the abstract, this conveys the idea that Scots recognise that beneath the surface of socially created difference, people share a basic humanity. However, its political implications are ambiguous: only when read in the context of its invocation does it gain meaning and practical significance. Couched in terms of a call for a politics of redistribution, it can imply an anomaly between primordial equality and humanly constructed inequality such that Scots must support programmes of redistribution. Yet, it can also be deployed to defend an inequitable status quo, for as McCrone (1992, p. 90) explains ‘if man is primordially equal, social structural inequalities do not matter, so nothing needs to be done’. In similar vein, the myth of the ‘freeborn Englishman’ only takes on meaning in the context of argument such that it can be used to galvanise support for all manner of political causes – both progressive and regressive: as Schwarz (1982, p. 88) puts it: ‘The “freeborn Englishman defending his home” is abstract until we know who he is defending it from—Nazi invasion and fascism, or Asians who have moved next door’.

To those tempted to assume that diversity in the reading of such cultural resources reflects the vagaries of the oral tradition, it should be noted that a diversity of interpretation attends every product—including those inscribed in holy texts (Kahani-Hopkins & Hopkins, 2002). Take the Qu’ranic verse which refers to the Muslim community as the *ummatan wasatan* (variously translated as ‘Thus We have appointed you a middle nation’ or ‘Thus have We made of you an Ummah justly balanced’: see Hopkins & Kahani-Hopkins, 2009). As a verse likely recognised by all within the Muslim community it is a potent resource with which to warrant particular projects, thereby guaranteeing its presence in quite diverse constructions of how Muslims should behave. Take the issue of how Muslims should relate to organisations such as Al Qaeda and whether it (and its project) deserves a hearing. Research shows that speakers wishing to either depict Al Qaeda as outside the community of debate or as bone fide participants in that debate can be found invoking this same Qur’anic verse. Whereas the former argued the verse implied a norm of moderation (which excluded Al Qaeda), others countered it referred to an approach to finding the ‘correct path’ between the many possible extremes, and that as a corollary, more inclusive debate was required (Hopkins & Kahani-Hopkins, 2009).

Again, the point should be clear. For analysts of identity to assume a singular and homogenising conception of a group’s cultural identity is to miss the point that the meanings of all manner of cultural products are routinely re-worked as group members develop different analyses of the issues before them and how they should respond. In turn, it would be an analytic error to assume cultural products have a singular meaning and to attempt to distil a core essence from all their manifestations. Doing so strips them from the context of their practical usage and so likely results in an account of their ‘essential’ meaning which is so empty as to be meaningless (Tudor, 1972).

6 Accomplishing Essentialism

This chapter has emphasised the psychological significance of identity constructions. When adopted, they encourage behaviour based upon a particular vantage point concerning the social and material world. Moreover, it is this quality that prompts their contestation: identity-related argumentation is worth entering (and therefore exists) because it is consequential. Accordingly, rather than identities having a fixed essence their relevance, boundaries and cultural contents, are contested social products with the potential to advance all manner of projects.

Yet, whatever the identity and whatever the resources employed in its construction, all such representations face a challenge: to the degree their strategically constructed nature is recognised, their ability to command others' investment is diminished. The challenge is to make one's version of the social and material world believable. Such issues are recognised by analysts of language (e.g. Potter & Wetherell, 1987; Wetherell & Potter, 1992) who demonstrate the ways in which speakers anticipate the charge that their versions of events and people are interested (e.g. self-serving) through 'working up' their accounts so that they appear factual descriptions of what everyone knows. In turn, this draws our attention to social actors' argumentative and rhetorical skills (or 'witcraft': Billig, 1987) involved in building accounts capable of countering the actual or potential alternative category constructions advanced by their opponents. Accordingly, analysts of identity must both eschew essentialising assumptions and explore the means through which social actors seek to naturalise their preferred version over others through invoking essentialising rhetoric.

The vehicles available for such rhetorical work are several (Hopkins, 2023). For example, metaphors have enormous potential to frame people's understandings (of themselves and others) through reference to familiar, concrete and vivid referents (Ortony, 1975). Whilst metaphors foreground certain ideas, so they obscure others such that they 'limit what we notice, highlight what we do see and provide part of the inferential structure that we reason with' (Lakoff, 1992, p. 481). Needless to say, the invocation of metaphors does not guarantee rhetorical success: the chosen metaphors can lack the necessary cultural or physical correspondence with the identity and proposed strategy (Bougher, 2012; Heo, 2020). However, when drawing on wider culturally available discourses, they can be powerful. For example, Gradmann (2000) explores the development of bacteriology in the nineteenth century and how concepts from this emergent body of work were appropriated politically to inform the characterisation of others as 'enemies'. Such metaphors, referencing as they do invisible pathogens responsible for the spread of disease, have the potential to 'anchor' (Moscovici, 1984) an understanding of others as threat and to imply that their danger is integral to their very being. In turn, as this mode of representing one's enemies became familiar, the ground was readied for the Nazi-propagated characterisation of Jews as 'a noxious bacillus' which featured so effectively in their campaigns to define Jews as an alien, contaminating presence threatening the body politic (O'Brien, 2009).

The skill in making such metaphors ‘work’ is illustrated in analyses of the rhetoric of threat in the Rwandan genocide. The differentiation between Hutus and Tutsis has a complex history (Carney, 2012) in which colonial administrators played a significant role: they contributed to the racialisation (and hence essentialization) of these categories in hierarchical terms such that the Hutus were represented as genetically closer to the European colonizer (and therefore superior). Building on this racialised differentiation, Hutu propagandists put enormous rhetorical effort into working up a narrative of sub-human Tutsi threat centred on species-related metaphors, e.g. representing Tutsis as *inyenzi* (cockroaches). For example, one radio broadcast argued:

A cockroach gives birth to another cockroach...The history of Rwanda shows us clearly that a Tutsi stays always exactly the same, that he has never changed. The malice, the evil are just as we knew them in the history of our country. () A Tutsi is somebody who seduces by his word but whose wickedness is incommensurable. A Tutsi is somebody for whom the desire of revenge never dies out, somebody whom you can never know what they think. () In our language, a Tutsi is called a cockroach because it takes the advantage of the night, who makes use of concealment to achieve his goals. (cited in Rothbart & Bartlett, 2008, p. 241).

As this example illustrates, the effort put into bringing the cockroach metaphor alive is striking. It is worked into a narrative that attributes the Tutsis an unchanging essence passed down from generation to generation (‘A cockroach gives birth to another cockroach’). Moreover, their threatening nature is emphasised by explaining that just as cockroaches take ‘advantage of the night’, so Tutsis operate in the shadows, pursuing their own goals (‘revenge’). Although more can be said on such elaborations, the point is simple: organising a genocide requires witcraft as well as weapons.

Concerning the use of species-related metaphors, it is appropriate to note another feature of their use: their capacity to represent others in a striking visual form. This is well-illustrated in Simonsen’s (2020) analysis of species-related metaphors in the policing of acceptable identity-related values in the rhetoric of Orthodox Jews in Israel opposed to military service. Simonsen, explores how religious Jews serving in the military were depicted visually as pigs. Obviously, this illustrates how some metaphors may lend themselves to visual rhetoric. However, it also illustrates something of the art to the selection of such metaphors and visual referents. Knowing what will resonate with the cultural values of one’s audience is key, and as the pig is judged ‘unclean’ and ‘forbidden’ according to Jewish religious law, it has considerable potential to police the boundaries of religiously acceptable behaviour.

The wider significance of this latter point about knowing what will resonate with one’s audience can be elaborated through reflecting on the meanings associated with different sorts of categories and how these can best be tapped. Take the category of ‘nation’. In popular imagination there is an intimate relationship between national identity and geographical place with Schama (1996) arguing that the capacity of the nation to capture our imagination is bound up with the ways in which geographical space is ‘mapped, elaborated and enriched as homeland’ (Schama, 1996, p. 15). Yet, far from a ‘given’, a nation’s topography is itself subject to construction with Schama (1996) arguing ‘landscapes are culture before they are nature... constructs of the imagination projected onto wood and water and rock’ (p. 61). In turn, this

implies potential for the meaning of this topography to be imagined strategically and so ground (as ‘indigenous’) particular versions of the nation’s psyche in the nation’s landscape (and others as ‘alien’). For example, Spanish fascists skilfully developed a eulogisation of the peasantry and their connection to the land which represented fascism as rooted in the harsh Spanish terrain and ‘soft’ liberalism as literally out-of-place (Richards, 1996). In turn, such rhetoric involved re-appropriating various cultural products—such as the writings of the poet Miguel de Unamuno who had described how:

in the interior lives a race of dry complexion, hard and wiry, toasted by the sun and cut down by the cold, a race of sober men, the product of a long selection by the frosts of the cruellest winters and a series of periodic penuries, suited to the inclemencies of the climate and the poverty of life. (Miguel de Unamuno, 1895, cited in Richards, 1996, p. 154)

Yet, whilst witcraft is important, it is appropriate to note that there is more to the successful essentialisation of identity than carefully selected metaphors and referents. As emphasised earlier, if the resultant identity definition is to be viable, one must be able to act on its basis (Reicher et al., 2005), and this again returns our attention to the social context one inhabits and the local social practices and social interactions that make the crafted narrative plausible and actionable.

7 Conclusion

Our group-based identifications matter, and it is because of their cognitive and behavioural consequentiality that they are such a prominent feature of public life with all manner of social actors seeking to recruit our investment in their preferred constructions. Analytically speaking, this implies we eschew essentialised accounts of identity in our theorisation of social phenomena. Rather, people’s talk of identity has a performative and constitutive dimension, organised to encourage the forms of action that would realise a particular version of the social world. Thus, when people speak about their identifications as being characterised by particular boundaries, a particular set of values, a particular character, etc. they are not describing a given reality, but are instead advancing particular identity ‘projects’ to be brought into being through action on the basis of that construction (Reicher & Hopkins, 2001). All this implies that essentialising talk should be read as a form of social action, grounding speakers’ projects for the future in visions of identity that appear timeless givens.

Reading essentialising talk as social action has another implication. Analytically we are drawn to consider the contextual usage of essentialising rhetoric, and when we do so we are alerted to its varied usage and its varied strategic purpose. For example, research shows prejudiced majority group members endorse essentialist conceptions of identity when it can be used to exclude people they wish to exclude yet reject such conceptions when they can be used to exclude them (Morton et al., 2009). Similarly, Verkuyten’s (2003) analysis of minority and majority group members’ arguments

concerning multiculturalism shows both parties invoked and resisted essentialising conceptualisations of identity. Whereas ethnicised majority group members justified discrimination through essentialised accounts of cultural differences, they also de-essentialised culture when arguing against the recognition of minority group identifications. In parallel, ethnicised minorities responded to demands for assimilation with essentialised visions of culture, yet de-essentialised culture when it implied discrimination against them was warranted.

Whilst such research confirms the strategic significance of essentialising accounts of identity, it also alerts us to their varied political uses. Essentialist rhetoric is not by definition oppressive and de-essentialism is not by definition progressive: its political significance depends on the argumentative context of its usage (Verkuyten, 2003). If it can mobilise exclusion and violence, so it can warrant demands for the minority groups' 'recognition'. Accordingly, some analysts have expressed caution about the wider implications of critical investigations of essentialism, with Modood (1998) cautioning that 'what promised to be an emancipatory, progressive movement seems to make, with its "deconstruction" of the units of collective agency (people, minorities, the oppressed and so on), all political mobilisation rest on mythic and dishonest unities' (p. 381).

How best to evaluate the use of essentialist rhetoric across different identity constructions is unclear. Phillips (2010) argues that the term essentialism 'covers a multitude of possible sins' (p. 49) such that 'what is wrong with it is often a matter of degree rather than categorical embargo' (p. 58). Indeed, she suggests that some forms of essentialism are not so easily distinguished from 'more innocent forms of generalisation' (p. 58). This implies that when exploring identity rhetoric, we need a nuanced approach to evaluating the form and scale to the essentialism found. It may also be appropriate to explore the social processes by which such constructions were developed. Studies of toxic leadership (e.g. dictatorships) show the essentialisation of group identity is routinely organised around the leader (such that the latter embodies the former), and alternatives are silenced (Reicher et al., 2016). However, other identity constructions may arise through more inclusive deliberations such that the political function of any essentialist representation is qualitatively different. Pursuing such a logic, Werbner (1997) cautions against any tendency to 'essentialise essentialism' (p. 249), arguing there is a difference between exclusionary essentialisations which deny others' rights and the self-essentialising that empowers and motivates minority group members' pursuit of social change.

All this is to imply that analyses of identity construction should not only explore the way categories are invoked, boundaries defined and cultural values represented. They should also investigate the political context, the social processes and the power dynamics (within and between groups) through which such constructions are produced, what they accomplish, and exactly whose interests they serve. Once again, this returns us to the need to locate category construction within a wider analysis of the social context and its social organisation.

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The Interface of Ethnicity and Institutions: Power, Regulations, and Ethnic Distinctions



Alejandro Erut

1 Ethnicity as Institutional Tool

Assume that you migrated from South America to the United States. In urban Buenos Aires, your home until recently, being “Latino” was not a prominent social category (this might be new for some readers). However, upon arrival in the U.S., this label becomes inescapable. Others categorize—mark—you as Latino, and you must adapt to this label to navigate a new social landscape. What was once a loosely relevant category applied to “others” becomes central to your own identitarian experience of institutional life.

Before coming to the U.S., as an Argentinian, you were never asked about your ethnicity when filling out forms, nor had you encountered such questions when visiting your neighboring countries. You were never called Latino or interacted with others under that nominal schema—or hierarchical for the case. However, from the moment you land in the new country, you are prompted to declare your ethnicity when enrolling in school, visiting the dentist, completing government paperwork, applying for school, a driver’s license, and so on. These interactions are not trivial. They reflect the institutionalization of ethnicity—a transformation of social perception into structured regulations. They reveal that “being Latino” is more than a personal attribute. It is an institutionalized inscription. It regulates access to healthcare, education, legal protections, census classification, political recognition, and social mobility. It is both an input and an output of institutional logics.

This example is not unique to the U.S. or the Latino category or my personal experience as Argentinian (Mora, 2014; Nobles, 2022; Perlmann, 2018). In virtually all human societies, institutions—legal, political, bureaucratic—embed ethnic distinctions into their frameworks, generating patterned forms of classification and regulation (Ames & Gomes, 2017; Barham & Coomes, 1994; Barth, 1956; Bird, 2010; Bradby, 2003; Comaroff & Comaroff, 2009; Cordeu & Siffredi, 1971; Descola, 1996;

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Fortes & Evans-Pritchard, 2006; Frymer, 2010; Gravlee & Sweet, 2008; Martínez Sastre, 2016; McCallum, 1990; Montani, 2008; Mora, 2014; Morrison, 2019; Nave, 2000; Nobles, 2022; Perlmann, 2018; Ribeiro, 1971; Romm, 2010). Whether we examine land tenure (as reflected in the ILO, Convention 169),¹ management of the commons (Coomes & Barham, 1997; Ostrom, 1999), intercultural and colonial education (Ames & Gomes, 2017; Novaro, 2016), or marriage patterns (Furtado, 2012; Smits, 2018), a consistent pattern emerges: ethnicity becomes an institutional raw material, a set of distinctions that institutions mobilize to define rules, rights, and obligations. Thus, a theoretical approach that ties together the patterns in which different institutions interlace with ethnic structures should be possible.

The relationship between institutions and ethnicity has long occupied a central place in the social sciences. While constructivist traditions have illuminated how institutions shape and sustain ethnic and other social categories, they often remain confined—perhaps due to a symptomatic excess of descriptive, normative, or epistemologically relativist assumptions—to the cultural particularities of their case studies, thereby avoiding the theorization of cross-cultural regularities (Brown, 2008; Eriksen, 2010; Spiro, 1986). Conversely, most non-constructivist perspectives—such as those rooted in sociobiology—tend to overlook or understate the role of social and institutional influences in the formation and maintenance of ethnic categories (Gil-White, 2001; Johnson, 2001; Ross, 2001; Van den Berghe, 1987).

Each perspective holds some merit. Still, given that ethnicity is culturally specific and institutional arrangements vary across societies, a flexible theoretical approach is necessary to account for these variations and explain how institutions exploit the evolved salience of ethnic distinctions to create stable, compliant, and robust forms of social regulation.

Beyond highlighting the institutional relevance of ethnicity, I propose to reposition ethnicity as foundational to institutional stability itself. Institutions do not simply shape ethnic categories—they mine them. Ethnic distinctions, preexisting in common sense or everyday categorization, become assets for institutional actors (see also Hopkins, 2026). These actors—operating under various constraints of power and self-interest—mobilize ethnicity to exploit hierarchies, define normative orders, and structure social interactions. They capitalize on evolved ethnic intuitions. In this sense, ethnicity becomes a shortcut for sorting, assigning, and justifying roles in governance systems. Thus, I propose here a framework that situates ethnicity as both cognitively grounded, culturally tuned, and institutionally co-opted.

The argument of this chapter is the following: in both intergroup and intragroup settings, ethnicity operates as a fundamental organizing principle that institutions weaponize to stabilize inequality and structure social life. Institutions—and occasionally organizations—exploit ethnic categories to sustain regulatory structures, simultaneously shaping and reinforcing existing collective identities. In this sense, institutions do not passively mirror ethnic diversity; they actively incorporate and instrumentalize it through institutionally powerful actors. Whether through formal policy or bureaucratic routine, they embed ethnic categories into their regulatory logic,

¹ International Labor Organization (2009)

granting or denying access, recognition, and participation. In doing so, institutions exploit ethnic distinctions to construct resilient hierarchies and articulate interactions, often concealing power imbalances under the guise of cultural consensus.

This chapter unfolds as follows. In section two, I situate ethnicity within broader processes of social marking and provide an operational definition of ethnicity, focusing on its essential aspect—ethnicity as a categorical distinction between “us” and “them,” which is labeled. In section three, I review evolutionary perspectives on ethnic cognition, arguing that ethnicity offers a robust foundation for institutional persistence by enabling ethnic categories to become embedded in institutional regulations. Section four introduces conceptual approaches to social institutions that support the chapter’s proposed integration. Institutions are understood as systems that hijack human psychology—such as ethnic cognition—to sustain their structure. Based on evolutionary theories, I suggest that institutions persist not merely through formal rules but by anchoring themselves in intuitive evolved psychological mechanisms, thereby shaping and reinforcing mental and public representations. In section five, I explore the relationship between institutions and power. I argue that self-interest theories account for how institutional actors strategically exploit ethnic cognitive mechanisms to maintain control or legitimacy. The chapter concludes with three illustrative cases. The first examines the role of ethnonationalism in Transylvania’s formal education system. The second explores how ethnic categories became institutionalized through legal structures and regulations in the Transvaal and during the early years of the Union of South Africa. The third analyzes patterns of interethnic marriage in Yugoslavia, showing how even intimate institutions like marriage encode and reproduce ethnic boundaries without formal legal constraints.

By the end of this work, I aim to address the following questions: (1) How can we theorize the relationship between ethnicity and institutions? (2) How does the integration of ethnicity within institutions function, and (3) Why does this configuration endure across societies?

2 Social Aspects of Ethnic Institutional Embedding

Institutional systems are predicated on social classification. They operate by categorizing individuals—defining who belongs, who governs, and who benefits. Ethnicity, like other identity categories (e.g., nationality, race, or gender), is part of a broader process of what Briones (1998) called social marking: by segmenting the human continuum, individuals create groupings based on various criteria (e.g., knowledge, language, behavior, biology (Barth, 1956; Eriksen, 2010; Moya & Boyd, 2015)) and motivations (e.g., identification, cooperation, exploitation) (Kurzban et al., 2001). These marked distinctions are not merely descriptive; they structure social interactions (Goffman, 1956) and institutional responses in ways that reflect historical conjunctures and power relations (Banton, 1998; Hobsbawm, 2012).

These markings reflect and reinforce systems of inclusion and exclusion. They do not just describe—they assign rights, constrain roles, and structure authority. They

provide structure to our interactions (Bourdieu, 1977). And while Identities are multifaceted—we can be categorized simultaneously by profession, gender, religion, or nationality—their salience shifts with context (Brubaker et al., 2004; Kurzban et al., 2001). What matters institutionally is which category becomes operative in a given moment, such as when determining access to state services, enforcing legal status, or assigning moral authority. Institutions, from courts to consulates, respond to these identity markers with differential treatment, reinforcing their social reality and material consequences (Appiah, 1996; Brubaker, 2004.) As Brubaker (Brubaker, 2004, p. 12) claims, ethnic groups “happen” through specific events and classifications, rather than existing as fixed entities. These events, I argue, are mediated by institutional regulatory functions (see below). In practice, ethnic distinctions become consequential in domains such as migration, land adjudication, or political representation—where institutions require legible categories to organize differential treatment (Barth, 1969; Roosens, 1991; Weik, 2014).

In this sense, the institutional impact of social marking varies with the category’s perceived permanence, level of explicitness, and scope. While categories, like “bachelor” are temporary, others, like ethnicity or nationality, are usually more enduring. Yet not all are globally recognized. Categories such as caste, witchcraft, or clan ascription may hold institutional power in some cultural contexts but be absent in others (Evans-Pritchard, 1976; Leach, 1979).² Even seemingly universal distinctions—such as sex or nationality—are filtered through local regimes of interpretation (Anderson, 1991; McCallum, 1990). In this sense, social marking is not universal in form, but ethnographically diverse in content. Categories such as caste (India), clan (East Africa), or witchcraft status (Central Africa) have the potential to perform analogously to ethnicity in their institutional effects, though their phenomenological contours vary. I consider that institutions engage with these distinctions through recursive systems of classification, regulation, and reproduction, and social marking becomes institutionally potent when it is both symbolically resonant and administratively deployable. This convergence gives rise to marked institutional spaces, wherein categorization is not merely a mode of social perception but a condition of access, legitimacy, and control.

What distinguishes ethnicity from other forms of social marking? Following Eriksen (2010), ethnicity can be analytically differentiated from religion (tied to the sacred), from nationality (linked to the state), and from race (associated with biological essentialism, see Gelman, 2003; Gelman & Hirschfeld, 1999; Gil-White, 2001; Hirschfeld, 1996; Kanovsky, 2007). Nor does ethnicity necessarily map onto cultural difference: groups such as Latinos or Jews may share ethnic affiliation despite considerable internal heterogeneity (Bashkow, 2004; Gupta & Ferguson, 2002). Nonetheless, ethnic categories are typically constructed around culturally salient elements that give content to the grouping criteria, often through language, kinship, and/or historical narrative processes (Anderson, 1991; Briones, 1998; Moya & Boyd, 2015; Wolf, 2010).

² See also Middleton and Winter (2013) and Peek (1991) for extensive surveys on witchcraft, sorcery, and divination across societies.

Yet a purely eliminative strategy—defining ethnicity by what it is not—quickly runs aground. One could indefinitely extend the list of contrasts to include sex, gender, occupation, or class. More critically, such distinctions are complicated by the fact that ethnicity often intersects with, or is co-constituted by, other social markers. Ethnonationalist ideologies, for example, collapse the boundary between ethnicity and nationality (Kiss, 2018; Stern, 2019), while cases like the Kazakhs or Mongols illustrate processes of racialization or biological essentialization of ethnic identity (Gil-White, 2001).

For the purposes of this chapter, I define ethnicity as a socially marked category that institutions formalize, reinforce, but also exploit. Minimally defined, it has two core features:

- (1) It divides society into “we” and “others,” establishing symbolic and often hierarchical boundaries.
- (2) It assigns ethnonyms—labels that become attached to institutionalized roles, rights, and obligations.

Ethnic categories such as Shuar versus Inkis (Colonos) or Wichí versus Criollos are not just linguistic tags; they are institutionalized distinctions that shape access to land, political representation, and recognition. These distinctions become meaningful not as a reflection of cultural substance but as a product of socio-institutional processes.

3 Cognitive Aspects of Ethnic Institutional Embedding

To understand how institutions leverage ethnicity to structure social roles and reinforce power asymmetries, we must first examine the cognitive and evolutionary foundations of ethnic categorization. Ethnicity is not simply a cultural construct; it is rooted in a suite of evolved and developmentally early cognitive mechanisms that organize social information and guide behavior in group contexts (Hirschfeld, 1994; Spelke, 2013). Therefore, understanding the cognitive and developmental foundations of ethnicity is crucial for explaining how institutions recognize, mobilize, and institutionalize ethnic representations as part of their structuring logic (Brubaker et al., 2004).

From an evolutionary perspective, ethnicity comprises adaptive mechanisms that facilitated both intra- and intergroup cohesion and cooperation in ancestral ecologies—particularly during the Pleistocene—where managing complex cultural information was critical for survival and coordination (Johnson, 2001; Moya & Boyd, 2015; Ross, 2001; Van den Berghe, 1987; see also Smaldino, 2026). Ethnic categories functioned as a means to classify, sort, rank, and evaluate others, enhancing coordination by providing individuals with a cognitively efficient system for navigating

the social world (Gil-White, 2001).³ These mechanisms did not evolve in isolation but rather under different ecological and social pressures, producing variation in how ethnic cognition is expressed and institutionalized across ethnic phenomena (Moya & Boyd, 2015).

Cognitively, ethnic classification processes depend on a range of socially transmitted cues—such as language, dress, behavioral norms, and other culturally salient markers—that are often bundled into coherent ethnic representations (Moya & Boyd, 2015). In settings marked by intergroup contact, these markers serve as information shortcuts for managing group affiliation and guiding social interaction (Brubaker, 2004). This bundling process reflects the ways in which cognitive systems are tuned to recognize and respond to regularities in social learning environments. Institutions build upon these cognitive patterns, formalizing them into symbols and regulatory (e.g., prescriptive) structures that manage legitimacy and compliance (Barth, 1969; Eriksen, 2010).

In contexts of intergroup contact, markings at the group level likely comprise a series of culturally distinctive elements, making the concept of ethnicity an efficient cognitive element for multiple identification needs (Moya & Boyd, 2015). Critically, the cognitive underpinnings of ethnicity intersect with domain-general learning heuristics—such as prestige bias, conformity bias, and similarity-based learning. These heuristics assist individuals in identifying whom to trust, imitate, follow, or avoid, and thus shape the architecture of social learning and cooperation (Gil-White, 2001; Henrich & Gil-White, 2001; Kurzban et al., 2001). Developmental research supports the early emergence of these capacities: infants raised in single-race households exhibit visual preferences for same-race female models as early as three months of age (Quinn et al., 2008). By ten months, infants show a preference for objects offered by native-language speakers over those presented by foreign-language speakers, and by 2.5 years, they prefer to share objects with individuals who speak their native language (Kinzler et al., 2012). These early-emerging capacities suggest that institutions inherit a “pre-loaded” set of psychological dispositions that can be selectively activated and reinforced to regulate group behavior and define membership boundaries.

Together, these findings suggest that the psychological architecture supporting ethnic cognition is not only early-developing but also functionally integrated with broader mechanisms of cultural learning and affiliation (Moya & Boyd, 2015). I argue that institutions pull this evolved psychology to bootstrap their structures, regulatory processes, and scopes of action. By aligning institutional logic with preexisting cognitive representations of ethnic categorization, institutions can stabilize their actions, legitimacy, and articulatory compliance within and between ethnic communities.

To understand how such mechanisms interact with institutional forms, it is useful to examine competing accounts of how ethnicity is cognitively instantiated. Some scholars, such as Gil-White, argue that ethnicity results from an exaptation—a cognitive mechanism originally evolved for processing biological categories that

³ This cognitive multiple functionality of concepts is what Machery (2009) refers to as conceptual promiscuity.

is co-opted for social group identification (Gil-White, 2001). On this view, essentialist thinking about ethnicity reflects the reuse of cognitive mechanisms and structures evolved to process animal species information. For instance, Gil-White (2001) suggests that perceived human differences (not just physical but also behavioral and symbolic) are taken as exapted as inputs to the domain of biology and delivered in the form of ethnic instead of biological categories.

Yet, this view is challenged by evidence presented by other authors, such as Hirschfeld (1994), whose studies suggest that racial and ethnic categories develop to a great extent through social learning, that is, not as an automatic button-up response based on perceptual dissimilarities (e.g., skin color) (see also Machery & Faucher, 2005). In a study with American children in which participants are asked to classify dolls racially characterized, the author shows that children learn the racial labels (e.g., black vs. white) before being able to classify the dolls on the basis of those labels (Hirschfeld, 1996). Moreover, the author suggests that the underlying ethnic cognition is not the same as the one that humans use for biological categories or to track people's psychological properties, but one that is specific to social groups (Hirschfeld, 1996; see also Shutts et al., 2010, 2011; Spelke, 2013). In a study with autistic children, Hirschfeld and colleagues found that even when having an autistic condition impairs making mental state attribution to individual character, participants are capable of attributing stereotypes to mental properties (e.g., intentions) to groups (Hirschfeld et al., 2007).

Further complexity arises when examining how essentialist properties are instantiated in different cultural contexts and categories (Carter, 2026; Diesendruck, 2026; Kanovsky, 2007; Machery & Faucher, 2005). Among the Wichí communities of northern Argentina, ethnicity is not fully essentialized (Erut, 2017). Rather than being defined by biological inheritance, ethnic identity is conceived as a socialization process. Cultural traits, such as community upbringing and language proficiency, determine ethnic attributions between indigenous groups (e.g., Wichí vs. Chorote) and between indigenous and non-indigenous populations (e.g., Wichí vs. Colonos, or people of European descent). This case shows that the cultural instantiation of ethnic psychology can use social criteria of classification such as learned behaviors and social factors, rather than biological inheritance (Erut, 2017). Nonetheless, Wichí ethnicity includes at least one essentialist component: once acquired, ethnic identity is considered fixed and permanent. This case highlights the persistence of ethnic essentialism even in societies where ethnicity is largely socially attributed (Erut, 2017).

In contrast, the Vezo people of Madagascar present an even more flexible model of ethnicity, based not on descent but on behavior (Astuti, 1991, 1995). To be Vezo is to engage in Vezo practices—especially fishing—not to inherit biologized properties. This non-essentialist conceptualization of ethnic identity reveals the cognitive and cultural pliability of ethnic categorization, showing how ethnic cognition can foster more dynamic or more rigid identity regimes depending on cultural conditions. Cases like the Vezo or the Wichí suggest that ethnic cognition provides institutions not with a fixed template but with a flexible set of tools to shape social boundaries in ways responsive to local conditions and power dynamics.

Further evidence comes from Moya and Boyd's (2015) ethnographic and theoretically informed research in Huatasani, a town in the Peruvian Andes where Quechua- and Aymara-speaking communities coexist. The authors found that ethnic boundaries are shaped by multiple reasoning pathways, with different social cues—such as language, religion, political affiliation, and morphology—triggering different dimensions of ethnic behavior. For instance, while linguistic boundaries influence ingroup cooperation and stereotyping, they are less predictive of intergroup competition or essentialist categorization. In contrast, market integration and political affiliation have stronger effects on essentialist reasoning and stereotyping. This case illustrates that ethnic cognition has a componential structure: it comprises multiple reasoning mechanisms that institutions can differentially activate or suppress depending on the desired behavioral and social outcomes (see also Moya, 2026). This feature also provides opportunities for institutional integration.

In sum, the observed cross-cultural variability in how essentialist or dynamic ethnic categories are instantiated demonstrates that ethnic cognition cannot be reduced to a false dichotomy between biological determinism and purely cultural construction (Bloch, 2012; Machery & Faucher, 2005; Searle, 1995). Taken together, these examples further underscore the potential of culturally influenced cognitive architectures in adapting to institutional dynamics. Ethnic categories are neither entirely biologically determined nor wholly constructed; they emerge from a layered interaction between evolved psychological capacities and cultural transmission processes (Machery & Faucher, 2005). I suggest that institutions exploit this interaction.

In the next section, I will conceptualize how ethnic cognitive mechanisms are embedded in institutions through their regulative function.

4 Ethnicity within Social Institutions

There is some consensus in philosophy, economics, and social sciences in defining institutions as rules or norms that organize, coordinate, and regulate social interactions, facilitating cooperation among individuals and groups (Abel, 1974; Boyer & Petersen, 2012; Currie et al., 2021; Heintz, 2007; Hodgson, 2001, 2002, 2006; North, 1991; Searle, 1995). Hodgson, for instance, defines institutions as “systems of established and prevalent social rules that structure social interactions” (Hodgson, 2006, p. 2).⁴ In agreement with other economic theorists (e.g., North (1991)), Hodgson states that institutions have a role in creating “stable expectations of the behavior of others” and shaping “thought and action by imposing form and consistency on human

⁴ Authors will characterize the role of rules for institutional facts in different ways. For example, Searle (1995, 2010) distinguishes between constitutive and regulative institutional rules. Constitutive rules create an institution's functional role (e.g., traffic regulations designed to minimize accidents), whereas regulative rules govern specific instances of institutional behavior (e.g., driving on the right side of the road) (Cf. Hodgson, 2006; North, 1991).

activities” (Hodgson, 2006, p. 2).⁵ The question is, what are the underlying mechanisms that allow for success and stability? Moreover, how do institutions emerge in order to fulfill their function?

Institutions are the basis of human societal and cultural structures. Without institutions, there is no human society. This ubiquity presents the challenge of providing a natural explanation. As natural products, institutions must serve one or more functions that provide a fitness advantage to individuals, regardless of the number or quality of beneficiaries (Heintz, 2007).⁶ One of these functions coincides with the social organization of cooperation (Currie et al., 2021). The other relates to the regulation of representations (Heintz, 2007; Sperber, 1996). In the case of ethnicity, these regulatory functions are not limited to abstract norms—they directly structure how social categories are represented, maintained, reproduced, and exploited in institutional contexts.

Once an institution emerges or is established in a human group, it must attain a level of stability or equilibrium to persist over time and effectively perform its function. This stability is achieved through the recurrence of the agent’s behaviors in accordance with the institutional regulations (Heintz, 2007; Searle, 1995; Sperber, 1996). More broadly, it is a recurrence in the actualization of agents’ mental representations (e.g., beliefs, behaviors, values) (Heintz, 2007; Sperber, 1996). Moreover, institutions produce two levels of representations: a level of regulative representations (e.g., rules) and another of public representations generated under the parameters of the regulatory level (Heintz, 2007; Sperber, 1996). As Heintz put it concisely, “[u]nderstanding the role of institutions in cultural evolution then consists in describing the causal chains that link the mental representations and the public productions of the institutions together and accounting for the causal effect of the regulative representations” (Heintz, 2007, p. 247). Thus, this representational approach suggests the pool of regulative representations shapes and gives origin to social causal chains of representations that cause the distribution of institutionally shaped representations in the environment. In this sense, institutions provide stability to the social environment by creating a cultural niche of representations whose stability is guaranteed by the causal effect of the regulatory pool (Heintz, 2007). As Heintz notices, the reproduction of specific behaviors (e.g., getting married or fasting during Ramadan) is not the result of behavioral imitations but the compliance of individuals to other representations (Heintz, 2007; Sperber, 1996).

⁵ A valid question may arise: If institutions are defined this way and social marking constitutes a set of prescriptions through which ethnicity and other categories are conceptually instantiated, can ethnicity be considered an institution? Yes, although its institutional character is often overshadowed in the literature by its identitarian function. However, the objective here is not to explore how ethnicity is defined as an institution. Rather, the goal is to consider how and why it is integrated into other social institutions. It is important to note that institutions do not operate in isolation; they often interact recursively, with one institution subsuming another (Searle, 1995) as part of an “institutional matrix” (North, 1991). In this regard, ethnicity has a cross-institutional presence.

⁶ Locally speaking, successful institutions must outcompete their alternatives that serve a similar purpose. For instance, Fong et al. (2024) suggest that formal schooling has largely replaced informal education as an effective means of large-scale teaching of hard to learn new technologies (e.g., writing).

Taken altogether, these conditions also apply to the effect of institutions, as active regulative devices, on social categories, including ethnicity. For instance, an institution like the nation-state regulates crime and punishment through a set of judicial institutions, with laws designed to punish and maintain social order and cooperation. The legislative institutional branch of the state, such as the parliament, plays a central role in designing and implementing these laws to mitigate crime, isolate offenders, and reinforce societal norms. There is a myriad of cases, however, in which those laws and their implementation—which include law enforcement institutions—reinforce an inequal application that correlates to the social identity of the parties.⁷ Thus, institutions formalize and reinforce ethnic representations by embedding them into law enforcement criteria, judicial decisions, laws, organizations, and other institutional outputs.

This process is particularly evident in bureaucracies, where standardized classification systems shape access to resources, political representation, and even social mobility. For example, while the U.S. census racial and ethnic categories—introduced initially for demographic tracking—have become deeply ingrained in unequal policy-making and implementation (Mora, 2014; Nobles, 2022; Perlmann, 2018). Still, the political activism of unfavored groups was able to push for affirmative action policies and legal protections (Gillion, 2013). In this case, actors revise the interface between institutions and ethnicity to ameliorate a social imbalance that is *de facto* present in the institution's regulative representations.

This process took a different form under colonial rule, when institutions were designed not to correct but to reinforce existing inequalities. During the colonial administration of Arabic-speaking countries (e.g., Algeria, Tunisia), education became a central tool for maintaining imperial dominance through systemic exclusion and ideological indoctrination. (Morrison, 2019). As Morrison notes, colonial authorities established “a two-tier system of education in which a minority of local inhabitants received a European-style education while the majority remained locked out of educational opportunities” (Morrison, 2019, p. 246). This structure created a narrow elite to serve in colonial governance, and a large “mass of illiterate, disempowered peasants” (Morrison, 2019, p. 246). Beyond exclusion, education also served as a vehicle for shaping colonial subjects' self-perception: school curricula taught “local inhabitants that they were an inferior race and unable to rule themselves” (Morrison, 2019, p. 247). Structural barriers further entrenched educational inequality: few indigenous children could access elite foreign-run schools, which catered mostly to expatriates, and the imposition of French or English (e.g., Egypt) as the language of instruction and certification marginalized those “who knew only Arabic” (Morrison, 2019, p. 247). Moreover, colonial administrations often neglected the creation of a sufficient number of public secondary schools, and, given that such education was required for employment in the colonial administration, most indigenous people were left excluded from both education and upward mobility (Morrison, 2019). This

⁷ A widespread case is the proportion of incarceration minorities in the U.S. (Loury et al., 2008; Schoenfeld, 2018).

example shows that institutions co-opted, codified, and reproduced ethnic hierarchies by design, using educational and job access to maintain social stratification.

A central component of institutional stability is its psychological underpinnings. In a series of articles, Boyer and Petersen (2012, 2013) state that many institutions have a natural origin that can be explained by the action of a set of evolved domain-specific cognitive mechanisms. The authors agree with other proposals that institutions are “bundles of concepts, norms, and behaviors” that are accessible to “culturally competent members of a group” (Boyer & Petersen, 2012, p. 3). Against domain-general approaches to cognitive architecture, they suggest that there is a causal connection between institutions and content-specific evolved intuitions. They hold that institutions that “fit” those evolved intuitions have a larger probability of emerging and acquiring stability due to a principle of less cognitive effort and resistance (Boyer & Petersen, 2012, p. 2). According to the authors, this is possible due to two properties of cognitive systems. On the one hand, they operate better, more efficiently, and more reliably in environments that match their architecture. On the other hand, this architecture motivates environmental changes that match them (Boyer & Petersen, 2013). I suggest that the causal relationship between evolved psychology and institutions explains the institutional promiscuity of ethnicity. But there is still another element missing. If ethnicity is not the product of an evolved psychology that is culturally and socially informed, we must take into account the political role of actors that participate in institutional life and, more specifically, those in power (Eastwood, 2012; Heintz, 2007).

5 Institutions, Power, and Self-Interest

We saw that institutions have two levels of representation: the regulative set and its products. Many authors noted that this brings the issue of how the regulative set is established and if it reflects the interest of specific parties. For instance, Heintz gives the example of a belief that can be cultural due to multiple causes, such as institutional ones or psychological ones, but he remarks that it also might have ecological causes, “such as the people being interested in the maintenance of the institution having coercive material power” (Heintz, 2007, p. 247). Eastwood, in a criticism of the excessive psychologism in Boyer and Petersen’s (2012) explanation, sustains that several “institutional arrangements are created and persist not because they conform with our shared expectations and intuitions but because *powerful actors* impose them” (emphasis is mine). (Eastwood, 2012, p. 544). In the next section, I will give some examples of this articulation, but here, I will address the role of power.

By “power,” I mean the capacity to make decisions, generate influence, and maintain privileges over other individuals or groups. A central question in social and political sciences is how power—usually held by a few at the expense of many—can be sustained without physical violence. Marxist philosophy offers one explanation through the concepts of alienation (e.g., separation of work from its product, workers from the means of production, and workers from their identity as class) and ideology,

which explains why the subordinated often fail to recognize their circumstances of exploitation (Marx, 1980). Later, Gramsci developed this further by connecting social inequality with culture through the concept of “cultural struggles” and the elements for a counterhegemonic action (Crehan, 2002; Mouffe, 1979). These approaches have the virtue of showing a connection between power and institutions—for instance, by pointing to the role of the state and the interest of those in control of the state, in the case of Marx, or by recognizing the role of cultural expressions, such as artistic ones, in the case of Gramsci. They also correctly identified the fact that power relations are sometimes internalized and experienced in opaque ways by actors (e.g., through ideology or hegemony). Their weakness resides in the fact that they do not explain how that is possible to emerge from an evolution process, whether it is by group or individual selection, by cultural evolution or psychological mechanisms, or from a combination of all the above.

I will argue that the last component that we need to understand is how ethnicity and institutions interface, and that this relationship is captured by the self-interested enforcement hypothesis (Singh et al., 2017). This hypothesis states that “the design of rules reflects the relative capacity of cooperating or competing parties to enforce their preferences and the degree to which the interests of those parties overlap” (Singh et al., 2017, p. 459). If we connect this idea with the process of formation of institutional regulatory rules, we can see how self-interest can drive sets of rules that benefit those who can shape them. Institutions, by definition, constitute devices that facilitate rule enforcement (Heintz, 2007). This enforcement can be expressed in direct violence—as in the case of the State’s monopoly of violence—or in more subtle ways like exclusion from cooperative enterprises, reputational costs, deception, manipulation, or by creating regulations that the institution certifies; without a certification from the university, you can’t become a lawyer.

From the point of view of the self-interest enforcement hypothesis, all human societies show some degree of power asymmetry (Lewellen, 2003). Even in small-scale societies, sometimes inaccurately called “politically equalitarian”⁸ and characterized once by Rousseau’s (1968) idea of the “noble savage,” there are actually disparities based on wealth, kinship, prestige, gender, and age (Allen, 1998; Donham, 1999; Fortes & Evans-Pritchard, 2006; Godelier, 2011; Jaeggi et al., 2021; Lewellen, 2003; Strathern, 1993). Thus, the self-interest enforcement hypothesis makes a series of predictions that could explain the emergence of institutional regulative rules and their role for those that control the institution in light of social asymmetries. For instance, the emergence of rules results from the preferences of powerful individuals. The tailoring of these rules benefits the powerful, which implies the capacity of actors to recognize their shared or opposed interests. Moreover, the hypothesis predicts that the design of rules will vary with the asymmetry of enforcement capabilities and the scope of shared interest among parties (enforcers and subjects). Finally, and relevant

⁸ I don’t consider that there exist cases of “true” or “pure” political egalitarianism. Even when decisions could be made collectively in some contexts, elements like prestige or oratorical persuasion create asymmetries in the decision-making process. Maybe a better denomination would be “relatively equalitarian” societies as used by Mattison and colleagues (Mattison et al., 2016).

here, is the prediction that rules will change as a function of a shift in power or if more efficient rules are found by those in power (Singh et al., 2017).

To summarize, institutions are devices that regulate (control) the distribution of representations. This is portended by a set of institutional regulative representations that give shape to those representations that are distributed in the public representational space. The design of the set institutional regulative representations reflects the self-interest of individuals who have the capacity to enforce them. These individuals can be at the head of the institution (e.g., the Pope), or they can have the capacity to coerce, persuade, and/or bribe those who take that role (e.g., the pharmaceutical lobby representatives).

6 Illustrative Analyses

This section presents several illustrative cases of the complex ways institutions intersect with ethnicity. The first examines the educational system in Transylvania, highlighting how institutional structures both shaped and responded to ethnic dynamics. In particular, it considers the centralized control of formal education by ethnic majorities, who regulate study programs, appoint school staff and teachers, and allocate resources—thereby reinforcing ethnic hierarchies through education. The second explores the use of demographic control under apartheid in South Africa, emphasizing how state institutions actively produced and maintained racial and ethnic divisions through the restriction of residence to designated areas, the imposition of rigid ethnic classifications, and the enforcement of laws governing children and family life. The third considers the role of ethnic endogamy in Yugoslavia, showing how an institution like marriage use ethnic boundaries to regulate social practices.

6.1 *Ethnonationalism and Education in Transylvania*

Brubaker's (2004) fieldwork in Cluj, Romania, during the mid-1990s offers a compelling case of institutionalized ethnonationalism, revealing how public institutions exploit ethnic distinctions to reinforce political power. Cluj, a town in the Transylvanian region, was profoundly politically shaped by the opposition between Romanian nationalist parties and the Democratic Alliance of Hungarians in Romania. This political polarization reflected broader ethnic tensions between the Romanian majority and Hungarian minority.

Several government actions were implemented as institutional tools for ethnic boundary enforcement in Cluj. Self-interested actors in positions of power, as was the case for the city's Romanian nationalist mayor, strategically used ethnic distinctions to consolidate control and structure public life, where governmental decisions engaged in targeted efforts to marginalize Hungarian identity. Governmental

measures included banning Hungarian public celebrations, suspending Hungarian-language broadcasting, renaming streets with Romanian alternatives, and even penalizing individuals for displaying the Hungarian flag or singing the Hungarian anthem (Brubaker, 2004).

The interface between government institutions and ethnicity also allows for the active manufacture of historical narratives and public memory to legitimize dominant ethnic claims and suppress minority expressions. Brubaker (2004) documented several interventions between 1995 and 2000 with the attempt to reify Romanian historical primacy. These included the alteration of a Hungarian monument, the deployment of an archeological project to legitimize Romanian ethnic claims to the region, and attempts to prohibit the celebration of the Hungarian revolution.

Yet amid this pattern of suppression, the school system in Cluj—and in Transylvania in general—reveals a more complex institutional interface with ethnicity. Brubaker notes that, although ethnic categories were not formally institutionalized across most sectors, education remained an exception: Brubaker notes the following:

“In Cluj—as in Romania generally—ethnic categories are not institutionalized in dramatic ways. Yet there is one important set of institutions built, in part, around ethnic categories. This is the school system. In Cluj, as in other Transylvanian cities, there is a separate Hungarian-language school system paralleling the mainstream system, and running from preschool through high school. These are not private schools, but part of the state school system.” (Brubaker, 2004, p. 26)

In Romania, a parallel, state-run Hungarian-language school system—from preschool to high school—offered limited space for cultural and linguistic continuity. These schools were not always private, but deeply integrated into the state system, which made them both a site of ethnic recognition and a domain of asymmetrical state control (Brubaker, 2004). This dual character of formal education exemplifies how institutions may accommodate ethnic identity while simultaneously embedding structural inequality. On the one hand, Hungarian schools support ethnic reproduction by fostering ingroup contact, shared identity, and long-term social patterns such as friendship and marriage (Brubaker, 2004). On the other hand, the system remains subordinate to the Romanian national framework, producing disparities in governance, oversight, and resource allocation.

Papp et al. (2018) analyzed these disparities in greater detail, identifying three institutional domains where ethnic inequalities are entrenched: structure, legality, and educational outcomes.

Structurally, Hungarian education suffers from weak representation within the Ministry of Education. By 2018, only three counselors oversee the Hungarian curriculum, textbook revision, and evaluation standards—an increase from just one counselor since before, but still insufficient given the scope of responsibilities. Moreover, the system also lacks centralized funding coordination among state actors, NGOs supported by the Hungarian kin-state, and Hungarian political parties. This fragmented oversight creates an almost acephalous system, impeding long-term planning and institutional coherence. The authors also cite a study by Barna et al. (2016; cited in Papp et al., 2018) in which of the 290 Hungarian schools studied, 130 were labeled at-risk of closure (in danger), and 44 were already shut down by 2016.

Legally, although Law 1 of 2011 provides for positive discrimination in favor of minority education, its enforcement remains inconsistent. Funding flows are unreliable, and many Hungarian school initiatives face obstruction by local authorities, typically dominated by Romanian actors. The law mandates ethnic representation in school administration, but Hungarian educators remain underrepresented in leadership roles. In some cases, Hungarian-language classes are taught in Romanian, undermining the linguistic and cultural aims of the system (Papp et al., 2018).

In terms of outcomes, the school performance is also symptomatic of the ethnic national divide. Except for small rural areas, ethnic Hungarian students' pass rates lag approximately 5% behind those of ethnic Romanians. They also have a lower GPA, and the proportion of students passing the high-school leaving (i.e., final) examination is below the national value. While the difference in PISA scores (2006–2015) generally improved for math, reading, and science over time, ethnic Hungarians who study in Romanian performed worse than those who study in the vernacular, suggesting that, despite structural challenges, vernacular instruction improves learning outcomes for minority students (Papp et al., 2018).

The work from Papp and colleagues is a good example of how institutions can simultaneously accommodate and constrain ethnic expression. While educational policy formally recognizes Hungarian identity, structural, and legal asymmetries—rooted in the state's institutional control and selective enforcement—reproduce ethnic inequalities. These highlights that institutions, operating through the self-interest of dominant actors, exploit existing ethnic structures to regulate interactions, distribute resources, and maintain normative authority. In doing so, they embed ethnic distinctions within institutional frameworks that provide stability to social hierarchies.

6.2 South Africa's Institutions: Boundary Definitions and Family Law Regulations

Chanock (2001) does a detailed examination of South Africa's legal system—particularly during the Union era—offering a compelling illustration of how institutions utilize ethnic and racial distinctions to regulate social interactions and reinforce power structures. The author's marriage and family law analysis highlights how legal institutions operationalized ethnicity as a governance tool, affecting individual rights and ethnic boundaries.

Two main legal domains illustrate the institutional embedding of ethnicity. First, legal recognition of marriage types was explicitly filtered through ethnic assumptions. Many African communities practiced polygamy, and while “native law and customs” were officially recognized since 1885, they were only upheld if deemed compatible with Western values (Chanock, 2001, p. 198). This conditionality created systemic ethnic exclusions. For instance, an Asian man could not legally cohabit with an African woman in an Asian-designated area because her presumed polygamous

background rendered the formal union invalid in the eyes of the law. Here, the mere potential of polygamy, attached to an ethnic category, became a basis for restricting mobility and family formation (Chanock, 2001).

Second, institutional efforts to maintain ethnic boundaries were evident in laws aimed at separating poor whites from non-white populations. In rural areas where landless whites and non-whites coexisted, authorities intervened to re-establish ethnic separations. The presence of interracial households, particularly involving children of mixed parentage, triggered state responses rooted in anxiety over boundary maintenance. As Chanock notes, “[t]hose children who were identified as being in need of care were those who inhabited the racial borderlands” (Chanock, 2001, p. 208). The placement of white children with non-white foster families, or the cohabitation of children of various ethnic backgrounds in informal rural settings, was framed as a threat requiring institutional protection. Even though children’s law did not formally differentiate by race or ethnicity, its discretionary application was carried out according to ethnic logics. (Chanock, 2001).

Legal regulation also required consistent, though often arbitrary, definitions of ethnic categories. Shaped by the self-interest of those in power, ethnic definitions were applied one-sidedly across legislative domains, underscoring the institutional manipulation of ethnic identity to control access to resources like land, consumption (e.g., liquor), voting, and other rights. In the Transvaal, Chanock (2001) points out, legal definitions of “native” often relied on social rather than strictly biological traits. Laws such as the Land Act or the Urban Areas Act categorized individuals based on tribal lineage, but others—like the Native Administration Act—relied on habits of life, residence, language, or community associations. For instance, in 1936, the Representation of Native Act, which had the objective of discriminating natives from voting, use definitions based on “desirous of being regarded as” a native, having a reputation or recognition as a native, living and having the habits of a native, speaking a native language as primary language, and association with other natives “under native conditions” (Chanock, 2001, p. 218).

In sum, in the context studied by Chanock, ethnicity was embedded into the institutional legal foundation not only as a descriptive category but also as a regulatory tool, enabling selective inclusion, exclusion, and surveillance. Chanock’s (2001) analysis demonstrates that ethnic categorizations were reflected in institutional rules and instrumentalized by self-interested actors to establish normative regimes, regulate social space, and maintain control over resources within asymmetric power relations.

6.3 Inter-Ethnic Marriage in Yugoslavia

If there is one institution that anthropologists have studied extensively, it is marriage. In small-scale societies, marriage is often regarded as the mechanism that links

multiple kin groups, thereby mitigating the risks of inbreeding and fostering cooperation through alliance formation (Fox, 1967). Like all institutions, marriage establishes a regulative space—one that defines prescriptions, prohibitions, and preferences regarding appropriate partners (Douglas, 1972; Lévi-Strauss, 1969). While reproduction is not a necessary condition for kinship, the ubiquity of marriage is sometimes interpreted as a cultural byproduct of reproductive needs. This has made marriage an attractive domain for evolutionary scientists, who have examined it through the lenses of mating strategies and sexual selection (Boyer & Petersen, 2012). Without delving into those debates, it is sufficient to say that marriage is a well-studied institution with both deep evolutionary roots and diverse cultural manifestations, central to human social organization (Sahlins, 2013).

As noted, marriage involves regulation, particularly through prescriptive and proscriptive norms. These norms are often expressed through the principles of endogamy and exogamy. Endogamy refers to marriage within defined group boundaries; exogamy, to marriage outside those boundaries. Importantly, these rules are not restricted to a single social category. Endogamic and exogamic norms may apply to kin, clans, religious affiliations, socioeconomic class, caste, profession, gender, and—significantly—ethnicity. What is noteworthy is that such rules are sometimes implicit. In many societies, for instance, individuals are not explicitly taught to avoid incest; rather, other mechanisms—whether biological (e.g., Westermarck effect) or cultural—trigger intuitive aversion to such pairings (Fox, 1967; Lévi-Strauss, 1969).

One useful proxy for assessing the institutional salience of ethnic boundaries is the rate of interethnic marriage: the lower the rate, the stronger the boundary is likely being maintained or enforced—either explicitly through formal norms or implicitly through social expectations and institutional constraints (Smits, 2018). While many studies explain interethnic marriage in terms of education, status, cohesion signaling, or class dynamics, such variables do not account for all observed patterns. In some cases, motivations and constraints remain opaque. Other restrictions to ethnic intermarriage are structural: special segregation, sex ratio, group size, and cultural barriers (Smits, 2018).

Smits (2018) analyzed interethnic marriage rates in the former Yugoslavia to test the assumptions of social cohesion theory, which posits that intergroup marriage functions as a mechanism to reduce conflict and foster integration. Yet even in the absence of formal prohibitions on interethnic unions, marriage patterns across ethnic lines reveal the enduring institutional salience of ethnic boundaries. By 1981, endogamy rates remained strikingly high for the largest ethnic groups: Serbians (93.9%; 4,331,327), Croats (91.4%; 2,178,733), Slovenes (93.5%; 821,698), Albanians (98.2%; 629,669), Macedonians (93.7%; 697,158), Montenegrins (77.7%; 246,767), and Hungarians (82.4%; 241,548). These patterns are relevant not simply as reflections of personal preference or demographic coincidence, but as indicators of how deeply ethnicity is embedded in the institution of marriage—as a normative, regulatory framework that channels social reproduction along group lines.

What is particularly striking is that neither numerical minorities strategically intermarried with larger groups (e.g., Serbians or Croats), nor did ethnic minorities consistently bond with one another to increase their collective leverage. By 1989, the

patterns were still largely consistent, with modest increases in intermarriage between Montenegrins and Serbians (17.5%) and between Hungarians and Serbians (13.9%). These changes are insufficient, however, to suggest a breakdown of ethnic boundaries within the institution of marriage.

Regional variation further reveals how cognitive and institutional representations of ethnicity coalesce. In ethnically tense regions such as Kosovo and Bosnia-Herzegovina, interethnic marriage remained below 10%, suggesting that marriage continued to operate as a gatekeeping institution through which ethnic boundaries were reproduced (Smits, 2018). In contrast, Macedonia showed exceptionally high rates of Macedonian–Serbian intermarriage (72.6%), though this is attributed by Smits to the small size of the Serbian minority, rather than to a genuine weakening of ethnic salience.

The most revealing case is Croatia, where, by the late 1980s, 28% of Croatians who married did so with Serbians (Smits, 2018). This appears, on the surface, to support the cohesion hypothesis. Yet the subsequent outbreak of violent conflict between these groups reveals the limits of interpreting intermarriage as a sign of diminished ethnic division. Instead, the data highlight how institutions like marriage—while biologically rooted and culturally complex—can continue to operate as mechanisms that reinforce and exploit deep cognitive boundaries. Ethnicity here is not dissolved by the institution, but selectively negotiated through it, often preserving its regulative function in the social order.

7 Conclusion: Rethinking the Ethnicity–Institution Interface

This chapter has illustrated the critical role ethnicity plays in the formation and persistence of institutions, not as a mere reflection of preexisting social categories, but as a raw material actively recruited and manipulated by institutions to ensure stability and control. Institutions, whether they are educational, legal, or political, leverage ethnic distinctions to regulate power dynamics, allocate resources, and define group boundaries. By embedding ethnicity in their very structures, institutions do not passively reproduce these categories; they actively exploit them to uphold hierarchies and manage social cooperation.

The cognitive and evolutionary foundations of ethnicity provide institutions with an intuitive mechanism for organizing social order. Institutions exploit this cognitive architecture, aligning their rules and representations with deep-seated ethnic categorizations, thus embedding ethnic identities in everyday interactions and societal norms. Through this process, ethnicity becomes not just a marker of identity but a tool for institutional regulation, reinforcing power asymmetries and enabling the stability of institutions over time.

The examples discussed, from the Hungarian education system in Transylvania to the legal categorizations in South Africa, demonstrate how ethnicity is deployed

as a control mechanism, often shaping access to rights, resources, and opportunities. A further illustration can be drawn from the institution of marriage in Yugoslavia. Despite the absence of formal prohibitions, strikingly high rates of ethnic endogamy across multiple groups reveal how marriage operated as a regulatory space where ethnic boundaries were reproduced rather than eroded. The persistence of such patterns even in the context of demographic integration pressures underscores the capacity of institutions to preserve ethnic distinctions through both implicit and explicit norms. Here again, we see how institutions naturalize and operationalize ethnic boundaries to structure social reproduction and cohesion.

At this point, we can briefly return to the questions posed at the chapter's outset.

1 How can we theorize the relationship between ethnicity and institutions? The interface between ethnicity and social institutions is best theorized not as a passive reflection of social categories but as a strategic interaction where institutions actively recruit and manipulate ethnic distinctions to maintain stability. Ethnicity is not merely reproduced by institutions; rather, institutions use it as a tool to regulate power and social dynamics.

2 How does the integration of ethnicity within social institutions function, and why does this configuration endure across societies? The integration of ethnicity within institutions functions by embedding ethnic distinctions into institutional frameworks, exploiting these categories to organize social roles and establish hierarchies. This allows institutions to maintain control and ensure social cooperation through deeply ingrained cognitive mechanisms.

3 Why does this ethnicity-institutions configuration endure across societies? The enduring nature of this configuration is explained by the fact that institutional power structures align with psychological predispositions, making them resilient and adaptive across diverse societies. These power structures exploit the natural cognitive tendencies that humans have toward ethnic categorization, ensuring the persistence of institutionalized ethnic distinctions as a means of maintaining social stability.

In conclusion, understanding the interface between ethnicity and institutions is crucial for analyzing contemporary power dynamics and institutional behavior. By recognizing how institutions exploit ethnic categories, we gain deeper insight into the ways dominant actors operate, not just through overt force, but through the subtler, more pervasive mechanisms of categorization, representation, and regulation. As such, this chapter contributes to a more nuanced understanding of the relationship between ethnicity and institutional regulations, offering a framework that sees ethnicity as both a psychological and a political tool that is actively shaped, manipulated, and embedded in the fabric of institutional life. Finally, and foremost, the potential insight for social change in the approach presented here lies in its ability to provide a pathway for reversing these entrenched ethnic asymmetries. By demonstrating how institutions exploit ethnicity for their stability, it becomes clear that the most effective way to address ethnic inequality is to gain control of these very institutions. Reaching institutional control offers the leverage needed to reshape the mechanisms that regulate the use of ethnic distinctions, ultimately enabling a more equitable scope to institutional regulatory functions.

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Intergroup Violence Without Essentialist Beliefs: The Case of Turkana Cattle Raiders



Matthew R. Zefferman and Sarah Mathew

1 Essentialist Beliefs and Intergroup Hostility Cross-Culturally

Ethnic groups, populations who share cultural norms, traditions, practices, and values and whose members self-identify as belonging to the group, are a uniquely human social phenomenon (Moya, 2023). A large body of literature has explored how ethnic groups are constructed and maintained, how people cognitively conceptualize ethnic groups, and what implications their cognitive constructs have on their attitudes and behavior toward members of other ethnic groups (Barth, 1969; Brubaker, 2006; Fearon & Laitin, 2000; McElreath et al., 2003; Merino & Tileagă, 2011; Nagel, 1994; Niemann et al., 1999). “Biological essentialism,” the belief that individuals’ membership in a social group or category is due to traits that are immutable, discrete, and stable across generations, is thought to be a key proximate cognitive mechanism that plays a role in steering behavior toward co-ethnics and ethnic outgroup members (Astuti et al., 2004; Diesendruck & HaLevi, 2006; Gelman, 2003; Gil-White, 2001, 2002; Hirschfeld & Gelman, 1997; Kanovsky, 2007; Segall et al., 2015). In this framework, even though ethnic groups themselves tend to be situationally constructed based on daily interactions and instrumental self-identification, the human mind may still reason about ethnic groups as if there is an unchangeable biological essence to members of a group. Such a psychological heuristic has been hypothesized to be an evolved cognitive tendency to categorize individuals who share cultural traits (Moya, 2013; Moya & Boyd, 2015; Moya & Scelza, 2015) or a byproduct of a psychology

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to categorize natural kinds like species (Atran, 1998; Gil-White, 2001) or primate groups (Schaller & Neuberg, 2008; Sperber & Hirschfeld, 2004).

However, the extent to which essentialist ethnic beliefs are a reliable feature of human cognition that evolved to navigate interactions with co-ethnics and ethnic outgroups is unclear. Members of otherwise identical groups display in-group favoritism and outgroup bias when they are simply assigned temporary labels (Tajfel et al., 1971) or made to compete for resources (Sherif et al. 1967). This suggests that negative intergroup interactions are not always based on essentializing notions of biological or cultural descent and can stem from other psychological and situational processes. Some research suggests that while essentialist thinking does characterize how young children view social categories or how adults may reason about unfamiliar social categories, it may be less relevant to how adults reason about individuals from familiar social categories (Astuti, 1995; Moya, 2013). Additionally, cultural context influences the extent to which particular social categories are essentialized (Chalik et al., 2017; Pauker et al., 2020), suggesting that essentialist reasoning could be a culturally learned phenomenon or might only develop under particular socio-ecological or politically strategic conditions. Consistent with this, there is substantial variability across societies in the prevalence of ethnic essentialist beliefs (Moya, current volume). More research on a wider range of populations, especially with adults, is needed to delineate the importance of ethnic essentialist thinking in human social cognition.

A second open question is how essentialist beliefs relate to negative intergroup attitudes such as prejudice and hostility and what might drive this relationship. In experiments with Israeli-Jewish 6-year-olds, compared to children in the control condition, children exposed to the ethnic essentialism prime drew Jewish and Arab characters as being more socially distant, represented Jewish characters with more positive affect, and showed greater bias in the Implicit Association Task (Diesendruck & Menahem, 2015). A study with German undergraduates found that participants with stronger essentialist beliefs also had stronger prejudice toward Turkish immigrants, and experimentally priming participants with essentialist views of Western Europeans led them to rate citizens of Eastern European ancestry as less likable (Keller, 2005).

There are multiple pathways by which essentialism might influence hostility (summarized by Rhodes et al., 2018). One possibility is that essentialism causes hostility toward outgroups and, thus, an increase in intergroup violence. Perhaps essentialist beliefs lead people to see outgroup members as different from in-group members and, therefore, less worthy of accommodation (Brewer, 1999; Halperin et al., 2011; No et al., 2008). Perhaps essentialism might also cause people to assign negative traits to outgroup members based on limited observation of negative outgroup behavior (Andreychik & Gill, 2015; Leslie, 2017; Prentice & Miller, 2007) and therefore justify violence to outgroup members. In the extreme, essentialism might be a step toward people seeing outgroup members as non-human and, therefore, removes or greatly reduces barriers to killing and violence (Haslam et al., 2006; Leyens et al., 2001).

Another possibility is that intergroup violence causes essentialism. Essentialist beliefs may be used to justify already existing hostility and violence toward outgroups (Haslam & Whelan, 2008; Mahalingam, 2003; Morton et al., 2009; Pettigrew, 1979; Rangel & Keller, 2011; Rhodes et al., 2018; Verkuyten, 2003). Some research suggests that outgroup violence is more likely to be attributed to stable internal (dispositional) qualities in contrast to in-group violence which is attributed to situational factors (Hunter et al., 1991). Such attribution biases may encourage more essentialized thinking about the outgroup. Alternatively, a person may develop essentialist beliefs when outgroups are violent toward members of the in-group in a way that violates the norms or morality of their in-group.

2 Turkana as a Test Case

Here, we report on essentialist beliefs held by Turkana pastoralist warriors toward a neighboring ethnic group, the Toposa, with whom the Turkana have hostile relations. As pastoralists in a semi-arid savanna habitat, the Turkana subsist by keeping a stock mix of cows, goats, sheep, camels, and donkeys and migrating periodically with their animals to access pastures and water. In the study area in northern Kenya near the disputed border with South Sudan, Turkana pastoralists engage in interethnic cattle raiding, mostly with Toposa pastoralists who live across the border (Mathew & Boyd, 2011; Zefferman & Mathew, 2020). These raids, conducted with modern firearms, can involve hundreds of warriors coming from different territories of the Turkana to join forces, walk up to a hundred kilometers over multiple days, and launch an attack on Toposa settlements or grazing areas. If successful, the raiders can drive thousands of cows, goats, and sheep back to their settlements. Turkana in this area also experience similar attacks on their settlements from the Toposa, and households may lose large numbers of livestock from a single raid if they cannot overcome their opponents. As such, these raids are motivated by the desire to reacquire lost cattle and seek revenge. In addition to these larger raids, small raiding parties comprising a few dozen warriors also conduct stealth raids, attempting to travel to the Toposa territory to steal livestock unnoticed.

Documenting essentialist beliefs held by Turkana individuals toward the Toposa can help address two questions: 1) How cross-culturally variable are essentialist beliefs about ethnic groups? Being a non-western, non-industrialized subsistence population, the Turkana data can help us determine whether essentialist beliefs about ethnic groups are particular to societies influenced by Western cultural notions of essentialism. 2) Is essentialism a driver of intergroup violence, and/or do essentialist beliefs develop from prolonged and intense hostility? The Turkana in our study area have high levels of combat exposure due to raids involving the Toposa and a decades-long history of such raiding between the two groups, so we might expect them to hold essentialist beliefs about the Toposa if there was a causal link between essentialism and intergroup violence.

3 Instrument to Measure Biological Essentialism

A common way to measure a person's biological essentialist beliefs about groups is by giving them a "switched at birth" vignette (Gil-White, 2001; Moya & Scelza, 2015; Moya et al., 2015; Solomon et al., 1996). For example, one might ask, "If a baby is born to parents of Group A but is raised by parents of Group B, would the baby be in Group A or Group B?" In this example, biological essentialist beliefs would correspond to an answer of "Group A" because the implication is that there is a trait inherited from one's biological parents which makes a person a member of Group A that does not change with their upbringing.

The switched-at-birth paradigm suggests that biological essentialist thinking is highly culturally variable. A review of studies using this paradigm found that essentialist beliefs about outgroups, measured as a percentage of subjects saying the child would be like its birth parents, ranged from 8 to 87% depending on the society in which the study was conducted (Moya et al., 2015).

4 Reasons to Expect the Turkana-Toposa Boundary Will Be Essentialized

4.1 *Lethal Hostilities*

If one thinks that intergroup violence and hostility toward another group should be associated with essentialist beliefs about them, the relationship between the Turkana and Toposa should be a strong test case. Raids on the Turkana by the Toposa are lethal and lead to strong feelings of grief for family and friends who were killed and anger toward the Toposa. In the study area, about half of adult male mortality is due to raiding, with about half of that mortality occurring during offensive raids and half during defensive raids (Mathew & Boyd, 2011). Additionally, in our survey, about half of the participants had at least one visible bullet wound due to raiding (Zefferman & Mathew, 2020, 2021). The raids also take a psychological toll—28% of warriors we interviewed had symptom severity scores that would qualify them for a provisional PTSD diagnosis (Zefferman & Mathew, 2021). While the Turkana do have hostile interactions with multiple neighboring pastoral ethnic groups, in our study area, the most frequent raids involved the Toposa due to their geographic proximity. Most individuals in the study population would have had a family member, relative, or friend killed at the hands of the Toposa.

4.2 *Parochial Norms Favoring Co-Ethnics*

Essentialist beliefs may also be more likely to develop because group boundaries between Toposa and Turkana are salient and enforced by norms. For example, Turkana who raid or steal livestock from the Toposa are widely admired, and successful warriors are showered with blessings and praise from their community members. On the other hand, Turkana who raid other Turkana are considered to be criminals and may face sanctions (Mathew & Boyd, 2011).

4.3 *Endogamy*

Some researchers have posited that endogamy within ethnic groups can lead to reasoning about ethnic groups as we reason about species (Gil-white, 2001). According to this hypothesis, the Turkana-Toposa boundary would be essentialized as the rates of intermarriage between the Turkana and Toposa are negligible. In data collected for a separate study, among 242 Turkana we surveyed who were practicing pastoralists, no one had married a Toposa (Taravella Oill et al., 2022). There are no norms prohibiting marriage outside the ethnic group, so the low rate is likely caused by other factors, including difficulties coordinating with in-laws for material aid, childcare, and social support when there are frequent hostile interactions between the groups.

5 Reasons Why the Turkana-Toposa Boundary May not Be Essentialized

5.1 *Trade*

Not all interactions between Turkana and Toposa are violent. In addition to hostile interactions in the form of raids and livestock stealing, Turkana and Toposa interact when elders from the two sides come together to attempt to forge an informal peace agreement. During these times, raiding each other is restricted, and there is an attempt to share certain grazing lands that might be the only dry-season pastures available to both sides. There may be an increase in trade during these times. However, the peace is often short-lived, and a stray attack from one side can reignite the cycle of raids and counter-raids.

5.2 *Linguistic Similarity*

The Turkana and Toposa boundaries are not marked sharply by language. The Turkana and Toposa languages belong to the Ateker language family, which is spoken by groups that likely emerged from a common cultural and linguistic population 200 and 300 years ago in Uganda before diverging into distinct ethnic groups spanning Uganda, Kenya, South Sudan, and Ethiopia (Gulliver and Gulliver, 1968). As a result, the Turkana and Toposa languages, Kiturkana and Kitoposa, are mutually intelligible, and the two groups share many religious and cultural traditions.

5.3 *Lack of Power Differences*

Some have theorized that power asymmetries between groups may explain essentialist beliefs. However, unlike some populations where essentialism has been studied, there is no evident power asymmetry between the Turkana and Toposa. Both groups are economically disadvantaged and politically marginalized in their respective Kenya and South Sudan countries. They are minority populations occupying outlying areas where formal political institutions and the rule of law are weak. The Turkana view the Toposa as equal to them in fighting potential and have experienced victory and suffered defeat at the hands of the Toposa.

6 *Asymmetries Between Groups in Essentializing Beliefs*

In a study with Himba pastoralists in Namibia, Moya and Scelza (2015) found that they held relatively low rates of essentialist beliefs, and the rate depended on direction of adoption. Only 25% of the Himba respondents said that an orphaned Himba child who at birth is adopted by an outgroup (either Herero or Damara) will be Himba as an adult. When the child's natal group was either Herero or Damara, and Himba were the adopting group, Himba respondents were twice as likely to say that the person would be Himba as an adult. The authors suggest three reasons for this asymmetry when Himba are the adoptee versus adopting group: (1) The Himba have norms for maintaining traditional lifestyles that they might suppose would cause emigrating Himba to maintain their group identity; (2) the Himba are less market-integrated than the outgroups so they may think it would be more difficult for them to integrate into outgroups; (3) the Himba may be more welcoming of immigrants as a small minority group, and (4) there may be information asymmetries about how easy or hard it is to become a member of the in-group vs an outgroup.

One limitation that Moya and Scelza (2015) noted about the generality of their results is that there was little open hostility between the Damara and the Himba and

even less so between Herero and Himba, and their vignettes assumed friendly long-term transfers between the Himba and the two outgroups. Therefore, their results may not generalize to groups where intergroup aggression is commonplace. In this chapter, we look at essentialist beliefs in Turkana about themselves and the Toposa, two groups where intergroup aggression is common and often deadly. This will allow us to see if their results hold in this group.

The Turkana-Toposa context may be a useful comparison case for the generalizability of asymmetric origin group ascriptions. While the asymmetries in origin group ascriptions in the Himba when they were the adoptee versus adopting group could stem from the lower status of the Himba relative to the Herero and Damara (Moya & Scelza, 2015), there is little to no perceived or actual status hierarchy between Turkana and Toposa. The Turkana and Toposa have similar market and political integration with their respective countries and similar military prowess, economic wealth, and status levels. They have similar lifestyles and population sizes. Additionally, there may not be many information asymmetries about the difficulty of joining each group as there are well-known examples of Turkana becoming Toposa and vice versa, which we elaborate upon in the Discussion.

7 Results

7.1 *Are Turkana Biological Essentialists?*

As part of a study into combat exposure, combat stress, and moral injury, we surveyed 162 male Turkana who had participated in at least one raid. We developed and conducted the survey orally in Turkana with bi-lingual, ethnically Turkana research assistants (see Zefferman & Mathew, 2020, 2021). We asked each participant two related questions about their potentially essentialist beliefs:

If a baby who was born to Toposa parents is raised by a Turkana family, will the baby grow up to be Toposa or Turkana?

If a baby who was born to Turkana parents is raised by a Toposa family, will the baby grow up to be Toposa or Turkana?

For this analysis, we consider anyone who answered “Toposa” for the first question and “Turkana” for the second to have essentialist beliefs about Toposa and Turkana, respectively. For the purposes of the discussion in this chapter, we consider those who answered “Turkana” for the first question and “Toposa” for the second to have non-essentialist beliefs. Although this question is a common measure of biological essentialism, it may not capture other types of essentialism.

Surprisingly, despite the large degree of lethal combat between the Turkana and Toposa, only four out of 162 participants (2.5% with a 95% Bayesian credible interval assuming a uniform prior of 1.0–6.1% and frequentist 95% confidence interval of 0.7–6.2%) in our survey endorsed essentialist beliefs (Fig. 1). These ratios is much lower

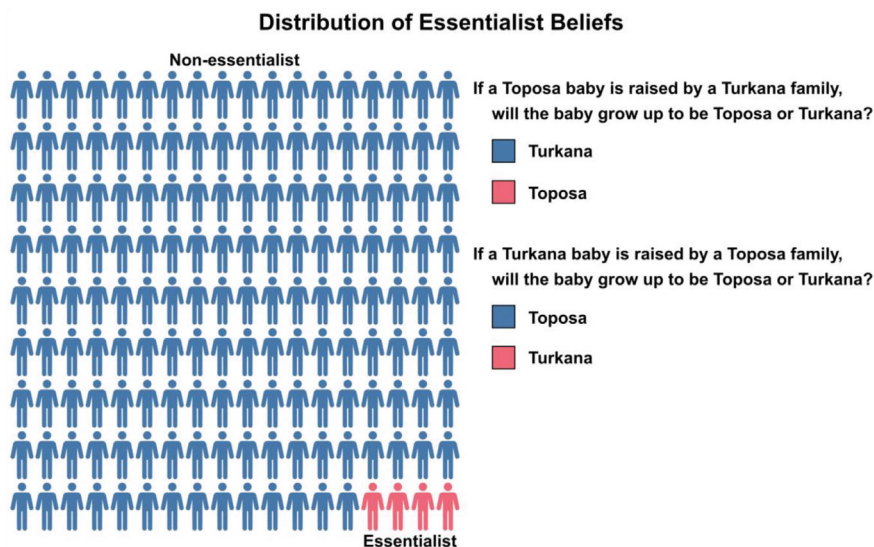


Fig. 1 Four of 162 Turkana men in our study (2.5%) expressed biological essentialist beliefs about Turkana and Toposa

than the populations in studies reviewed by Moya et al. (2015), where participants holding beliefs consistent with biological essentialism ranged from 8 to 87%. This suggests that intergroup conflict alone is insufficient to cause biological essentialism, and biological essentialism is not required to cause intergroup conflict. It is still possible that Turkana hold other kinds of essentializing beliefs that might contribute to intergroup conflict.

7.2 No Evidence of Asymmetry in Origin-Group Ascription

Unlike Moya and Scelza (2015), we did not find any asymmetries in essentialist beliefs about Turkana being raised by Toposa or Toposa being raised by Turkana. Every participant who gave the essentialist answer for the Toposa also answered it for the Turkana and every participant who gave the essentialist answer for the Turkana also gave it for the Toposa. This lack of asymmetry could be due, statistically, to the small number of respondents in our sample who held essentialist beliefs at all. Or it could reflect the Turkana and Toposa's similar economic, political, and social status.

7.3 Do Essentialist Individuals Differ from Non-Essentialists?

Despite Turkana and Toposa having very high levels of intergroup violence, especially for our sample of warriors with raiding experience, we found low levels of essentialist sentiments in the Turkana. Although this finding indicates little evidence of a relationship between essentialism and intergroup violence at the group level, there may be evidence of a link at the individual level. That is, are there important differences between the Turkana who expressed biological essentialist beliefs and those who did not? In the next few sections, we will explore potential differences between individual Turkana with essentialist and non-essentialist beliefs. We will explore whether essentialism is a cause of violence by examining if those who hold essentialist beliefs are more likely to engage in offensive raiding. We will explore whether essentialism is caused by violence by examining if those who were exposed to raiding by outsiders were more likely to develop essentialist beliefs. We will also see if essentialist beliefs are associated with combat stress, moral beliefs, and moral injury in the Turkana.

7.4 Essentialism as a Cause or Effect of Violence

We could examine whether essentialist beliefs are associated with voluntary participation in offensive violence (indicating that essentialism might be a cause of intergroup violence) or in defending against violence (indicating that it might be an effect of intergroup violence). Potentially, essentialism causes violence because people with essentialist beliefs might see the other side as an “other” and be more comfortable engaging in violence. This would suggest that essentialist Turkana warriors would be more likely to participate in offensive raids (battle and stealth raids), be involved in potentially morally injurious events where Turkana were the perpetrators, or have killed more enemies in battle. More directly, it would suggest that the Turkana with essentialist beliefs would have a smaller moral sphere than those with non-essentialist beliefs.

With only four essentialists among 162 study participants, we do not have sufficient variation in our sample to statistically analyze whether individuals with essentialist beliefs differed from non-essentialists in the above combat-related traits. Therefore, we cannot formally evaluate the relationship between essentialist thinking and outgroup behavior at the individual level. However, to generate preliminary insights, we describe below where the four essentialists fell within the distribution of all Turkana participants for these combat-related traits.

Figure 2 shows where the essentialist participants lay in the distribution of responses in their moral beliefs about who is permissible to kill on a Toposa raid, their “moral sphere.” The moral sphere scale measures how many demographic groups the Turkana say are permissible to kill from the Toposa side. The 11 demographic

categories are infant girls, small girls, older girls, adult women, elderly women, infant boys, small boys, older boys, unarmed adult men, armed adult men, and elderly men. A score of zero indicates that it is permissible to kill anyone from the other side. A score of 11 indicates the belief that it is not permissible to kill anyone from the other side. Intermediate scores indicate that it is not permissible to kill, for example, elderly women or infant boys (for details, see Zefferman & Mathew, 2020, 2021). If essentialist beliefs lead to seeing others as less than human, we might expect essentialists to have a smaller moral sphere. This is not the case in our data, at least for the four participants who expressed these beliefs. While a moral sphere score of zero is the modal score for all survey participants, only two essentialists are at zero with many other participants; the other two are in the mid-to-upper end of the distribution. Therefore, there is little evidence in this data to support the idea that essentialist beliefs lead to greater dehumanization of the Toposa by the Turkana. However, since very few participants are in the “essentialist” category, it is difficult to draw definitive conclusions.

Since participation in offensive raids is voluntary, we might expect that if essentialist beliefs encouraged intergroup violence, warriors holding essentialist beliefs would be likelier to participate in raids, especially those resulting in combat exposure. We compared participants’ essentialist beliefs to measures of combat exposure in offensive combat. We used the first two factors generated from a factor analysis of combat exposure data, including participation in battle raids, participation

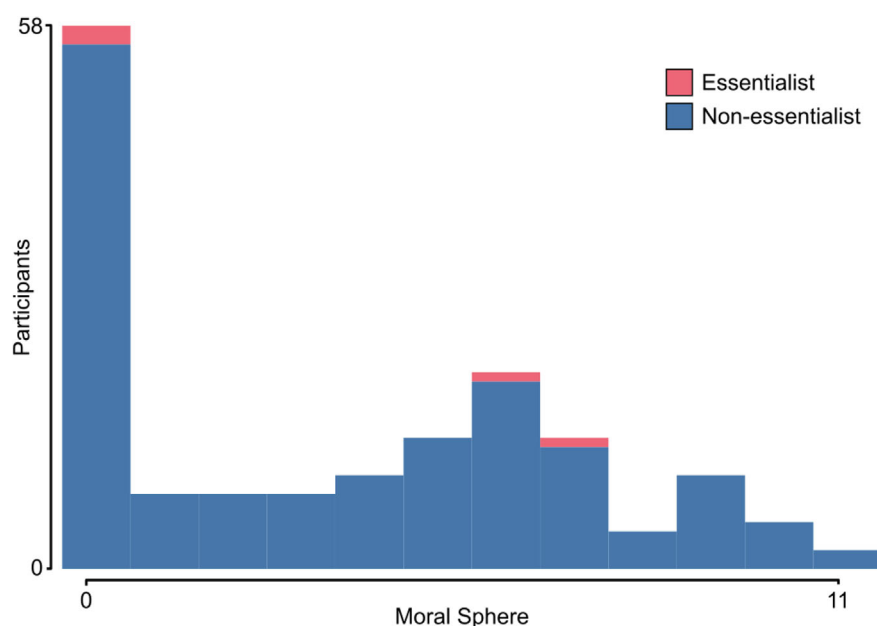


Fig. 2 Participants holding essentialist beliefs are within the typical range for all Turkana participants

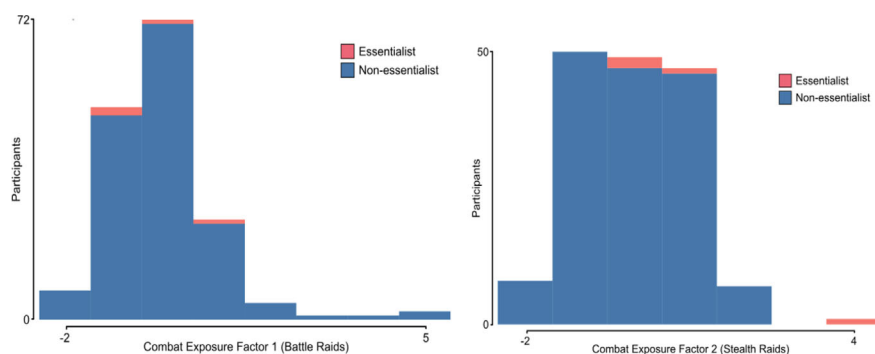


Fig. 3 Participants with essentialist beliefs had typical combat exposure in both battle and stealth raids. However, one participant was especially active in stealth raids, which suggests, anecdotally, that essentialist beliefs may contribute to outliers in raid participation, though the direction of any causation is unclear

in stealth raids involving combat, participation in defensive raids, being ambushed, being shot at, being shot, engagement in hand-to-hand combat, and visible bullet wounds (see Zefferman & Mathew, 2021, for details of how this was constructed). The first factor loaded heavily on participation in battle raids, and the second loaded heavily on participation in stealth raids. Generally, the essentialist participants loaded in the middle of the distribution for both offensive combat exposure factors (Fig. 3). However, one participant was an outlier in the stealth raid combat exposure factor. More data would be needed to explore this association.

Similarly, if essentialist beliefs encourage violence, we might expect that individuals who have essentialist beliefs may be more willing to kill in battle. Figure 4 shows the number of raids a participant participated in and said they had killed an enemy. All four essentialists in the population had taken part in at least one raid where they had killed someone from the opponent's side, and one of the four warriors stated that he had taken part in twelve such raids. While this participant is at the high end of the distribution and is also a prolific raider (especially stealth raids, as described above), the other three essentialists are not particularly frequent raiders.

None of the differences between essentialist and non-essentialist participants were statistically significant at the standard 5% level. This is not that informative since there were only four participants in the essentialist group (decreasing statistical power), and, in any case, failure to reject the null is not evidence for the null being true.

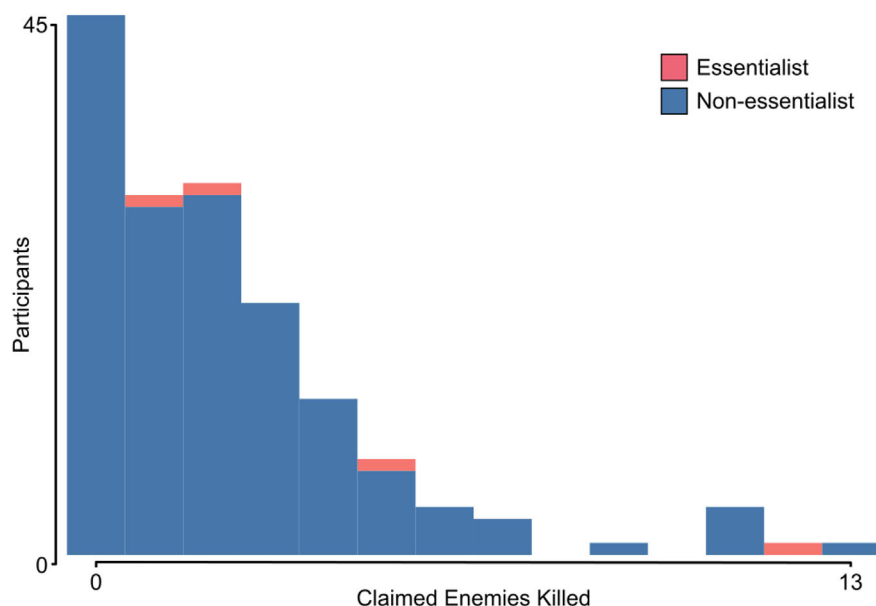


Fig. 4 Participants with essentialist beliefs had typical amounts of claimed enemies killed in battle, though they were all non-zero. However, the participant who was especially active in stealth raids, anecdotally, also had claimed a relatively large number of enemies killed. This is a small amount of evidence that essentialist beliefs may contribute to, but not be sufficient for, outliers

7.5 Violence as a Cause of Essentialism

If exposure to intergroup violence causes essentialist beliefs, we might expect that exposure to raids where the Turkana were attacked would be associated with essentialist beliefs. We examined the third factor of combat exposure in our measurement, which loaded heavily on exposure to defensive combat (Fig. 5). We found that participants with essentialist beliefs were typical of all participants.

Additionally, we examined the Moral Events (Victim) scale (Fig. 6) that was also created for the Turkana by Zefferman and Mathew (2021) and based on the Moral Injury Events scale that was developed for American service members (Nash et al., 2013). This scale covers events where Turkana were the victims of aggression. The scale increases by one unit if a participant ever felt guilt over failing to save the life during a raid, ever saw or was involved in the shooting of a Turkana by another (friendly fire), ever saw the rape of a Turkana woman during a raid, and ever saw Turkana die during a raid. Participants with biological essentialist beliefs were also not very different from those without.

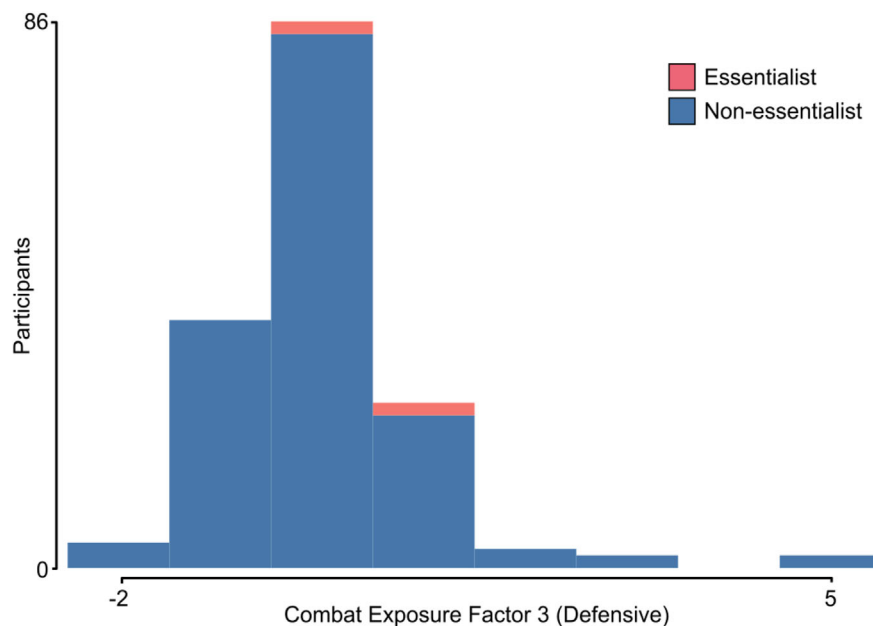


Fig. 5 Participants with essentialist beliefs fell within the typical range for all participants in exposure to combat where the Turkana were attacked. This suggests that exposure to violence from an outside group is not necessary or sufficient to develop biological essentialist beliefs

7.6 *Essentialism's Contribution to Combat Stress*

Our questions about essentialism were conducted as part of a survey about combat stress, and we conducted an exploratory analysis to determine where participants with essentialist beliefs fell within the typical range of combat stress severity. Perhaps essentialist beliefs occur in those at the higher end of symptom severity distribution, suggesting that they may be caused, in part, by combat stress. Or perhaps they occur at the lower end of the symptom severity distribution, suggesting they may be protective of combat stress. We examined this for total symptom severity based on the PTSD Checklist Version 5 (Weathers et al., 2013) translated for use with the Turkana (Zefferman & Mathew, 2021). We also looked at the subset of “learning and reacting” symptoms that Zefferman and Mathew (2020) hypothesized evolved to help people learn from and react to traumatic events (see also Cantor, 2009) and the subset of “depressive” symptoms that Zefferman and Mathew (2020) hypothesized evolved to help people navigate the social danger of norm violations (see also Watson & Andrews, 2002; Allen & Badcock, 2003). We supposed that essentialist beliefs would have the most association with depressive symptom severity since those were more related to the potential violations of social norms, like killing. The idea here is that those with essentialist beliefs would experience less moral distress by witnessing the horrors of combat visited on others. However, we found that the participants with

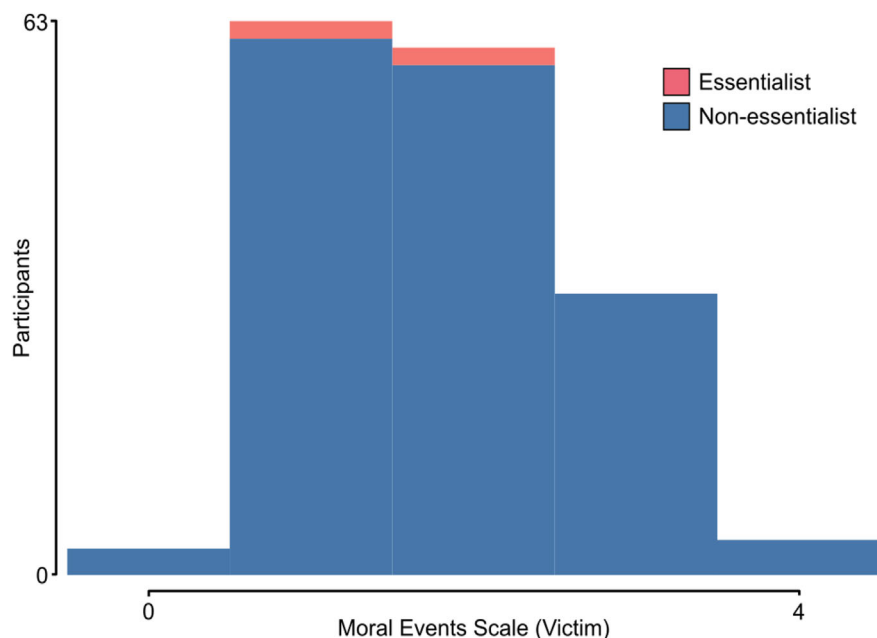


Fig. 6 Participants with essentialist beliefs fell into the typical distribution of all participants in their exposure to potentially morally injurious events where Turkana were the victims

essentialist beliefs were within the typical range for overall symptom severity and severity of both symptom subsets (Fig. 7).

8 Discussion

Our data show that among the Turkana ethnic group, biological essentialism, as measured by the “switched at birth” vignette, is close to absent, occurring in only 2.5% of the interviewees. Based on the few individuals who did exhibit essentialist beliefs, we find there is also little evidence of a relation between essentialism and intergroup hostility, as measured by people’s concerns about the outgroup, their participation in raiding the outgroup, their rate of killing outgroup members during raids, and the severity of PTSD symptoms they have from combat. These results suggest that lethal intergroup hostility does not necessarily lead to essentialist beliefs of the outgroup and that essentialist beliefs are not a prerequisite for lethal intergroup hostility. Since the Turkana and Toposa have engaged in intergroup violence for several decades, it is unlikely that there has not been a sufficiently long history of hostility to lead to the formation of essentialist beliefs.

Why might Turkana, who are engaged in frequent lethal raiding with the Toposa, have little essentialist beliefs toward them?

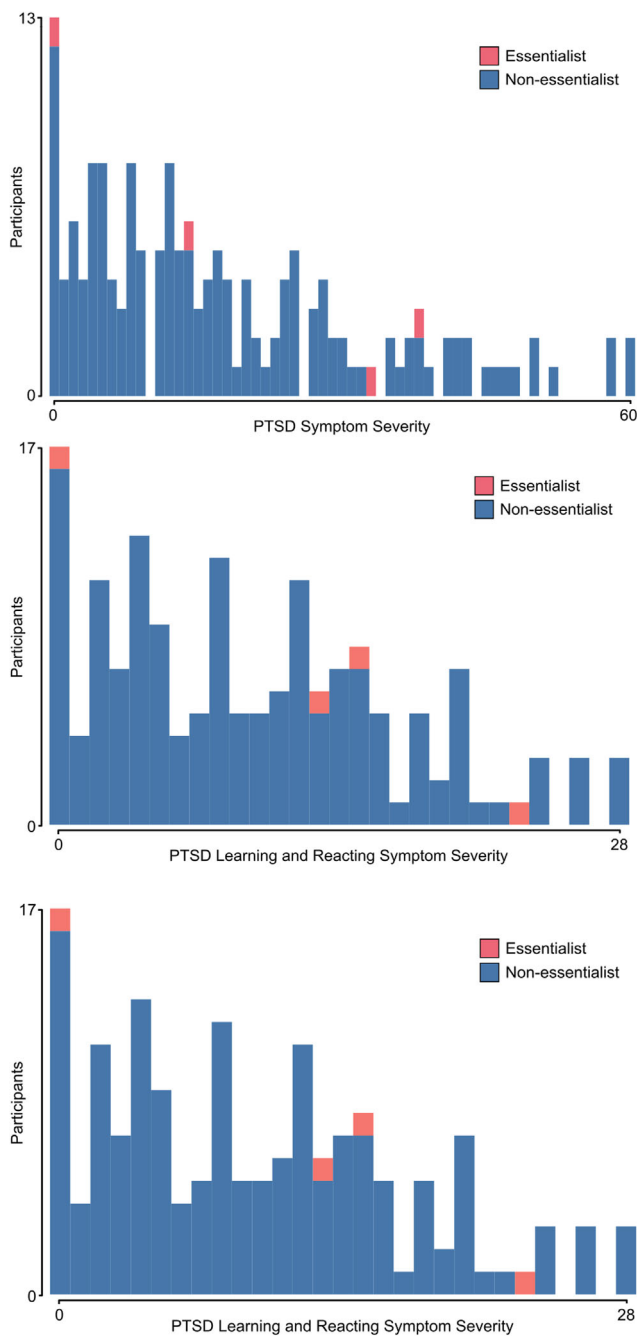


Fig. 7 Participants with essentialist beliefs were within the typical range of total (top), learning and reacting (middle), and depressive (bottom) severity

8.1 *Cross-Ethnic Adoption*

One reason Turkana may have little essentialist beliefs toward the Toposa may be that there are living examples of individuals born to one group who become members of the other group. Adoption of children from other pastoral groups who are orphaned during a raid is not uncommon. Male children are valuable as they contribute to managing livestock, and girls can bring bridewealth when they marry. For example, one participant in our study adopted a small girl after her parents were killed in a raid on the Toposa. According to the participant, the girl grew up as a sister to his other children and was treated as their firstborn daughter. They called her the name given to her by her Turkana parents, and she was eventually married as a Turkana with her husband paying bridewealth to her adopted family. Another participant told us of his uncle, who brought a small boy back from a raid on the Jie of Uganda. The boy became a family member and, eventually, a businessman in the nearby Turkana town of Kakuma. Additionally, multiple participants told us that a well-known Turkana warrior brought a small boy back from a raid on the Jie, who later became Turkana.

Multiple participants also told us of a well-known female diviner among the Toposa who was born to a Turkana family and later became a Toposa. According to one interviewee, she was born to a Turkana diviner, and Toposa warriors captured her as a child during a raid. She was taken to a Toposa diviner who had called for the raid on the Turkana and had prophesied about her becoming a fierce diviner for the Turkana. Instead, the Toposa diviner performed a ritual called Amook and adopted her into his family, giving her a new name according to his Toposa family lineage. As she grew up, she is thought to have learned from her adoptive father, and used her talent to help him with prophesy, blessings, and sending Toposa warriors on raids. She married a Toposa man, and continues to be recognized as a trusted and successful diviner organizing Toposa raids against the Turkana, the Nyangatom, and the Merilee. Her relatives in Turkana visit her when there is peace with the Toposa.

Overall, 16 of the 162 participants (9.9%), including one essentialist participant, said that they had been involved in kidnapping a non-Turkana child during a raid. However, some of these may have been involved in the same incident, and many of these abductions or kidnappings likely did not result in adoption and assimilation by a Turkana family. Some of the participants likely reported the same incident since many of these abductions were communal. Additionally, some reported that they abducted the child temporarily to keep them from reporting the presence of the Turkana to their community. In these cases, the Turkana raiders would let the child go once they had made sufficient progress in their journey back to Turkana territory. Additionally, even children taken with the intent to adopt them would escape to make their way back to their home territory on their own.

8.2 *Common Origin and Cultural Similarity*

Another reason that Turkana may not have strong essentialist beliefs about Toposa is because they see themselves as having a common origin. In our interviews with Turkana warriors, they often emphasized their similarity to the Toposa. “We come from the same people; we speak the same language; we sing the same songs; we have the same dances” was a common sentiment. According to Turkana oral tradition, the Turkana and Toposa were derived from the Jie of Uganda around 200–250 years ago. According to the Turkana, the origin of the Turkana was the settlement of a Jie woman named Nayese at the source of the Tarac River (Korobe, 2023; Lamphear, 1988; Mirzeler, 2004). The Toposa’s oral tradition also agrees that the original Toposa were Jie, who migrated to what is now South Sudan in the nineteenth century (Gulliver & Gulliver, 1968). The oral traditions of the neighboring Nyangatom and Jie also agree about the timing and origins of the Toposa and Turkana (Gebre, 2016; Gulliver & Gulliver, 1968). Both the Toposa and Turkana are considered by Western anthropologists to be members of the “Karamojong Cluster” or “Ateker group” of pastoralist societies who share a common language and cultural practices. Furthermore, there is no perception among the Turkana that there are systemic power differences between them and the Toposa, even if one group may have a military advantage over the other for certain periods.

8.3 *Cross-Ethnic Friendships*

Turkana may not hold strong essentialist beliefs about Toposa because it is not uncommon for Turkana and Toposa men to develop friendships. Due to overlapping territory and relatively frequent cycles of conflict and peace, many Turkana formed friendships with Toposa during peacetime. We asked 124 participants if they had ever recognized an enemy in battle, and 18 (15%) said they had. We asked 11 of these to describe their encounter. Of these, 10 (91%) described befriending a Toposa man during peacetime. These friendships often involved the exchange of gifts, including livestock, sharing in dances, and sometimes staying at each other’s residences. Some described encountering their friend in battle and either not fighting them or encouraging other Turkana not to fight them. Sometimes, they would find their friend among the dead.

Here is an example, described by one of the ten participants, of their friendship with a Toposa man that they had met in battle:

I befriended a Toposa warrior during peacetime. The Toposa man took me to Toposa territory and gave me ten goats. While dancing, I praised one of the he-goats that the Toposa gave me, and I also praised my friend. My friend later visited Turkana, and I gave him a big bull with red, white, and yellow spots. When my friend danced with the Toposa, he praised that bull, and he also praised me.

Later, I went with other Turkana to raid the Toposa. It turned out that the family that we were attacking was my best friend's family. While his family was hiding behind the fence, I heard my best friend shooting bullets and calling my name with praise.

I felt bad and told the other Turkana that this man was a friend of mine. Then, they all felt bad, and we left. When I heard my friend shouting, I almost cried. I wanted to praise my friend, too, but I did not.

I again saw him two years ago during peace in Lokichogio. Some Toposa, including my friend, came to Lokichogio for peace. He sent me a message, and I went to Lokichogio to meet him. When I saw my friend, we ran, hugged, and cried. I told my friend the story [of the raid], and my friend told me it was good luck because no one in his family was hurt.

While 15% of participants said they had encountered someone they recognized in battle, this likely undercounts the number of friendships between Turkana and Toposa, as some Turkana might have had Toposa friends but never met them in battle.

As a counter-example, the participant who described recognizing an enemy warrior in battle, but the enemy was not his friend, described the incident as follows:

There was a time of peace when Turkana and Toposa became friends. During that time, a Toposa man stayed with me for some days. We exchanged clothing, and I gave him some animals. I then followed the man and killed him on the way.

I did this for revenge. My older brother had earlier made friends with a Toposa man during peacetime. My brother was staying with the Toposa when war broke out, and my brother was killed.

I purposefully made friends with the Toposa man because he was the brother of the man who killed my brother. At first, my Toposa friend did not know who he was, but he eventually figured it out.

To make matters worse, we had a mixed dance with Turkana and Toposa, and during the dance, the man who killed my brother - the brother of my friend - sang that he had killed my brother. This was during a time when the Turkana men and Toposa men both started singing about the enemies that they killed.

Although this was not an example of actual friendship between Turkana and Toposa, the Turkana participant's deception was only possible because of the plausible friendship between Turkana and Toposa. He exploited this common type of relationship to get revenge for his brother's death.

The power of cross-ethnic friendships may be especially effective in reducing essentialist beliefs because even cross-ethnic exposure can reduce essentialism—at least among Israeli Jewish and Arab school children (e.g., Deeb et al., 2011).

9 Study Limitations

We only probed essentialist beliefs using the question of ethnic migration. While our measure is a key aspect of ethnic group essentialism that may drive intergroup attitudes, it is possible that a broader set of questions on different aspects of essentialist beliefs may have painted a different picture of the extent of essentialist beliefs in this

population. Our sample population only comprised men. We do not expect women's beliefs to be different on this front, but it is a possibility.

We do not have data on essentialist beliefs toward the several other pastoralist ethnic groups that territorially border the Turkana and with whom the Turkana have varying degrees of conflict or non-pastoralist ethnic groups with whom the Turkana interact in markets. The Toposa are the most salient outgroup for our study population due to their proximity and raiding frequency, but they are also culturally and linguistically closely related to the Turkana. Other neighboring groups, like the Samburu and Rendille, are more culturally and linguistically distant. How cultural similarity affects essentialist beliefs is complicated. For example, Moya and Scelza (2015) found that the Himba displayed higher essentialist attitudes toward an ethnic group more culturally similar to them. On the other hand, a meta-analysis using multiple populations by Moya (Moya, this volume) suggests that two groups having the same religion, similar language or dialect, or similarities in dress are associated with lesser essentialist beliefs.

Due to the rarity of subjects with essentialist beliefs, we did not have enough data to assess the relationship between essentialist beliefs and intergroup attitudes and behavior. Therefore, the individual-level analysis only provides preliminary insights. Another concern is that unobserved confounders may be masking an association between essentialism in Turkana and other traits. We looked at age as a possible confounder since exposure to combat and related variables increases with age. Also, age may capture additional cohort effects. Study participants typically did not know their calendar age but were associated with an "ageset" of males born within an approximately 3–5 year period. When we compared the four participants with essentialist beliefs only to other participants in their ageset, three of the four fell within the typical range for their ageset. The fourth participant was an outlier for the same variables that he was an outlier for the entire population.

10 Conclusion

The main contribution of our study is that it illustrates a cultural context in which interethnic hostilities and violence occur with little to no essentialist beliefs about ethnic groups, as measured by the "switched at birth" vignette. This supports the view that cultural context plays a large role in how essentialist reasoning develops and how it is harnessed to fuel interethnic prejudices and hostilities (Chalik et al., 2017; Pauker et al., 2020). Another contribution is to show that the few individuals with essentialist beliefs, who are clearly outliers in their level of essentialism in the Turkana cultural context, are not evident outliers on most of our other raiding-related measures. This too, is in line with there not being an association in this cultural context between essentialist beliefs and intergroup attitudes and behavior. It appears that biological essentialism is not a necessary or sufficient condition for intergroup violence. Our findings highlight that a wider range of societies should

be studied to better understand the socio-ecological and cultural contexts in which ethnic essentialism develops and influences intergroup hostilities.

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Part 5: Instead of an Afterword

Of Elephants and Aspirins: Similarity, *Gestalt* Perception, and Inductive Inference in Essentialism



Wolfgang Wagner

Why is an elephant big, gray, and wrinkled?
Because if he were small, white, and round, he'd be an aspirin.
(Cathcart & Klein, 2007, p. 13)

1 Understandings of Essence

In a nutshell, psychological essentialism is the tendency of humans to think that the appearance of living things ought to have some underlying cause that constitutes their attributes, their identity, and their membership in a category. This underlying causal power is called the essence of the thing.

In Plato's Theory of Forms, the Latin term *essentia*, the Greek noun *ousia*, and the verb *einai* all signify "to be." *Ousia* refers to the distinctive and ideal qualities that an object possesses simply by existing. These ideal forms, unlike their physical manifestations, are unchanging and eternal. They represent a profound, unchanging, and ideal level of reality that surpasses our everyday perception of transient aspects of the world and natural kinds. (cf. Politis, 2021). If it were possible to remove the essence of an entity that entity would cease to be what it is. The fact that essential attributes of a thing cannot be shed without losing its identity is illustrated by the above quoted quip about the elephant.

In the classical philosophies the term "essence" made epistemological sense as a causal *explanans* of the yet unknown molecular and atomic processes that we accept as *explananda* today. Formerly, for example, liquids were perceived as similar in their flow behavior due to an "essence of liquidness," stones similar by an "essence of stone-ness," and air and gases being perceived as similar due to an "essence of

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volatility.” A similarity judgment requires an explanation by an apparent cause, and if the waves of saltwater in the Aegean Sea resembled the drinking water sloshing around in a jug, then the shared essence of liquidness could pass as an explanation. In a time with a more developed science the state of the art is that the structure of matter at the quark-size scale is responsible for the properties of things in the macro-world.

Beyond contemporary scientific circles, the concept of essences may be a viable intuition to distinguish one object from another and to categorize them as natural kinds. However, Quine (1969) pointed out that modern science fundamentally departs from this everyday understanding of the categorical structure of the world. He claims that a branch of science can be considered mature “if it no longer needs an irreducible notion of similarity and kind.” (Quine, 1969, p. 138) Modern science’s progress rests on replacing the terms of kinds and similarities with an analysis of matter along measurable physical dimensions, enabling a deeper comprehension of matter, its causal structure, and the objects in the world. This new worldview has transformed everyday conceptions and fostered a scientifically-inspired culture.

Suppose an individual still adheres to the notion of essences and believes, for instance, that water possesses an essence. In such a scenario, if modern education teaches water to consist of two atoms of hydrogen and one atom of oxygen, the level where essences would be relevant would be transposed down to the atomic level. Consequently, atoms must be assumed to have an essence—but which essence? With the progress of education, individuals may gain a lay understanding of protons, neutrons, electrons, as well as the constituent quarks and fundamental forces. At this juncture, we would need to discuss the essences of down and up-quarks held together by the gluons of the strong nuclear force to form atomic nuclei and the electromagnetic force binding electrons to the nucleus.

Let’s not further complicate the picture and leave the weak nuclear force and radioactivity aside. At which level are formally educated people going to place an essence in this continuing decomposition of matter? Through this example I want to show that attributing an essence to inanimate natural kinds in contemporary societies brings about a problem of regression to the smallest entity. Hence, it is unlikely that even moderately educated contemporary adults think in terms of psychological essentialism when contemplating inanimate natural things as Newman and Knobe (2019@592; Tobia et al., 2020) suggest, solely based on a very artificial experimental setting. The case of living kinds is different and will concern us later.

2 Induction

A statement about an element x_i being a member of the category X constitutes an inference from the present state of affairs to the future. It means that x_i at time T and x_i at time $T + I$ —that is at a later point in time—are unchanged elements of the same category X . Such a statement constitutes an *induction*, as defined by the philosopher Nelson Goodman (1946). He discusses whether one can conclude that emeralds will be green in the future if the one in my hand today is green, presupposing that the

predicate “emerald” has been determined through a method other than color. In other words, the problem of “[i]nduction might roughly be described as the projection of characteristics of the past into the future” (Goodman, 1946, p. 383). If an emerald possessed the color “grue” that is green before the point in time T and blue at time $T+1$, then this property would constitute a problem for prediction and induction. This issue boils down to the statement that the property “grue” cannot be projected into the future, it is not projectible, while “green” is projectible in the present case. In inductive reasoning we project patterns of attributes into the future but the criteria for selecting the patterns from all the minutiae that we observed in the past, remain in the dark. Inductive reasoning lacks a criterion for distinguishing projectible from non-projectible characteristics or essential features from coincidental ones (Goodman, 1946, p. 385).¹

An essentialist statement, hence, postulates that an animal a belongs to the kind of As , and that it will belong to A also in its future life, and it will produce little a -s when giving birth, projecting “ A -ness” into the future. In other words, an animal recognized as a dog will retain its constitutive properties of “dog-ness” during lifetime, and it will transmit its dog-ness across generations. As argued before, an essentialist statement is an inductive inference by projecting essential features into the future.

Willard V. Quine (1969) and Hilary Putnam (1975) generalized Goodman’s discussion by noting that it is natural kinds that are characterized by projectible predicates, while human artifacts are not. Their examples were green emeralds and black ravens that seem to allow the inference that what counts as an emerald will always be green and what counts as a raven will always be black.

Quine’s (1969) significant addition to Goodman’s riddle is the introduction of the everyday notion (in contrast to science) of similarity and its relationship to kinds. In short, similarity is the sum of intensional properties that coincide “in respect of the things that have them,” rendering the notion of kind and of similarity substantially one. “Things are similar when they are two of a kind” (Quine, 1969, p. 117ff). The question arises, what kind of similarity are we referring to in the real world?

3 Similarity, *Gestalt*, Cause, and Kinds

3.1 Similarity

Similarity is a fundamental concept in everyday life, challenging formal methods of measuring similarity without the assistance of a human subject making similarity judgments. Similarity judgments can be expressed in degrees, as exemplified in

¹ Goodman’s (1946) example of emeralds was not the best choice. He seems to be unaware of the fact that the mineral where emeralds are an exemplar, can take many shades of green, which passes into blueish and the light-blue aquamarine without changing its chemical composition and hexagonal crystal symmetry as exhibited by a specimen on my desk. The reason is that both, emeralds and aquamarines, are variants of common beryl, just colored by different trace elements.

prototype theory (Rosch, 1973) or as fuzziness in the terms of fuzzy set theory (e.g., Wagner, 1981). In contrast, kinds are discrete and kind judgments are dichotomous, with a clear “yes” or “no” outcome. Natural kinds exhibit tolerance to variations in similarity, but a kind of type *A* cannot simultaneously be a kind of type *B*. Combining black tourmaline with black ravens, despite their shared black color, is illogical. Under exceptional artificial circumstances, their similarity may be discerned based on a single attribute, but in general, it is not feasible to establish a single attribute as the basis for similarity.

These examples illustrate that Quine’s (1969, p. 117) quote, “Things are similar when they are two of a kind,” does not bring us closer to understanding inductive inference as long as it is not clarified, which characteristics, attributes, and details of a natural kind specimen enter a similarity judgment. Watching a flock of ravens allows us to expect the next raven joining the flock to be very similar to those observed before, but which of the raven details become part of the similarity judgment and which not, that is, which attributes are projectible, and which are not projectible, remains unanswered. Quine’s (1969) proposed solution to the conundrum of projectible attributes is to postulate an innate but malleable intuition of similarity that may undergo change with scientific development, that operates through similarity judgments and kind perception, and that is critically important to everyday perception and communication.

3.2 *Gestalt Perception, Cause, and Kind Assignment*

I concur with Quine’s pessimism and propose that similarity goes beyond even of an exhaustive enumeration of discrete attributes. This contrasts with numerous illustrations of essentialist inference in the psychological literature. In her treatment of essentialism in children Gelman (2003) employs the didactic example of tigers and their striped fur to illustrate their primary projectible attribute. However, numerous animals possess striped bodies, rendering it impossible to distinguish these striped animals from tigers solely based on stripes. In fact, most people would diagnose an albino tiger without stripes still as a tiger.

Consider the diverse dog breeds you have observed throughout your life. Among them may have been Great Danes, Poodles, and Chihuahuas, each with shoulder heights ranging from approximately 9 cm to 90 cm and exhibiting a wide array of fur colors. Certainly, you have accurately perceived their similarity and classified them as exemplars of the class of predator known as wolves and dogs.² You do not require mental enumeration and comparison of discrete features to reach this conclusion. As previously demonstrated, the perceived constitution of a kind

² That dogs are predators may not be clear to the dog owner. However, the dogs’ potential pray recognize their essential “predatoriness” immediately. This leads to the numerous and sometimes fatal attacks of cow herds of a nearby inattentive hiker with a leashed dog in the high alpine meadows and elsewhere.

such as the ‘kind of dogs’ cannot be defined by enumerating a finite number of attributes or measures because dogs share numerous attributes with cats, including four-footedness, predator-eyes, snout, fangs, fur, and so on.

Given the vast diversity of dog breeds, it is a matter of a few moments to correctly identify an animal as a dog, whether it is a diminutive Chihuahua or a majestic Boxer. It is the coherence of the attributes, the behavior, and gait that enables us to perceive their similarity as belonging to the same kind, ultimately allowing us to distinguish a dog from a cat. It is the cohesive entirety of observable characteristics that is captured in an essentialist judgment.

The similarity in perceiving living beings is only meaningful if it involves the configuration of their attributes, including their movement and specific gait, which collectively form the *Gestalt* of a tiger. Gestalt psychology posits that the entirety of a set of characteristics is more than the sum of its parts. Instead of focusing on single attributes, a similarity judgment establishes a *Gestalt*-like similarity between living beings. The *Gestalt* of an object is the integration of perceptual elements into a structured whole (Goldstein, 2009; Koffka, 1935; Verstegen, 2010). Contemporary cognition researchers call a similar process top-down pattern recognition (Mattson, 2014). Besides dogs, a good example is face perception where one can determine in a split second whether the face of your friend popped up in a crowd or not, even if seen from an unusual angle (Wilmer, 2017). The constitutive elements of a *Gestalt* can rarely be pointed out, but several exemplars with a sufficiently *similar Gestalt* tend to be perceived as having the same underlying cause (Koffka, 1935). In other words, the result of perception is influenced by the entirety of attributes that perceptually can barely be decomposed into their separate parts. In this understanding, the projectible characteristics of tiger-ness allowing us an inductive inference, are not a list of attributes, but the cohesive entirety of perceptual elements. Living kinds and their essences are in a metonymic relationship: “Things are similar when they are two of a kind” (Quine, 1969, p. 117).

An essentialist intuition that perceives some animals as belonging to a kind is based on the similarity in their overall *Gestalt* that distinguishes them from others that are similar to a lesser extent. Carnap (1998) defines a “natural class as a class in which each member resembles every other member to a certain degree, and nothing outside the class resembles all the members to the same degree.” This relationship is known as ‘resemblance nominalism’ (Zimmerman, 2024). However, in resemblance nominalism this definition degenerates to the psychologically senseless claim that “to share a property, then, is to belong to at least one of the same natural classes.” (Zimmerman, 2024) As we have seen with the raven-tourmaline-example, such a statement does not make much sense in a psychological contexts and Quine (1969) held against it by arguing in favor of a more complex similarity that I suggest to be the perceptual *Gestalt* similarity.

This perceived comprehensive causal similarity allows adults and children to make inductive inferences about kind membership. It enables children to draw inferences across exemplars of animals, allowing them to override perceptual similarity if it competes with belonging to a kind (Gelman, 2003, p. 50). Furthermore, when comparing natural kind objects with artifacts, children tend to draw more inferences

within the former than within the latter, indicating the spontaneous centrality of natural kinds in the human world (Gelman & O'Reilly, 1988).

What follows from this is that knowing the kind membership of a set of animals immediately implies a large number of important as well as peripheral attributes that are implicitly part of the *Gestalt* similarity but went unnoticed by the cognizer. Consequently, the process of induction in recognizing a similarity between entities carries more than meets the eye.

Knowing a living being's kind membership implies what has been termed the rich inference potential of essentialized kinds. Knowing a striped animal to have the *Gestalt* of a zebra allows one to infer that its *Gestalt* is similar to horses in its fight-or-flight response to the presence of predators, possesses lateral eye-positions, resides in herds, etc. In other words, an essentialist judgment of an animal's kind membership already implies all the potential inferences that may follow at a later point in time, building upon one's folk biological knowledge, which even children possess. Given that an essentialist kind induction implies a multitude of implicit attributes, the inference potential of kinds is *deductive* rather than *inductive*. Conversely, if a living being is unknown and encountered for the first time by a perceiver, it may initially be judged by its overall similarity to known kinds, but any further inference will be provisional.

I concretize the case of *Gestalt* similarity in the following by applying it to insights from the extended synthesis of evolution theory, and to findings in cultural anthropology.

3.3 *Living Beings Are Not Random Assortments of Features*

The significance of employing living beings as prototypical examples for essentialist intuitions in this chapter stems from their pivotal role in human development. Animals and plants occupy the mesocosm within human ecology, providing essential life support and materials for shelter construction, clothing, and tools. Notably, certain plants and animals facilitated the Neolithic Revolution by enabling agriculture and animal husbandry. Consequently, animals have consistently been of paramount importance for human survival, fostering a unique psychological connection with them.

Living beings exhibit characteristics that are distinctly different from abiotic natural kinds, even at a cursory glance. Unlike inanimate matter, living entities demonstrate autonomous growth and development, reproduction, inheritance, metabolism, and locomotion. Moreover, animals possess at least rudimentary forms of behavior that can be interpreted as expressions of goal direction if not of intentionality, just as respondents perceive simple moving geometric shapes as animate entities with intention (Parovel, 2023).

Given the profound impact of animals and their behaviors on humans, their cultures, and technologies over millennia, they are ideally suited to illustrate the structure and workings of essentialism, similarity, and kind membership. Notably,

animal perception constitutes a significant branch of psychological research. (Atran et al., 1997; Berlin et al., 1973; Rosch et al., 1976).

To appreciate *Gestalt* perception and the concept of similarity in the present context, it is crucial to recognize that biological organisms are not a random aggregation of features and characteristics. In contrast, organisms are structures characterized by a systemic interdependence of functions. Contemporary organisms are the result of aeons of biological evolution, during which organisms utilized and adapted body parts in the course of evolutionary transformations that built the evolutionary tree of life. Homology or ‘identity of characters’ across species arises from the historical continuity of character identity networks—gene regulatory networks that enable differential gene expression. The homological identity of features is independent of their form and function, as the same network can activate distinct effector genes, thereby controlling development into various forms, sizes, and qualities (Wagner, 2014).

Similarly, because body features evolved as an interrelated whole, the affective and cognitive apparatus also evolved in parallel. Evolutionary selection refined this system to align with the necessities of survival, reproduction, and niche construction. Consequently, the perceptual and inference system was shaped to facilitate the recognition of potential predators among others. This “evolutionary epistemological system” encompasses the ability to recognize, discriminate, and generalize features of other organisms through induction, mimicking human rationality in a ‘ratiomorphic’ apparatus (Campbell, 1974; Kaspar, 1984; Riedl, 1984; Wuketits, 1990). Present developments integrated system theoretical, coherence theoretical, and aspects of up-and downward causation into conceptions of a non-adaptationist evolutionary epistemology (Gontier & Bradie, 2021; Sarto-Jackson, 2021, 2026).

Given the interrelatedness of organismic features and the evolved capacity to infer behaviors of relevant organisms, it has significant implications for the perception of living beings. This explains why human affect and cognition are tuned to an inclusive perception of an organism as a *Gestalt* with an intrinsic cause. An integrated *Gestalt* perception constitutes a regular psychological phenomenon that contributes to the cognitive capability of essentializing and pointing out natural kinds (for a comprehensive discussion of this issue see Riedl, 2019). Being lay cognitions, essentialist induction and kind perception do not correctly reflect academic biological knowledge (Legare et al., 2018, p. 258), but follow the epistemic criterion for everyday individuals and their pragmatic necessities in the here and now. Biological insights in the evolution of living beings’ somatic and ‘ratiomorphic’ cognitive apparatus show that essentialist reasoning about living kinds is as efficient as pragmatically necessary and *functionally* compatible with biology.

3.4 *Kind Induction in the Cultural Domain*

What has been said about the organization of organisms as featuring interdependent attributes applies to ethnic groups and cultures as well: Cultures are also not random

assemblages of features; they have evolved through the interaction of cohabiting individuals who established social order by maintaining beneficial rules and behaviors and discouraging unpleasant or harmful activities to coethnics. Over generations, this led to a cultural package of often interrelated features, including ethnic markers, language use, religious beliefs, overt behavior norms, and tacit rules. These cultural elements and their non-genetic transmission coupling over generations, are theorized in approaches of cultural group selection among others (e.g., Yeh et al., 2019; Richerson et al., 2016). The institution of monogamous marriage, for example, bundled several evolved mechanisms that entailed increased paternal investment, reduced male/male competition, household coherence, and in due course increased offspring survival (Henrich et al., 2012).

If cultures come in bundles of interrelated features, *visible* ethnic markers can serve to *inductively* infer the ethnic belonging of individuals', to assign them to an ethnic group and thereby *deductively* infer *invisible* aspects of that group, such as tacit norms, cooperative preferences, and potentially aversive tendencies toward outgroups (McElreath et al., 2003). An essentialist inference of social 'kind' membership opens up the deductive 'inference potential' of that assignment.

Inferring another's identity and group belonging will often reveal one's own ethnic identity, allowing interactants to gather their mutual similarity, not only regarding group belonging but also implying behavioral consequences. In other words, interacting individuals are challenged to discern each other's cultural makeup to some extent as a meta-representation that is required for cross-cultural interaction (Boyer, 2018, p. 258f; Wagner, 2021).

The definition of essentialism presented in these sections has implications for its cognitive status. It has been proposed that an essentialist intuition is not merely a cognitive process akin to perceiving and recognizing attributes, but rather a meta-cognition that integrates both visible and implied group attributes into the percept of a comprehensive *Gestalt*. This *Gestalt* facilitates the judgment of similarity between entities and the grouping of those most resembling each other into a natural or social kind. Importantly, an essentialist intuition projects a shared origin of category membership onto the members of a kind.

4 Corollary: Mixing Artifacts, Chemical Elements, and Living Beings

In their pursuit of gold or an elixir that could grant immortality, alchemists crushed, heated, cooled, and mixed naturally occurring substances in their laboratories. Over centuries, despite their valiant efforts, they failed to achieve their primary objectives. However, they did discover several compounds that remain relevant in contemporary chemistry. By experimenting with a wide range of substances, alchemists challenged Aristotle's theory of essences, which posits that inherent qualities determine the nature of natural substances and constitute the true metaphysical object. If mixing

substances that each supposedly possess an essence can yield novel substances with unexpected properties, it suggests that the essences of the components of a chemical compound may not be as fundamental, absolute, and metaphysical as previously believed. Consequently, the essence of these new creations remains uncertain: is it the summation of the initial substances' essences, is it something else, or has the initial essence evaporated? These insights promoted the modern view on the scientific endeavor that replaced ideas of similarity by quantitative measures.

The widespread understanding that substances, whether natural or artificial, can be combined to create novel entities is a common concept in contemporary society and everyday life. However, there exists a domain where everyday thinking has not relinquished the intuition of essences determining membership within a kind: the realm of living kinds. The workings of the genetic apparatus were only recently comprehensively understood by biologists but less so by the general public. Like in other disciplines, the insights gained into the workings of the genome progressed from qualitative assessments to quantitative measurements. Recent genetic engineering and technologies for manipulating genes like CRISPR-Cas9 have demonstrated that the genetic apparatus can be understood in quantitative terms. This insight, though, has not yet sedimented in the lay perception of the living world and the idea of animals and plants possessing essences is widespread (Ahn, 1998; Gelman, 2003).

Historically earlier breeding technologies that produced favorable hybrid phenotypes progressed at a much slower pace than genetic engineering and escaped individual attention. Hence, the general public perceived the increased speed of genetic modification as a violation of the principles of life and as hubris. The chimeras envisioned as resulting from the splicing of genes from various animals, plants, or bacteria are often met with disgust (e.g., Kronberger et al., 2014; Pivetti, 2007). The reason for this affective reaction can be attributed to the still widespread intuition that living beings are governed by their specific essences encoded in genes (Dar-Nimrod & Heine, 2011), which entails the thought of discrete species that are mutually exclusive and therefore cannot be mixed (Wagner et al., 2010; Wagner & Kronberger, 2024). A genetic mixture, hence, is equivalent to mixing essences where the hybrid 'straddles the border' between kinds and lacks a clear identity (Kronberger & Wagner, 2007). This idea can also explain the disapproval of interracial mating (e.g., Roncarati et al., 2009), particularly by politically right-wing individuals (Holtz & Wagner, 2009; Kalmijn, 1998).

5 Discussion and Conclusion

This chapter posits that an essentialist intuition in the animal domain is rooted in the perception of similarities among features as a unified whole, known as a *Gestalt*. Animals exhibiting highly congruent feature sets are regarded as exemplars of a specific kind-category. The inductive inference of a kind is derived from projecting an animal's organization and *Gestalt* into the future, thereby providing stability to the world of living beings over time. Importantly, *Gestalt* perception is biologically

justified by the coordinated organization of body plans and homological relations realized in evolution that characterize natural species. Living kinds and their essences are in a metonymic relationship.

Essentialist thinking in the social domain can be applied in a similar manner. Since the formation of human groups and cultural clustering, essentialist ideologies have likely contributed to the stabilization of local identities and ethnic structures. The approaches to essentialist thinking about animals of different species and humans of distinct ethnic appearances can adhere to the same inductive logic and inform kind-like categorizations based on *Gestalt*-like feature similarities in contemporary societies.

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