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Regimes beyond the One-Drop Rule: New Models of Multiracial Identity

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Abstract: The racial classification of mixed-race people has often been presumed to follow hypo- or hyperdescent rules, where they were assigned to either their lower- or higher-status monoracial ancestor group. This simple framework, however, does not capture actual patterns of self-identification in contemporary societies with multiple racialized groups and numerous mixed-race combinations. Elaborating on previous concepts of multiracial classification regimes, we argue that two other theoretical models must be incorporated to describe and understand mixed-race identification today. One is “co-descent”, where multiracial individuals need not align with one single race or another, but rather be identified with or demonstrate characteristics that are a blend of their parental or ancestral races. The other is the “dominance” framework, a modern extension of the “one-drop” notion that posits that monoracial ancestries fall along a spectrum where some—the “supercessive”—are more likely to dominate mixed-race categorization, and others—the “recessive”—are likely to be dominated. Drawing on the Pew Research Center’s 2015 Survey of Multiracial Adults, we find declining evidence of hypo- and hyperdescent at work in the United States today, some support for a dominance structure that upends conventional expectations about a Black one-drop rule, and a rising regime of co-descent. In addition, we explore how regimes of mixed-race classification vary by racial ancestry combination, gender, generation of multiraciality, and the time period in which multiracial respondents or their mixed-race ancestors were born. These findings show that younger, first-generation multiracial Americans, especially those of partial Asian or Hispanic descent, have left hypo- and hyperdescent regimes behind—unlike other young people today whose mixed-race ancestry stems from further back in their family tree.



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1. Introduction

In his groundbreaking work, *Who is Black? One Nation’s Definition*, Davis (1991) chronicled the shifting legal codes and social conventions that have governed the racial classification of Afro-descent Americans since the country’s founding. Davis’s work underscored that the “one-drop rule”—whereby individuals with partial African ancestry are defined solely as Black—was a fairly recent adoption nationwide and only one of many possible approaches to the categorization of mixed-race people. For one thing, various regions of the United States—as well as its predecessors, the colonies of Britain, France and Spain—had experimented with alternative methods of racial assignment. In some areas and at certain times, multiple-race heritage could be acknowledged; in others, one might automatically inherit the race of the father (or mother). For another, cases from around the globe, such as Coloureds in South Africa or Anglo-Indians in South Asia, made clear that one-drop rules were hardly the norm.

Drawing on anthropologists' research, Davis labeled the U.S. one-drop rule a "hypodescent" system, in which mixed-origin people were assigned to their lower-status parental ancestry. In contrast, "hyperdescent" frameworks assign mixed-origin people to their higher-status ancestry. In the United States, the routine identification of people with both European and Indigenous lineage as simply White has been a telling hyperdescent counterpoint to the historical hypodescent identification of Americans with European and African ancestry as Black (Hollinger 2003; Liebler and Ortyl 2014; Snipp 1997). Indigeneity more broadly—as in the cases of Native Hawaiians or Aboriginal Australians—has been associated with hyperdescent classification in a wide range of European settler societies (Hannabach 2016; Golash-Boza 2011; Katzew 2004; Kauanui 2008; Wolfe 2001).

The hypo- versus hyperdescent binary has noticeable conceptual limits, however. First, it assumes that multiracial people are lumped in with one monoracial parental community or another, rather than split into a distinct, mixed category. There is no "co-descent" option. Second, it is generally applied only to part-White people in contexts where legal, political, social and/or economic practices make clear that Whiteness constitutes the highest racial status. What would the hypo/hyper-descent dichotomy predict for pairings that did not include White ancestry, for whom the relative status of their parental ancestries is less clear? Third—and relatedly—the concept of hypo/hyperdescent in the United States has been applied to a small, tripartite system of Black, White, and Indigenous populations, which represent the racial groupings forged in its colonial period along the Eastern seaboard (Nash 1999; Smedley and Smedley 2012). How does it work then when we bring relatively "new" racialized immigrants and their descendants, such as Asian and Latinx Americans, into the picture? In summary, the hypo/hyperdescent model is ill-equipped to shed light on multiracial categorization for people who do not identify with a single race, lack European ancestry, or whose family tree includes Asian or Latin American origins.

In this article, we revisit longstanding assumptions about hypo- and hyperdescent and construct an alternative theoretical model for the racial categorization of people with mixed ancestry, which we call the "dominance" framework. First, we draw on the Pew Research Center's 2015 Survey of Multiracial Adults to identify which single-ancestry populations have higher or lower socioeconomic status (SES) than their mixed-ancestry offshoots, in order to determine empirically which dual-ancestry combinations follow a hyperdescent, hypodescent, or in-between ("co-descent") outcome. We also examine whether individuals from dual-ancestry groups are more likely to identify with the higher SES ancestry, the lower SES ancestry, or both. Describing the U.S. racial hierarchy in this way allows us to examine whether particular racial ancestries—Asian, say, or Indigenous—are associated with a tendency towards a hypodescent, hyperdescent, or in-between status position in terms of either material well-being or self-identification.

Second, we develop a competing framework for the racial assignment of multiracial people: the "dominance" model, which ranks racial ancestries in terms of the probability that they are determinative or dominant in patterns of individuals' racial self-identification. In this cousin to hypo/hyperdescent rules based on the ranking of races in a supposed hierarchy, it is not the relative socioeconomic position of groups per se that dictate multiracial classification. Instead, mixed-race individuals' racial assignment reflects the symbolic power—or impotence—of their embodied, competing ancestries in a given time and place. In the dominance model, African ancestry is portrayed as intrinsically dominant (or "supercessive"), and Indigenous ancestry as inherently dominated (or "recessive") when paired with European ancestry, which is taken as the unmarked default. In the imagery of the "one drop", after all, Blackness irredeemably stains and overwhelms whatever it touches. Its opposite, encapsulated in the early American belief in the eventual *blanqueamiento* (Whitening) of the native populations in Spain's colonies in the Western Hemisphere, also ascribes a particular quality to Indigenous "blood"—in this case, retreat, effacement, and disappearance. In other words, Blackness has been assumed to determine the racial categorization of mixed people, and indigeneity has been presumed to vanish when combined with other racial ancestries. This "dominance" folk theory of supercessive versus recessive

racial identities is often conflated with the hyper/hypodescent model, but it hinges on a different imaginary mechanism, distinct from weighing material status rankings.

Distinguishing between these two models raises the question: are the myriad combinations of racial identities that Americans report today better explained by ancestry dominance rules, or hypo- and hyperdescent patterns of identification with higher or lower SES groups? As we elaborate below, these possibilities can be thought of as distinct “regimes” for the racial classification and social location of mixed-race individuals (Gullickson and Morning 2011), and their applicability or presence for specific multiracial ancestry combinations in the contemporary United States is at the heart of our research agenda. For example, do Americans with some Hispanic ancestry tend to identify with their Latinx heritage rather than their other ancestries, making “Hispanic” a dominant (or supercessive) racial ancestry? Furthermore, how does this compare to the tendency among people with some White ancestry to self-identify as White? Is White ancestry less dominant (i.e., more recessive) than Hispanic ancestry?

Several novel findings emerge from our inquiry. First, we find little evidence that the socioeconomic positioning of the U.S. multiracial population today follows hyper- or hypodescent regimes. Most of the dual-ancestry groups we examine seem to follow a co-descent regime, where their socioeconomic status lies in between that of their two parental ancestries. When it comes to racial self-identification, hypodescent patterns are more prevalent than hyperdescent outcomes, but these are not linked to any particular racial ancestry. To make sense of these outcomes, we chart the overall dominance of each ancestry, finding Black and especially Hispanic origins tend to supersede others, while Asian and especially Indigenous roots tend to recede, and Whiteness falls in the middle.

The regimes of mixed-race self-identification come into sharper focus when we further investigate how these dominance patterns vary by multiracial generation, time period, and respondent gender. Our results suggest that hypo/hyperdescent and racial dominance rules continue to structure the identities of both older mixed-race Americans and those whose multiraciality stems from more distant ancestors. In contrast, young first-generation multiracials—born to parents of different races after interracial marriage was legalized nationwide in 1967—are much more likely to cast off such conventions to embrace “co-descent” and identify with multiple races. It is also in this multiracial generation and younger cohort that men and women are most likely to diverge in their racial self-identification.

In short, this article builds on previous research to theoretically and empirically distinguish a variety of multiracial classification regimes: dominance, hypo-, hyper-, and co-descent. It also illustrates that these regimes are embedded in particular historical periods that are nevertheless echoed in contemporary patterns of self-identification. In so doing, it responds to Roth’s (2018, p. 2) call for “broader approaches focusing on societal-level norms of contemporary racial classification or assessments of the societal racial order.”

2. Multiracial Classification Regimes in Theory and Data

2.1. *Regimes in Theory*

Researchers have long tried to understand the factors that shape multiracial categorization. One strand of this literature has asked whether hypo/hyperdescent or “one-drop” rules explain the contemporary classification of multiracial individuals (Khanna 2010; Roth 2005). As Gullickson and Morning (2011, pp. 499–500) put it, “What ‘rules,’ if any, guide the ways in which mixed-race people of varied backgrounds are identified and identify themselves today? Are the hypodescent and hyperdescent conventions of the past likely to remain in force, and if so, do they apply to the United States’ relatively ‘new’ races as well?”

When Gullickson and Morning traced the racial self-identification of individuals who reported having some combination of White, Black, Asian, or Native ancestry, they used the term “regime” to describe the distinct patterns they encountered. Analyzing data from the 2000 U.S. census, they found three rules of classification: “multiraciality for mixed-race people of Asian descent, hypodescent for all others with African ancestry, and hyperdescent

for the remaining White/American Indian group" (506). They attribute the three "regimes" to the "different histories of racialization for people of Asian, African, European, and Native American origin" (506). [Gullickson and Morning's \(2011\)](#) concepts of "regimes" and the aspects of "histories of racialization" that underpin them call for more thorough theorization.

We build on [Gullickson and Morning \(2011\)](#) to develop a more comprehensive theory of "regimes of multiracial classification." First, we understand such a regime to be a set of beliefs and norms regarding the racial classification of mixed-race individuals and groups. Multiracial regimes can thus be considered a type of "racial appraisal", which [Roth \(2018, p. 1\)](#) defines as "the way that people classify the race of others, both particular individuals and larger groups." Such appraisals are grounded in the "racial schema" that people hold, meaning "cognitive bundle[s] of racial categories and the set of rules for what they mean, how they are ordered and relate to one another, and how to apply them to oneself and others" ([Roth 2018, p. 3](#); see also [Roth 2012](#)). Although appraisals can be micro-level, involving one person's racial classification of a single other individual, multiracial regimes are akin to the form of appraisal that Roth calls "assessments of the societal racial order", involving widespread beliefs about the proper categorization of entire groups. Such assessments also embody evaluations of the merit, worth, or rank of racial ancestries in a social hierarchy, so stereotypes figure in appraisals too.

Our concept of regimes departs from Roth's appraisal model in two key respects, however. While her focus is on observed race—that is, the racial categories that others ascribe to a person or group ([Roth 2016](#))—we include both self-identification and other- (or "external") classification when we refer to "multiracial categorization." In other words, multiracial categorization regimes are not only imposed by others; to some extent, they are also embraced and enacted by mixed-race people themselves. The White supremacism that gave rise to the "one-drop rule", for example, has not prevented generations of African-descent Americans from cleaving to it ([Williamson 1980](#)).

We also depart from Roth in that our conceptualization underscores that multiracial regimes are not only about categorization; in addition to this cultural, representational aspect, they have a fundamentally structural dimension. Regimes are an example of what [Omi and Winant \(2014, p. 56\)](#) call a "racial project", which is "simultaneously an interpretation, representation, or explanation of racial dynamics, and an effort to reorganize and redistribute resources along particular racial lines." After all, racial assignment is never an end in itself; at stake is the treatment, the opportunities, the oppression, rights and exclusions that accrue to a given racial position ([Bonilla-Silva 1996](#)). Accordingly, racial regimes also reflect the roles and institutions, the laws and policies, that shape people's life experiences. Historically in the United States, such racialized social structures have dictated everything from where people lived, the occupations they practiced, to whom they might marry ([Berry 1963](#); [Williamson 1980](#); [Hollinger 2003](#)).

Multiracial regimes are themselves the product of particular historical contexts—social, political, economic, and legal. As [Xu et al. \(2021, p. 1610\)](#) observe, "The possibility and prevalence of interracial unions, as well as the treatment of their offspring, were shaped by historical circumstances; policies, laws, and other institutions consolidated particular social rules for categorizing mixed-ancestry individuals by race, and changing political and economic conditions fostered certain types of interracial union at some times and not others." Black-Indigenous mixture in the United States, for example, tends to have taken place in a much earlier time period than Asian-White unions. For this reason, [Xu et al. \(2021, p. 1625\)](#) describe "different multiracialisms, with distinct logics and experiences." Their research suggests, moreover, that distinct regimes apply not just to groups with different combinations of racial ancestries, but also to different multiracial generations (for example, first-generation "biracials" with parents of different races), and even to men and women differently.

Finally, historically rooted multiracial regimes will also vary in terms of their novelty and endurance. [Omi and Winant's \(2014, p. 55\)](#) concept of racial formation—"the

sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed”—clearly applies to multiracial classification regimes. [Gullickson and Morning \(2011, pp. 499, 509\)](#) contrasted “old” or “historical” regimes pertaining to Americans with White, Black, and/or Indigenous ancestry to “new” or “immigrant” regimes involving Americans with Asian ancestry; [Xu et al. \(2021, p. 1624\)](#) refer to these as “established” versus “emergent” regimes and include Americans with Hispanic ancestry among the latter. Both perspectives recognize that at any given moment, a certain constellation of regimes prevails, some waxing and some on the wane.

2.2. Beyond Hypo/Hyperdescent: Dominance Regimes of Multiracial Classification

Our approach builds on an empirical strategy of “nested rules” used by [Gullickson and Morning \(2011\)](#) to gauge the dominance of certain racial ancestries over others in the self-identification patterns of mixed-ancestry individuals. Their approach implicitly suggested a dominance framework: by associating each of these rules with a particular racial ancestry—first Asian, then Black, then American Indian or Alaska Native—they effectively attributed a certain governing or supercessive quality to each. In their framework, Asian ancestry entailed the broadest rule, implying it was the most dominant ancestry: on the 2000 census, the modal outcome for all part-Asian ancestry groups was multiple-race self-identification. After that, a second, nested rule applied to the remaining combinations without Asian ancestry: if they had Black ancestry, their modal self-identification was “Black.” So, in these data, Blackness could be said to be less dominant than Asianness in determining identity outcomes.

[Xu et al. \(2021, p. 1610\)](#) extended [Gullickson and Morning’s \(2011\)](#) nesting of classification regimes by explicitly articulating the concept of racial supercession and recession in multiracial self-identification. Relying on the literature on mixed-race identities past and present, they assigned their multiracial respondents to one of four nested and mutually exclusive racial classification regimes that attributed decreasingly dominant tendencies, respectively, to Black, Hispanic, Asian, and Indigenous ancestry based on historical observation. (A residual category contained those who reported “White” plus “Other” ancestry).

However, prior research has elided the conceptual distinction between hypo/hyperdescent rules, on one hand, and supercession/recession patterns on the other. Yet, the two models are rooted in different logics and predict distinct patterns of multiracial self-identification. Hypo/hyperdescent rules are anchored in the socioeconomic status of racial groups, whereas racial ancestry dominance need not be determined by economic and political standing alone. We cannot assume that dominance conventions such as the one-drop rule are the same as hypo- and hyperdescent identity structures; as we explain in the next section, they can produce divergent outcomes.

3. Data and Methods

To investigate racial classification regimes empirically, we draw on data from the Pew Research Center’s 2015 Survey of Multiracial Adults. This survey is the first to collect self-reported racial ancestry across multiple generations, along with socioeconomic status and measures of self-identification. Drawing on a nationally representative online research panel of 22,719 U.S. adults recruited by probability sampling ([Pew Research Center 2015](#)), the survey asks respondents to report the races or origins of themselves, their mother, father, grandparents, and great-grandparents and earlier generations. Based on this self-identification and ancestry data, an additional set of questions was asked to a smaller sample of individuals identified as multiracial by Pew. Our analyses draw on the full screening sample to investigate patterns of racial self-identification among multiracial Americans.

We consider individuals to be multiracial if they included more than one race in their descriptions of their family origins (regardless of how they personally self-identify; see below). Furthermore, we count “Hispanic, Latino, or Spanish origin” as a racial category for the purposes of both ancestry reports and racial self-identification. This decision

yields a larger multiracial population than reported by the U.S. Census, but we believe it also more precisely captures the contemporary racialization of people with Hispanic, Latino, or Spanish origins in the United States. For a full discussion of this approach, see [Xu et al. \(2021\)](#).

We also limit the scope of our study in two ways. First, we exclude the small number of respondents who report Native Hawaiian or Other Pacific Islander (NHOPI) ancestry alone or in combination ($N = 68$). Given the unique history of racial mixing within this population and its small sample size,¹ our data do not allow us to make claims about classification regimes for NHOPI ancestry. Thus, the category we refer to as “Indigenous” includes only those who report American Indian or Alaska Native ancestry. Second, we limit our analyses to respondents with no more than two reported ancestries for ease of exposition. Our analyses cover the seven largest dual-ancestry combinations in our sample: White–Indigenous, White–Hispanic, White–Black, Black–Indigenous, Asian–White, Indigenous–Hispanic, and Black–Hispanic. Although other dual-ancestry combinations, such as Asian–Black, were also reported in the survey, their small sizes prohibited their inclusion in the three- and four-way cross-tabulations that comprise the bulk of our analyses.

3.1. Measuring Regimes: Socioeconomic Status and Self-Identified Race

As outlined above, we conceive of multiracial regimes as having both a cultural, classificatory aspect and a structural dimension of social positioning. To capture both components, we explore the SES and racial self-identification of people with mixed racial ancestry.

Socioeconomic data were measured prior to the Survey of Multiracial Adults in the annual demographic profile data collected for the online research panel. We consider two measures of SES: educational attainment and per capita household income. *Education* is measured as a continuous variable that we created by approximating years of schooling for adults age 25 and over based on the 14 education categories reported by Pew. Second, *per capita household income* is measured as a continuous variable calculated by recoding the 19 yearly income categories reported by Pew to their midpoints, and assigning a top code to the highest, open-ended income category. Household income was then divided by household size in order to determine per capita household income. Our results are not sensitive to alternative coding schemas for education or income, such as using log transformations of income or categorizing education in terms of highest degree completed.

Respondents’ racial self-identification is derived from their response to the question, “What is your race or origin?” Although we consider respondents multiracial based on reporting mixed ancestry, not all such respondents selected more than one race to describe themselves; we understand individuals as self-identifying as monoracial if they report only one race for themselves (despite having reported two or more races among their ancestors). Additionally, respondents had the option to select “Some other race or origin” for themselves and write in more information. Following [Xu et al. \(2021\)](#), we manually reviewed such responses (1.2% of the full sample) and recoded cases as necessary. For example, in some cases, we considered these respondents to be signaling a multiracial identity, as when writing in “White and Black.”

3.2. Analytical Strategy: Identifying Hypo/Hyperdescent, Codescent, and Dominance Regimes

To investigate prevailing multiracial classification regimes, we first compare the SES of the largest dual-ancestry combinations to those of their constituent (or “parent”) racial ancestries. We do so by considering mean years of education (Table 1) and mean household income (Table 2) for both single- and dual-ancestry respondents in our sample. Apart from providing a unique look at the U.S. racial hierarchy based on reported ancestry rather than racial self-identification, these SES rankings serve two purposes. First, they allow us to visualize how socioeconomically similar or dissimilar dual-ancestry groups are to their single-ancestry constituents. For example, where are people with Black and Hispanic ancestry positioned in terms of educational attainment with respect to people with only

Black or Hispanic ancestry, respectively? Second, the SES rankings offer guidance for classifying single-race ancestry categories as either the “higher-status” or “lower-status” parental group with respect to a given “descendent” dual-ancestry group. As we will discuss further, this is necessary for identifying whether hypodescent or hyperdescent regimes are at work.

Table 1. Years of education by racial ancestry, respondents age 25 and older (N = 20,621).

Racial Ancestry	Mean (Years)	Standard Deviation (Years)	N
Asian	16.01	2.38	378
Asian–White	15.59	1.99	106
White	14.72	2.34	15,160
White–Black	14.45	2.25	232
White–Indigenous	14.34	2.25	1566
Black–Hispanic	14.04	2.68	45
White–Hispanic	14.01	2.67	712
Black	13.88	2.27	737
Black–Indigenous	13.74	2.15	228
Indigenous	13.52	2.85	23
Indigenous–Hispanic	12.86	1.70	48
Hispanic	12.43	3.40	1386

Source: 2015 Pew Survey of Multiracial Adults.

Table 2. Yearly per capita household income by racial ancestry (N = 21,399).

Racial Ancestry	Mean (USD)	Standard Deviation (USD)	N
Asian	40,390	32,446	407
White	37,187	27,191	15,587
Asian–White	32,231	25,453	114
White–Black	30,463	28,092	249
White–Indigenous	29,450	24,089	1627
Black	27,000	26,077	777
White–Hispanic	25,664	24,704	782
Black–Indigenous	24,199	24,086	238
Indigenous	24,049	25,552	24
Black–Hispanic	21,475	23,796	50
Indigenous–Hispanic	18,783	18,045	53
Hispanic	17,238	18,479	1491

Source: 2015 Pew Survey of Multiracial Adults.

By definition, each dual-ancestry group has two constituent or parental single-race ancestries. We define the one that has greater average years of education and per capita household income as the “higher-status” group. For example, as Tables 1 and 2 show, for people who report Asian–White ancestry, “Asian” is the higher status ancestry and “White” the lower status, because single-ancestry Asians have a higher socioeconomic ranking, on average, than single-ancestry Whites. Yet, for the White–Black ancestry group, “White” is the higher status ancestry and “Black” the lower status, because people who report only White ancestry have higher socioeconomic standing, on average, compared to people who report only Black ancestry. For clarity, we refer to each dual-ancestry combination with the higher-status category first and the lower-status category second (i.e., Asian is higher-status relative to White, so the dual-ancestry group is referred to as “Asian–White” rather than “White–Asian”).

After identifying higher-status and lower-status single-ancestry parent groups for each of our dual-ancestry combinations, we can test for the presence of hypo- or hyperdescent outcomes. If a dual-ancestry group has SES equal to or higher than that of its higher-status parent group, we consider it to follow a hyperdescent pattern. If it has SES equal to or lower than that of its low-status parent group, we consider it a case of hypodescent. Finally, if the dual-ancestry group’s SES falls in between that of its two single-race constituent groups, we

label it an example of “co-descent.” Taking the outcomes for all the dual-ancestry groups together, we can assess how frequent hypo-, hyper-, or co-descent cases are and come to a conclusion about which of the three types, if any, is the prevailing multiracial regime in the contemporary period.

Although we begin our analyses with data on socioeconomic status to discern hypo-/hyper-/co-descent and dominance patterns, it is not the only indicator of multiracial classification regime that we use. The bulk of our analysis focuses on the racial self-identification patterns of each dual-ancestry group. For each ancestry combination, we calculate the percentage of multiracial individuals who self-identify (1) with their higher-status constituent single race, (2) with their lower-status constituent single race, or (3) with both of those races. This offers another way to determine whether a given dual-ancestry group follows a hyper-, hypo-, or codescent regime. Again, taking the identification patterns for all dual-ancestry groups together, we assess the extent to which a hyper-, hypo-, or co-descent regime appears to prevail overall.

As we have suggested, however, there exists an alternative organizing scheme for multiracial classification: the “dominance” framework. In this approach, multiracial groups’ categorization is determined by which of their ancestral groups is collectively viewed as racially dominant or determinative, and not necessarily by which holds the highest socioeconomic status. A dominance mechanism could predict a set of outcomes that might well differ from a hypo- or hyper-descent regime. (It also excludes codescent). For example, in a classic “one drop of Black blood” dominance regime, all dual-ancestry combinations with some African ancestry would be categorized and treated as Black. However, in a purely hypodescent regime, people with Black–Indigenous and Black–Hispanic ancestry would be treated as Indigenous and as Hispanic, respectively, given that both Indigenous and Hispanic people have lower socioeconomic status in contemporary data (see Tables 1 and 2). For a comparison of the different racial classification outcomes associated with dominance, hypo-, hyper-, or co-descent regimes, see Table 3.

Table 3. Distinguishing regimes: A theoretical table of predicted outcomes for dual-ancestry groups.

Modal Racial Self-Identification and SES Proximity under the Following Models:				
	DOMINANCE ¹ (dominant identity and SES proximity)	HYPODESCENT ² (lower-status identity and SES proximity)	HYPERDESCENT ² (higher-status identity and SES proximity)	CODESCENT ² (dual identities and in-between SES)
Asian–White	White	White	Asian	Asian–White
White–Black	Black	Black	White	White–Black
White–Indigenous	White	Indigenous	White	White–Indigenous
White–Hispanic	Hispanic	Hispanic	White	White–Hispanic
Black–Hispanic	Hispanic	Hispanic	Black	Black–Hispanic
Black–Indigenous	Black	Indigenous	Black	Black–Indigenous
Indigenous–Hispanic	Hispanic	Hispanic	Indigenous	Indigenous–Hispanic

Notes: ¹ Predicted outcomes based on our empirical dominance ranking (in Section 4.2.2). ² Based on socioeconomic outcomes for Asian, White, Black, Indigenous, and Hispanic single-race groups (Tables 1 and 2).

We mine our respondents’ racial self-identification data to empirically deduce which single ancestries (e.g., Asian, Black) seem to dominate in their identity choices. Using the percentages of individuals in each dual-ancestry pairing who identified with one racial ancestry or the other (or both), we learn which single-race identities are more frequently chosen over their “competing” options. This, in turn, allows us to rank racial ancestries overall in terms of how dominant versus dominated they are, or how supercessive versus recessive. In a tripartite system such as the one historically described in the U.S., if most people with

Black–White ancestry self-identify as Black, most people with Black–Indigenous ancestry self-identify as Black, and most people with White–Indigenous ancestry self-identify as White, the dominance hierarchy ranks Blackness as most supercessive (both part-Black groups identify as Black), Whiteness as less supercessive (only one of the part-White groups identifies as White), and indigeneity as recessive (neither of the part-Indigenous groups identify as Indigenous). Moreover, a dominance logic better describes such a context than either hyper- or hypo-descent, each of which holds only partially true in this example.

3.3. Period, Generation, and Gender

If we think of racial ancestry combinations (e.g., Black–Indigenous, Asian–White) as the key independent variable in our analysis, associated with particular multiracial regimes that shape racial self-identification, then we consider three other variables as playing an additional or intervening role in this process. First, we examine racial identification by *time period*, measured by whether a respondent was born before or after the landmark *Loving v. Virginia* U.S. Supreme Court decision in 1967. The *Loving* case legalized interracial marriage across the United States and represents a turning point in the widespread acceptance of miscegenation. Time period is an important dimension of racial classification regimes, as it dictates the structural and cultural dynamics around racial mixing in a given era (Xu et al. 2021). We posit that those born in 1967 or earlier are less likely to identify as multiracial than those born after the *Loving* decision.

Second, we examine how *multiracial generation* is associated with respondents' self-identification. We identify generational locus by tracing the first interracial union in a respondent's family tree (see Morning and Saperstein 2018). We consider respondents to be *first-generation* if they categorize their parents as different single races (e.g., White mother and Asian father) and earlier ancestors with those same races. Respondents are categorized as *second-generation* if they identify the first interracial union in their family tree in their grandparents' generation (e.g., White maternal grandmother and Asian maternal grandfather). In other words, second-generation respondents are not the first generation to have multiple ancestries in their family. We consider respondents to be *third- or higher-generation* if they categorize their great-grandparents or earlier ancestors as a different race than any of the more recent members of their family tree (i.e., parents and grandparents). Following Morning and Saperstein (2018), we expect first-generation respondents to report greater multiple-race self-identification than those in higher generations.

Finally, we examine the role of gender. Unfortunately, the Pew data are limited to a single binary report as "female" or "male" that conflates the concepts of sex assigned at birth and current gender. Despite this limitation, we interpret our results in terms of differences between "women" and "men" because cisgender people are currently estimated to account for nearly 99% of all U.S. adults (Saperstein and Westbrook 2021). Multiraciality has long been considered more common among women than men (Davenport 2016; Renn 2012). Yet, as Xu et al. (2021) reveal, this pattern is only true for first-generation women with mixed ancestry; men who are second-generation and above are more likely than similar women to self-identify as multiracial. Thus, we consider the combined influence of gender and generation on patterns of self-identification among those with mixed ancestry.

We present only descriptive analyses in this paper. Results from multivariable regression support the conclusions based on our descriptive tables (see Appendix A), but patterns of statistical significance should be interpreted with caution given the relatively sparse cells for the smaller dual-ancestry combinations.

4. Findings

4.1. Co-Descent and Conflicting Socioeconomic Patterns of Hypo- and Hyperdescent

First, we examined the socioeconomic status of each dual-ancestry group relative to their "parental" racial ancestries. Tables 1 and 2 rank single- and dual-ancestry groups on education and per capita household income, respectively. Importantly, they reveal a shared socioeconomic hierarchy, where single-ancestry groups are arranged in the following

descending order of status: (1) Asian, (2) White, (3) Black, (4) Indigenous, and (5) Hispanic. This finding departs from the typical racial hierarchy in existing research, which tends to find Black Americans and Indigenous Americans at the bottom of the socioeconomic hierarchy, and Hispanic Americans in the middle (Guluma and Saperstein 2022). This difference likely stems from two sources: first, we use reported ancestry rather than racial self-identification. Second, our data were collected using a “combined question” format that included Hispanic, Latino, and Spanish origin alongside the other racial categories in our analysis, rather than presenting it as a separate question. The “combined question” method yields lower nonresponse and higher test–retest reliability (Mathews et al. 2017), but the generalizability of our results awaits broader adoption of this question format.

What is most important about the rankings in Tables 1 and 2, however, is they help us assess what kind of multiracial classification regimes are in force. By comparing dual-ancestry groups’ socioeconomic standings to those of single-ancestry groups and determining whether they are more similar to their higher- or lower-status parent racial groups, we can investigate whether hypo-, hyper-, or co-descent conventions seem to be at work.

Overall, Tables 1 and 2 indicate that the socioeconomic outcomes of dual-ancestry groups usually lie in between those of their single-race ancestries. For example, the average education and household income for people who report Black–Indigenous ancestry fall in between the mean levels for people who report only Black ancestry or only Indigenous ancestry. Of the 14 dual-ancestry outcomes we show across the two tables, just two deviate from this pattern: on average, people who report Black–Hispanic ancestry have more years of schooling than their single-ancestry counterparts, and people who report Asian–White ancestry have lower per capita household income than people who report only Asian or only White ancestry. These exceptions aside, the general rule seems to be one of co-descent, rather than hyper- or hypodescent, as the dual-ancestry groups we study overwhelmingly report socioeconomic characteristics that blend those of their higher- and lower-status parental ancestries. Moreover, the differences between each dual-ancestry outcome and their ancestral “parents” are all statistically insignificant. Such prevalent patterns of co-descent are inconsistent with a “dominance” framework of supercessive and recessive single-race ancestries.

That said, the results also suggest that dual-ancestry groups “lean” toward one parental ancestry or another, and they do so in remarkably consistent fashion. When it comes to education, all of the dual-ancestry combinations are closer to their higher-status parent ancestry than to the lower. To return to the Black–Indigenous example, their average 13.74 years of schooling is closer to the 13.88 years reported by respondents who report only Black ancestry than it is to the 13.52 years for respondents who report only Indigenous ancestry. Given we may be underestimating meaningful differences by relying on statistical significance alone, particularly for the small dual-ancestry combinations in our sample, these outcomes might be taken as evidence of a multiracial regime that tends—across the board—toward hyperdescent rather than co-descent.

Outcomes on per capita household income, however, lean in exactly the opposite direction: towards hypodescent. Here, all dual-ancestry groups are closer to their lower-status parent ancestry than to the higher one. Examining the Black–Indigenous case again, their mean per capita household income of USD 24,199 is much closer to the mean of USD 24,049 for people reporting only Indigenous ancestry than to the mean of USD 27,000 for people reporting only Black ancestry.

Using socioeconomic characteristics to gauge the status positioning of people with mixed racial ancestry, then, does not provide clear support for either a hypo- or hyperdescent structure in the contemporary United States. Not only do different indicators—here, education and income—point in different directions, but they do not clearly differentiate specific racial ancestries. Black-ancestry combinations are no more or less likely than White-, Asian-, Hispanic- or Indigenous-ancestry combinations to follow hypo- or hyperdescent patterns. This finding runs contrary to longstanding assumptions about the unique salience of hypo/hyperdescent rules for particular racial ancestries.

4.2. Racial Self-Identification Patterns

If socioeconomic outcomes are one way to gauge the social positioning of people with mixed ancestry, another equally if not more meaningful approach is to explore the racial identities they report for themselves. In Table 4, we present the distribution of racial self-identification for each of the dual-ancestry groups in our sample. Specifically, drawing on the patterns of socioeconomic status in Tables 1 and 2, we report the percentage of each combination's members who identified with: (1) their higher-status single race; (2) both parental races (i.e., "MR" or multiracial); or (3) their lower-status single race. This allows us to search for evidence of co-descent, along with either hypo- or hyperdescent self-identification, or broader patterns of dominant/supercressive versus dominated/recessive racial ancestries. We report the classification regime implied by the identification pattern for each ancestry combination alongside the relevant percentages in Table 4.

Table 4. Racial self-identification patterns and hypo/hyperdescent outcomes for dual-ancestry respondents (%).

	Asian		Black		Indigenous		Hispanic	
White	A: 20.7 MR: 57.7 W: 21.6 N = 111	C	W: 11.0 MR: 15.5 B: 73.5 N = 245	H−	W: 73.0 MR: 23.4 I: 3.5 N = 1618	H+	W: 16.9 MR: 40.9 H: 42.3 N = 781	H−
Black	x				B: 89.9 MR: 8.8 I: 1.3 N = 238	H+	B: 36.0 MR: 18.0 H: 46.0 N = 50	H−
Indigenous	x						I: 2.0 MR: 25.5 H: 72.6 N = 51	H−
Hispanic	x							

Notes: (1) x indicates data not shown for ancestry combinations with fewer than 50 cases. (2) Cases of codescent labelled with a "C"; hyperdescent with an "H+"; and hypodescent with an "H−". (3) Single-race categories are classified as higher and lower status based on their position in the contemporary SES hierarchy according to data on education and income from the Pew sample (see Tables 1 and 2).

4.2.1. Evidence of Hypo/Hyperdescent?

Consistent with our findings on education and income, no clear patterns of hypo- or hyperdescent emerge from the respondents' racial self-identification. If we define hyperdescent as a dual-ancestry group's modal self-identification with their higher-SES ancestry, then we find hyperdescent in only two cases: among people who report White–Indigenous ancestry or Black–Indigenous ancestry. At first glance, this confirms the traditional hypothesis of hyperdescent among mixed-race Indigenous people. However, the Indigenous–Hispanic ancestry pairing follows a pattern of hypodescent, with the vast majority of individuals who report this ancestry combination identifying with their lower-SES single-race Hispanic counterparts.

Overall, we find hypodescent outcomes are more common, though not universal. Four dual-ancestry combinations demonstrate hypodescent, meaning their modal self-identification is with their lower-SES racial ancestry: White–Black, White–Hispanic, Black–Hispanic, and Indigenous–Hispanic. The most consistent rule then is hypodescent for people with Hispanic ancestry rather than people with Black ancestry, as is commonly assumed.

The lack of co-descent patterns in the self-identification data overall, contrasts with the overall tendency toward codescent we find in our SES data. Asian–White ancestry is the only combination that demonstrates a co-descent regime, with multiracial as the modal self-identification (58% of respondents). Moreover, Asian–White ancestry respondents who

identify with single races are nearly equally likely to identify with the higher-status Asian category (21%) as with the lower-status White category (22%).

4.2.2. Empirical Racial Dominance Ranking

As neither hyper/hypodescent nor codescent logic seem to structure multiracial self-identification outcomes in a systematic way, we propose an alternative way to think about these results. Simply put, we rank each single-race ancestry (e.g., Asian, Black) according to how frequently respondents identify with it in dual-ancestry pairings. For example, monoracial Black identity dominates in two out of its three dual-ancestry combinations (Table 4). For people who report White–Black ancestry, “Black” (73%) is the most common self-identification, and about 1 in 10 identify as single-race White. Single-race Black identification also dominates when it is the higher-SES of the two ancestry groups: people who report Black–Indigenous ancestry identify only as Black by a wide margin (90%), followed by multiracial (9%) then Indigenous only (1%). However, people who report Black–Hispanic ancestry are most likely to identify as Hispanic (46%), even though it is the lower-SES category.

Revisiting Table 4 in light of such dominance contests, we observe the following:

“Hispanic” self-identification dominates in all 3 of its 3 pairs;

“Black” dominates in 2 of its 3 pairs;

“White” dominates in 1 of its 4 pairs;

“Asian” dominates in 0 of its 1 pair;

“Indigenous” dominates in 0 of its 3 pairs.

These results suggest at least two key corrections to longstanding thinking about regimes of self-identification for mixed-race Americans. One is that Blackness may not be the ultimate one-drop rule; in our results, Hispanicity proved to be an even more salient identity. The other is that racial ancestries are not entirely dominant or dominated. Instead, we find a gradient of supercession to recession, with relatively “strong”—or “marked” (Zerubavel 2018)—ancestries like Hispanic and Black currently exerting a greater pull on mixed-race individuals’ self-identification than those like White, Asian, or Indigenous ancestries. As the SES finding of co-descent also showed, mixed-race classification in the 21st century is a heterogeneous outcome, rather than one beholden to simple rules.

4.3. Gender, Generation, and Period Effects on Multiracial Self-Identification

Given that racial ancestry combinations do not demonstrate a clear pattern of hypo- or hyperdescent patterns in socioeconomic or self-identification outcomes, we next explore whether such rules have a place in classification regimes that are demarcated not only by ancestry combination but also by time period, generation, and gender.

4.3.1. Cohorts Born before and after the 1967 Demise of Anti-Miscegenation Laws

We first examine patterns of racial identification by time period, to account for the distinctive historical contexts in which multiracial categorization regimes evolve. We find strong evidence that multiple-race self-identification is more common among those born after the landmark 1967 U.S. Supreme Court case, *Loving v. The State of Virginia* than among their older dual-ancestry counterparts (Table 5). This finding holds across all ancestry combinations. Significantly, multiracial is the modal identity among all groups with part-White ancestry in the post-Loving period. In addition, the percentage of individuals identifying as single-race White drops off among post-Loving Asian–White, White–Black, and White–Indigenous respondents. (The exception is people who report White–Hispanic ancestry born post-Loving, for whom single race White identity remains at a similar level to that of those born pre-Loving).

Table 5. Racial self-identification by ancestry combination and time period among dual-ancestry respondents (%).

		Pre-Loving		Post-Loving	
Asian–White	A	28.4%	C	7.1%	C
	MR	43.3%		81.0%	
	W	28.4%		11.9%	
	N	67		42	
White–Black	W	12.7%	H–	0.0%	C
	MR	8.9%		72.0%	
	B	78.4%		28.0%	
	N	213		25	
White–Indigenous	W	74.5%	H+	31.3%	C
	MR	22.5%		50.0%	
	I	3.0%		18.8%	
	N	1558		48	
White–Hispanic	W	17.3%	H–	15.3%	C
	MR	37.9%		52.9%	
	H	44.9%		31.9%	
	N	613		157	
Black–Hispanic	B	33.3%	H–	40.0%	C, H+
	MR	12.8%		40.0%	
	H	53.9%		20.0%	
	N	39		10	
Black–Indigenous	B	90.0%	H+	x	x
	MR	8.7%		x	
	I	1.3%		x	
	N	230		x	
Indigenous–Hispanic	I	2.2%	H–	x	x
	MR	23.9%		x	
	H	73.9%		x	
	N	46		x	

Notes: (1) x indicates data not shown for ancestry combinations with fewer than 5 cases. (2) Ancestry combinations are bolded when a chi-square test of the distribution of racial identification by period is statistically significant. (3) Cases of codescent labelled with a “C”; hyperdescent with an “H+”; and hypodescent with an “H–”. (4) Pre-Loving and post-Loving percentage columns within each ancestry combination may not sum to 100 percent due to rounding.

Overall, Table 5 reveals that the logic of co-descent becomes more prominent for those born post-Loving, regardless of ancestry combination. Among mixed-race people born prior to the Loving decision, co-descent was rare; only people with Asian–White ancestry were more likely to identify as multiracial than any single-race option. Among respondents born after *Loving v. Virginia*, however, co-descent, i.e., multiracial self-identification, became the modal regime for all groups shown.

A corollary of this shift is that, over time, racial ancestries that had previously superseded others in dual-ancestry pairings lost much of their dominance. Mixed-race people born before the *Loving* decision show the dominance hierarchy described previously: Black and especially Hispanic ancestry tend to prevail over the other ancestry components in terms of racial self-identification; White ancestry prevailed over Indigenous, and neither Asian nor Indigenous ancestry ever dominated in terms of self-identification. When it comes to individuals born in the wake of *Loving*, however, the sharp rise in multiple-race reporting meant that all ancestry groups became less dominant.

The extraordinary disparity in the sizes of each group in our sample points to an important aspect of classification regimes: they are attached to mixed-ancestry groups that grow more quickly in some eras than others. Black–Indigenous mixture in particular appears to be much more of a historical than a contemporary phenomenon; with too few respondents in our sample with Black–Indigenous ancestry born post-*Loving*, we are unable to discern if they move to a co-descent regime like other dual-ancestry groups.

Overall, the comparison of multiracial self-identification patterns between the pre- and post-Loving cohorts strongly suggests that models of hypo- and hyper-descent and of racial supercession versus reversion have lost their explanatory power over time. For mixed-race people born after the *Loving* decision, co-descent or multiracial self-identification has become the norm in the United States.

4.3.2. Generation of Multiracial Ancestry

We next explore the role of generational locus of mixed-race ancestry as an intervening variable in self-identification patterns (Table 6). We find that generation is significantly associated with racial identification for all ancestry combinations, but this relationship takes several forms. In the most common pattern we observe, self-identification with multiple races is most frequent in the first generation (i.e., for individuals born to parents of two different races) and becomes monotonically less frequent in the second and higher generations. This is the trend displayed by the Asian–White, White–Black, and Black–Hispanic ancestry groups, suggesting stronger inclination toward co-descent with proximity to the first interracial union in one’s family tree.

Table 6. Racial self-identification by ancestry combination and generation among dual-ancestry respondents (%).

		First Generation		Second Generation		Third+ Generation	
Asian–White	A	11.8%		6.3%		52.0%	
	MR	76.5%		56.3%		8.0%	
	W	11.8%	C	37.5%	C	40.0%	H+
	N	68		16		25	
White–Black	W	3.1%		14.3%		12.3%	
	MR	65.6%		31.4%		2.9%	
	B	31.3%	C	54.3%	H–	84.8%	H–
	N	32		35		171	
White–Indigenous	W	34.4%		53.2%		94.2%	
	MR	35.1%		45.2%		5.2%	
	I	30.5%	C	1.6%	H+	0.6%	H+
	N	131		630		845	
White–Hispanic	W	22.2%		14.7%		13.0%	
	MR	43.6%		61.5%		13.9%	
	H	34.2%	C	23.8%	C	73.0%	H–
	N	275		265		230	
Black–Hispanic	B	38.5%		70.0%		19.2%	
	MR	38.5%	C, H+	30.0%		3.9%	
	H	23.1%		0.0	H+	76.9%	H–
	N	13		10		26	
Black–Indigenous	B	100.0%		75.9%		97.3%	
	MR	0.0		21.7%		2.1%	
	I	0.0	H+	2.4%	H+	0.7%	H+
	N	5		83		146	
Indigenous–Hispanic	I	x		4.2		0.0	
	MR	x		45.8		0.0	
	H	x	x	50.0	H–	100.0	H–
	N	x		24		21	

Notes: (1) x indicates data not shown for ancestry combinations with fewer than 5 cases. (2) Ancestry combinations are bolded when a chi-square test of the distribution of racial identification by generation is statistically significant. (3) Cases of codescent labelled with a “C”; hyperdescent with an “H+”; and hypodescent with an “H–”. (4) Generation percentage columns within each ancestry combination may not sum to 100 percent due to rounding.

Looking across generations, it comes as little surprise that the shift towards a co-descent regime that we observed among younger, post-Loving respondents is mirrored in the prevalence of multiracial self-reporting that we find in the first generation. In the second generation, no regime type predominates; the dual-ancestry groups we follow are fairly evenly distributed across hypo-, co-, and hyper-descent patterns. By the time we

come to the 3+ generation, whose members locate their mixed ancestry in the generation of their great-grandparents or even earlier, none of the ancestry combinations follow a co-descent rule. Although multiracial generation is not the same thing as time period (or age), it can be related when different ancestry combinations are most prevalent in different time periods.

It is also worth noting that the self-identification outcomes become more uniform within each ancestry combination as we move from the second to the third and higher generations. Among second-generation respondents within any given dual-ancestry group, racial self-identification is fairly heterogeneous; even the modal responses do not represent more than 76 percent of the group members. When it comes to the category of third and higher-generation respondents, in contrast, the hypo- and hyper-descent rules that prevail are more extreme than in the second generation, lumping up to 100 percent of a given ancestry combination into a single racial category.

The White–Black ancestry group provides an example of changing patterns of co- and hypo/hyperdescent from one generation to the next. As is true for almost all the other ancestry combinations, the modal identity for first-generation people with White–Black ancestry is mixed-race; two-thirds identify as both White and Black, compared to 31 percent who select “Black” only and 3 percent who identify as “White” alone. In the second generation, however, a hypodescent regime prevails, where 54 percent identify as Black, 31 percent as multiracial, and 14 percent as White. This hypodescent norm becomes only more ironclad for the third and later generations, as nearly 85 percent now identify as Black. Equally telling, the mixed-race option evaporates for the 3+ generation; where it had been the second most frequent response in the second generation, it becomes the least-frequent selection in the third generation, shrinking more than tenfold down to less than three percent, making it actually more common for people with White–Black ancestry in this generation to identify as White than as mixed. Again, these findings corroborate the diminishing power of hypo- and hyperdescent logics for the racial self-identification of mixed-race Americans in the contemporary period.

Three cases—White–Indigenous, Black–Indigenous, and White–Hispanic ancestry—demonstrate an alternative pattern, an inverted U-shape in which it is the second generation (i.e., whose mixed-race ancestry stems from the generation of their grandparents) that is most likely to identify with multiple races. Although it is not surprising that the second generation would be more likely to self-identify as mixed-race than the third and higher generations, given this generation’s relative proximity to grandparents (as opposed to great-grandparents) in interracial unions, it is harder to explain why it would be more likely than the first generation to do so for these ancestry combinations. The small size of the Black–Indigenous ancestry group in our sample makes generational conclusions for them less reliable; we count only five as first-generation. Yet, we observe the same pattern among people who report White–Indigenous and White–Hispanic ancestry, who are better represented in our sample. We do not have the data to resolve this puzzle, though we expect it results from changing sociopolitical dynamics and cultural mores regarding the claiming of particular ancestries.

Finally, we observe that multiracial generations also display waning dominance rules. Given the high rate of mixed-race reporting among first-generation respondents, only one of the five racial ancestries—Black—emerges as supercessive, and it remains the most dominant in second-generation ancestry pairings as well. Among third-generation respondents, however, it is Hispanic and Asian that tends to prevail in self-identification,² followed by Black (dominant in two of its three pairings), White (dominant in one of four pairings), and the consistently recessive Indigenous ancestry. Like the pre- and post-Loving contrast, analyzing mixed-race ancestry by its generational recency or distance points to the weakening of both hypo/hyperdescent rules and dominance patterns over time.

4.4. Historical Roots of Regimes: Periods and Generation

The salience of multiracial generation raises the distinct possibility that it is not only the time period in which a mixed-race person is born that affects their racial classification; the era in which the first interracial union in their family tree arose may also play a role across the generations. In other words, multiracial individuals' self-identification is likely colored by the historical classification regime in place when their families first became mixed-race, and not just—or not necessarily—the one that prevailed at the time of their birth. Morning and Saperstein (2018, p. 61) hypothesized that factors like era-specific racial attitudes, laws, and classificatory practices—which have generally changed across time—thus have consequences for both interracial couples and their descendants. By cross-tabulating the period in which our respondents were born (i.e., before or after the legalization of interracial marriage) with the number of generations since the first interracial union in their families, we can roughly estimate the time periods in which their families became multiracial, and explore whether their contemporary self-identification seems to be associated with a particular regime anchored in that historical time frame.

Table 7 presents the cross-tabulation of birth period and generation. The findings illustrate the primacy of the classification regime into which a multiracial family, rather than any particular descendant, is born. Only the first column, that of first-generation multiracials born after 1967, represents families that became mixed-race—i.e., with these births—in the wake of the Supreme Court's *Loving* decision. It is not surprising, then, that the outcomes in this first cohort of post-1967, first-generation individuals are distinct from the rest. Strikingly, it is this group that most consistently embraces multiple-race self-identification, making it the modal identity for every ancestry combination shown. In contrast, none of the ancestry groups comprised of respondents whose mixed origins go back three generations or more displays a similar co-descent pattern.

Even though second-, third-, and higher-generation mixed-race people are just as young as their peers in the first generation if they too were born after 1967, their self-identification patterns are generally those of their older, 50+ counterparts. (The main exception is among post-Loving Asian-Whites in the second generation, whose modal identity is mixed, unlike the White identity preferred by their pre-Loving counterparts.) This suggests that the period in which second and higher-generation respondents were themselves born has less influence on their self-identification than the period in which their ancestors were first understood to be of mixed race.

The enduring imprint of older, pre-Loving hypo- and hyper-descent regimes is perhaps best seen in the second generation. There, only groups with partial Asian or Hispanic ancestry lean towards multiracial self-identification. In contrast, people in the second generation who report White-Black, Black-Indigenous, and White-Indigenous ancestry are more firmly anchored in longstanding hypo/hyperdescent conventions. Following Xu et al. (2021), we posit that large-scale immigration from Asia and Latin America following the 1965 Immigration and Nationality Act plays an important role in these self-identification patterns, with the relatively “newer” Hispanic and Asian groups leaning away from longstanding hypo/hyperdescent conventions due to their greater foreign-born population and shallower pools of higher-generation multiracials, compared to the “older” Black, Indigenous, and White groups. This further underscores the marked turn to multiraciality among post-Loving, first-generation respondents for whom the dominance of certain racial ancestries over others that characterize older people and higher generations is virtually non-existent.

Table 7. Racial self-identification by ancestry combination, generation, and time period among dual-ancestry respondents (%).

		First Generation				Second Generation				Third+ Generation			
		Post-Loving		Pre-Loving		Under 50		50+		Under 50		50+	
Asian–White	A	7.3%		18.5%		9.1%		0		64.3%		36.4%	
	MR	82.9%		66.7%		63.6%		40.0%		7.1%		9.1%	
	W	7.3%	C	18.5%	C	27.3%	C	60.0%	H–	28.6%	H+	54.6%	H–
	N	41		27		11		5		14		11	
White–Black	W	0%		12.5%		14.3%		14.3%		13.7%		11.2%	
	MR	75.0%		37.5%		35.7%		28.6%		5.5%		1.0%	
	B	25.0%	C	50.0%	H–	50.0%	H–	57.1%	H–	80.8%	H–	87.8%	H–
	N	24		8		14		21		73		98	
White–Indigenous	W	28.6%		36.5%		55.3%		51.9%		95.2%		93.6%	
	MR	48.6%		30.2%		41.8%		47.3%		4.5%		5.7%	
	I	22.9%	C	33.3%	H+	3.0%	H+	0.8%	H+	0.3%	H+	0.8%	H+
	N	35		96		237		393		332		513	
White–Hispanic	W	16.0%		29.0%		14.8%		14.7%		10.3%		17.7%	
	MR	50.7%		35.9%		59.3%		63.1%		14.5%		12.9%	
	H	33.3%	C	35.1%	C	25.9%	C	22.3%	C	75.2%	H–	69.4%	H–
	N	144		131		108		157		145		85	
Black–Hispanic	B	33.3%		X		X		100%		21.4%		16.7%	
	MR	44.4%		X		X		0		0		8.3%	
	H	22.2%	C	X	x	X	x	0	H+	78.6%	H–	75.0%	H–
	N	9		X		X		6		14		12	
Black–Indigenous	B	x		x		73.0%		78.3%		95.0%		98.8%	
	MR	x		x		27.0%		17.4%		5.0%		0	
	I	x	x	x	x	0	H+	4.4%	H+	0	H+	1.2%	H+
	N	x		x		37		46		60		86	
Indigenous–Hispanic	I	x		x		10.0%		0		0		0	
	MR	x		x		40.0%		50.0%	C,	0		0	
	H	x	x	x	x	50.0%	H–	50.0	H–	100.0%	H–	100.0%	H–
	N	x		x		10		14		8		13	

Notes: (1) x indicates data not shown for ancestry combinations with fewer than 5 cases. (2) Ancestry combinations are bolded when a chi-square test of the distribution of racial identification is statistically significant. (3) Cases of codescent labelled with a “C”; hyperdescent with an “H+”; and hypodescent with an “H–”. (4) Generation by Post- and Pre-Loving period within each ancestry combination may not sum to 100 percent due to rounding.

4.5. Gender

The last variable we consider in relation to multiracial categorization regimes is gender. Xu et al. (2021) find that gender, in conjunction with generation, is an important driver of self-identification among mixed-race people: women are most likely to identify as multiracial in the first generation, but men are most likely in later generations. Accordingly, in Table 8 we consider self-identification by both gender and generation (See Appendix A, Table A2 for results by gender alone). In most cases, women and men of the same generation and with the same mixed-race ancestry share the same modal race response. For example, 74 percent of first-generation men with Asian–White ancestry identify with more than one race, as do 79 percent of first-generation Asian–White women. However, our results also reveal patterns of gender concordance that vary by generation and by ancestry combination.

Strikingly, there is perfect gender concordance for ancestry combinations in the third and higher multiracial generations, but not in the first or second generation. This is consistent with what we have seen of firmer hyper- and hypodescent rules obtaining for individuals whose mixed ancestry originated further back in the family tree. Racial self-identification outcomes are more similar for women and men in the third and higher generations because mixed-race people were more often constrained to a single racial identity. Over 90 percent of White–Indigenous men and women self-identified with one race—White—in the third generation, whereas the modal response for first-generation White–Indigenous women was to select two races (which 39 percent did), and the mode for men was Indigenous (selected by 36 percent). In short, the first-generation relaxation of

hypo- and hyperdescent rules that still apply to third-generation multiracials has opened the door to gender heterogeneity in self-identification.

Table 8. Racial self-identification by ancestry combination, gender, and generation among dual-ancestry respondents (%).

		First Generation		Second Generation		Third+ Generation	
		Female	Male	Female	Male	Female	Male
Asian–White	A	11.8%	11.8%	12.5%	0	50.0%	54.6%
	MR	79.4%	73.5%	50.0%	62.5%	7.1%	9.1%
	W	8.8%	14.7%	37.5%	37.5%	42.9%	36.4%
	N	34	34	8	8	14	11
White–Black	W	4.4%	0	23.5%	5.6%	10.8%	14.5%
	MR	73.9%	44.4%	17.7%	44.4%	1.0%	5.8%
	B	21.7%	55.6%	58.8%	50.0%	88.2%	79.7%
	N	23	9	17	18	102	69
White–Indigenous	W	36.1%	32.9%	59.9%	44.9%	95.7%	92.7%
	MR	39.3%	31.4%	38.6%	54.3%	4.0%	6.4%
	I	24.6%	35.7%	2.2%	0.8%	0.2%	0.9%
	N	61	70	365	265	421	424
White–Hispanic	W	21.5%	23.0%	17.3%	12.1%	10.5%	15.5%
	MR	47.7%	38.9%	58.7%	64.4%	10.5%	17.2%
	H	30.9%	38.1%	24.1%	23.5%	79.0%	67.2%
	N	149	126	133	132	114	116
Black–Hispanic	B	50.0%	20.0%	X	66.7%	35.7%	0
	MR	37.5%	40.0%	X	33.3%	0	8.3%
	H	12.5%	40.0%	X	0	64.3%	91.7%
	N	8	5	X	6	14	12
Black–Indigenous	B	x	x	79.4%	65.0%	96.9%	98.0%
	MR	x	x	17.5%	35.0%	2.1%	2.0%
	I	x	x	3.2%	0.0	1.0%	0.0
	N	x	x	63	20	97	49
Indigenous–Hispanic	I	x	x	8.3%	0.0	0.0	0.0
	MR	x	x	25.0%	66.7%	0.0	0.0
	H	x	x	66.7%	33.3%	100.0	100.0
	N	x	x	12	12	14	7

Notes: (1) x indicates data not shown for ancestry combinations with fewer than 5 cases. (2) Cases of codescent labelled with a “C”; hyperdescent with an “H+”; and hypodescent with an “H−”. (3) Generation by gender period within each ancestry combination may not sum to 100 percent due to rounding.

Gender concordance in self-identification also varies by ancestry combination. Across most ancestry combinations, men and women demonstrate similar patterns of hyper-, hypo-, and co-descent, but the White–Black, White–Indigenous, and Indigenous–Hispanic ancestry groups constitute notable exceptions. In the White–Indigenous example, women lean more towards higher-status racial groups than men do in every generation. White–Black ancestry respondents also display unique gender outcomes. In the first generation, nearly three quarters of women identify as mixed-race, whereas more than half of men identify with their lower-status single-race Black counterparts. This outcome switches for second generation women, however, for whom Blackness becomes the modal identity (selected by 59 percent).

Taken together, these results show that generational distance from multiracial ancestry, time period, and gender all play a role in the racial self-identification of Americans of mixed heritage.

5. Conclusions

In this article, we set out to test a common presumption that hypo- and hyper-descent models are useful and accurate tools for describing mixed-race Americans’ patterns of racial self-identification. Based on our reading of the literature, we identified two competing categorization regimes that may do a better job: either co-descent or what we call the

“dominance” framework. Although we uncovered some instances of hypo- or hyperdescent identification, these were not ancestry specific as in previous formulations and thus could be subsumed by a more general dominance account. Moreover, we repeatedly encountered evidence that both hyper/hypodescent and dominance rules are gradually giving way to a regime of co-descent or multiple-race identification for individuals of all combinations of ancestral racial mixture. Here, we review key findings before going on to discuss their implications.

5.1. Summary of Results

We did not find evidence of either hypo- or hyperdescent classification regimes characterizing the multiracial population as a whole. When we examined the socioeconomic status of mixed-ancestry groups across the seven largest dual-ancestry combinations, co-descent—or status in between those of their “parent” single ancestries—was the norm. When we turned to racial self-identification, we found a mix of outcomes: four hypodescent cases, two hyperdescent instances, and one example of co-descent. Contrary to longstanding assumptions, however, hypo- and hyperdescent were not consistently correlated with specific racial ancestries: groups with White, Black, and Indigenous heritage are found in both hypo- and hyper-descent regimes. In fact, the only systematic hypodescent rule we encountered applied to people of Hispanic, not Black, descent.

Given the heterogeneity of hyper-, hypo-, and co-descent outcomes, we turned to dominance ranking—that is, calculating where each racial ancestry lay on a spectrum from supercessive to recessive—to better capture the relationship between specific ancestry mixtures and multiracial self-identification. We found that overall, “Hispanic” was the most dominant or supercessive ancestry, followed (in descending order), by “Black”, “White”, “Asian”, and “Indigenous”, which was consistently displaced in self-identification by any other reported ancestry.

In a second part of our analyses, we subdivided our dual-ancestry groups by time period, multiracial generation, and gender to see how these factors might refine our thinking about the regimes in play. Starting with a division of the sample into respondents born before the U.S. Supreme Court’s *Loving v. Virginia* decision and those born after 1967, we identified a clear shift toward multiple-race self-identification. For people born after 1967, choosing two races was the modal response for every ancestry combination with at least five respondents in our sample. This was the first indication that formerly powerful regimes, grounded in dominance and to a lesser extent in hypodescent, lost their purchase in the late 20th century. It also signaled that multiracial regimes are anchored in particular time periods.

We corroborated and elaborated on the role that multiracial generation plays in self-identification as well. Consistent with [Morning and Saperstein \(2018\)](#) and [Xu et al. \(2021\)](#), we found that in general, first-generation multiracials were more likely to identify with multiple races than those in the second generation, who in turn were more likely to do so than their counterparts in the third and higher generations. In addition, however, we discovered that generation is also associated with regime: third or higher generation mixed-race people consistently followed hypo/hyperdescent and dominance patterns in self-identification, unlike the second generation, and they did so more rigidly, with more uniform outcomes (e.g., 90 percent identification as Black rather than say 65 percent). Moreover, such regimes disappeared altogether in the first generation, giving way to co-descent outcomes.

To further delve into the role of time period in regimes of multiracial classification, we took respondent age—i.e., the pre- or post-Loving era of their birth—and generation into account simultaneously. This cross-tabulation revealed that it is not so much the period in which mixed-race individuals are themselves born that influences their self-identification, but rather the period in which their ancestors became mixed-race, marked by the first birth to an interracial union in their family tree.

Finally, we introduced gender into the mix, extending Xu et al.'s (2021) work by considering how men and women's racial self-identification might reflect regimes of dominance, hyper-, hypo-, or co-descent. The rigidity of older hypo- and hyper-descent patterns that we noted above were related to gender concordance; the firmer rules about multiracial classification for the higher generations mean that men and women consistently converged on the same modal choices. In contrast, gender mismatch was common in the first and second generations, with each displaying an intriguing pattern. In the second generation, women seemed to be more "conservative" than men, preserving—or remaining bound by—the hypo- or hyperdescent patterns of higher generations. In the first generation, among the older respondents (i.e., those born before *Loving v. Virginia*), men leaned toward lower-status single-race identification more than women.

5.2. Discussion

It may be tempting to assume that a general pattern of dominance or hypo- or hyper-descent characterizes the multiracial population overall. However, our decomposition of this population by ancestry combination, age, generation, and gender reveals that it would be more accurate to say that subgroups within any given ancestry combination may exhibit systematically different patterns of self-identification, and share them with other subgroups of different ancestral combinations. Multiraciality is not a blanket experience; rather there are multiple categorization regimes, coexisting yet anchored in different historical periods, which produce distinct identification patterns and are shaped by the material well-being of mixed-race people in a racially stratified society.

At any given time, new regimes may emerge alongside older ones that echo past patterns. As we observed, the self-identification of the second and 3+ generations in the 2015 Pew survey was largely governed by categorization rules that had been in place when their grandparents or earlier ancestors entered into interracial unions, regardless of whether they themselves were born before 1967 or not. Instead, it was in the first generation, subject to changing laws and social mores when their families first included a mixed-race union (in their parents' generation), where we observed the strongest period effect on self-identification. This shift in self-identification was echoed in the prevalence of codescent in contemporary SES rankings by ancestry.

Taken altogether, our analyses suggest that the era of hypo- and hyperdescent rules—and similarly of dominant single-race ancestries—is waning. Identifying as multiracial has become the norm for Americans with multiple racial ancestries born since the 1967 *Loving* decision. This development has immediate implications for expectations about racial self-identification in the future, and its impact on the racial demography of the nation as a whole. Most strikingly, it calls into question predictions that people with part-White ancestry will be subsumed into the monoracial White population over time, thus allowing it to retain its historical majority status (Alba 2020). We found that among all respondents who reported some White ancestry and had been born since 1967, multiracial self-identification was the modal response. Even among people who report White–Indigenous ancestry, whose mixed ancestry is largely rooted three or more generations in the past and who skew heavily towards White self-identification in general, just one-third of the post-1967 cohort identifies as single-race White. This figure is even lower among other young people with part-White ancestry: 17 percent of post-1967 White–Hispanic ancestry respondents, 11 percent of White–Asian, and none of the White–Black ancestry respondents in our dataset identified as single-race Whites. It seems unlikely then that the projected midcentury slide of the White American population below 50 percent of the total will be significantly slowed by the absorption of mixed-race people.

Beyond questions of demographic trends—or of the influences on individual racial self-identification that have occupied much of the existing literature on mixed-race people—thinking about classification regimes beckons us toward a sociology of multiraciality. Norms about the categorization and treatment of mixed-race people—and especially transformations in these norms over time—stand to shed light on the societal functions and

operations of race more broadly. In a racially stratified society like the United States, multiraciality is an ongoing racial project.

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Appendix A

Table A1. Ordinary least squares regressions predicting socioeconomic status by dual-ancestry combination.

	Education	Logged Yearly Income per Capita
White–Black	−1.262 *** (−0.301)	−0.371 ** (0.117)
White–Indigenous	−1.360 *** (−0.262)	−0.324 ** (0.102)
White–Hispanic	−1.612 *** (−0.262)	−0.465 *** (0.102)
Black–Hispanic	−1.766 *** (−0.443)	−0.655 *** (0.171)
Black–Indigenous	−1.915 *** (−0.305)	−0.637 *** (0.119)
Indigenous–Hispanic	−2.652 *** (−0.437)	−0.863 *** (0.170)
First Generation	−0.255 (−0.136)	−0.033 (0.053)
Second Generation	−0.199 * (−0.093)	−0.065 (0.037)
Midwest	−0.314 * (−0.145)	−0.049 (0.057)
South	−0.330 * (−0.128)	−0.138 ** (0.051)
West	−0.417 ** (−0.138)	−0.151 ** (0.054)
Female	−0.376 *** (−0.08)	−0.105 ** (0.032)
Age (Years)	−0.002 (−0.0)	0.018 *** (0.001)
Constant	16.780 *** (−0.333)	9.628 *** (0.129)
Observations	3765	4078

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table A2. Racial self-identification by gender among dual-ancestry respondents (%).

		Female		Male	
Asian–White	A	21.4%	C	20.0%	C
	MR	57.1%		58.2%	
	W	21.4%		21.8%	
	N	56		55	
White–Black	W	10.9%	H–	11.2%	H–
	MR	15.0%		16.3%	
	B	74.1%		72.5%	
	N	147		98	
White–Indigenous	W	75.6%	H+	70.2%	H+
	MR	21.6%		25.5%	
	I	2.8%		4.3%	
	N	853		765	
White–Hispanic	W	16.9%	H–	16.9%	H–
	MR	40.8%		40.9%	
	H	42.3%		42.2%	
	N	402		379	
Black–Hispanic	B	48.2%	H+	21.7%	H–
	MR	14.8%		21.7%	
	H	37.0%		56.5%	
	N	27		23	
Black–Indigenous	B	90.4%	H+	88.9%	H+
	MR	7.8%		11.1%	
	I	1.8%		0.0%	
	N	166		72	
Indigenous–Hispanic	I	3.3%	H–	0.0%	H–
	MR	13.3%		42.9%	
	H	83.3%		57.1%	
	N	30		21	

Notes: (1) x indicates data not shown for ancestry combinations with fewer than 5 cases. (2) Ancestry combinations are bolded when a chi-square test of the distribution of racial identification is statistically significant. (3) Cases of codescent labelled with a “C”; hyperdescent with an “H+”; and hypodescent with an “H–”. (4) Generation by gender within each ancestry combination may not sum to 100 percent due to rounding.

Table A3. Odds of self-identification with hyper- or hypodescent groups from multinomial logistic regressions, compared to co-descent identification for White–Indigenous respondents.

	White	Indigenous	White	Indigenous
Midwest	0.046 (0.250)	0.468 (0.656)	0.047 (0.250)	0.494 (0.654)
South	0.201 (0.237)	0.397 (0.612)	0.205 (0.237)	0.447 (0.614)
West	0.031 (0.253)	−0.324 (0.682)	0.033 (0.253)	−0.302 (0.681)
First Generation	−2.764 *** (0.285)	2.257 *** (0.541)	−2.737 *** (0.298)	2.311 *** (0.543)
Second Generation	−2.791 *** (0.177)	−1.156 * (0.573)	−2.794 *** (0.177)	−1.250 * (0.583)
Post-Loving	−0.662 (0.370)	−0.622 (0.475)	−0.548 (0.598)	1.643 (1.139)
Female	0.536 *** (0.139)	0.015 (0.323)	0.535 *** (0.139)	0.001 (0.324)
Time Period × Generation			−0.191 (0.762)	−2.474 * (1.240)
Constant	2.022 *** (0.323)	−2.451 ** (0.850)	2.022 *** (0.323)	−2.466 ** (0.849)
Observations	1606			

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table A4. Odds of self-identification with hyper- or hypodescent groups from multinomial logistic regressions, compared to co-descent identification for White–Hispanic respondents.

	White	Hispanic	White	Hispanic
Midwest	0.261 (0.478)	−0.0813 (0.414)	0.260 (0.478)	−0.084 (0.414)
South	0.264 (0.366)	0.287 (0.299)	0.263 (0.366)	0.284 (0.299)
West	−0.083 (0.366)	0.023 (0.296)	−0.084 (0.366)	0.020 (0.296)
First Generation	−0.128 (0.333)	−1.652 *** (0.279)	−0.133 (0.336)	−1.669 *** (0.284)
Second Generation	−1.370 *** (0.313)	−2.633 *** (0.246)	−1.370 *** (0.315)	−2.623 *** (0.248)
Post-Loving	−0.998 ** (0.313)	−0.463 (0.263)	−0.956 (1.067)	−0.712 (0.792)
Female	0.102 (0.216)	0.105 (0.178)	0.102 (0.216)	0.103 (0.178)
Time Period × Generation			−0.034 (1.114)	0.281 (0.839)
Constant	−0.292 (0.514)	1.404 *** (0.412)	−0.291 (0.514)	1.409 *** (0.413)
Observations	770			

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Notes

- The NHOPI ancestry population has a unique history of racial mixing in the U.S. that spans multiple time periods, beginning with the late 18th century colonization of Hawai'i and increasing due to White immigration and labor migration from Asia at the turn of the 20th century (Jung 2006; Kana'iaupuni and Liebler 2005). Yet, racial mixing is also a contemporary phenomenon: the Census reports high rates of intermarriage and multiracial identification among people who identify as NHOPI under age 50 (Krogstad 2015). Taken together, these histories suggest that the broader population that report some NHOPI ancestry contains both older and newer mixed-race ancestry. Given our interest in examining how patterns of racial “dominance” vary across different time periods, the unique historical trajectory of NHOPIs prevents us from subsuming them into other categories. In particular, we could not lump NHOPI ancestry with Asian, because in general racial mixing for people with part-Asian ancestry is more recent, tracking trends in Asian immigration in the middle of the 20th century. At the same time, we could not lump NHOPI with people who reported American Indian ancestry because the bulk of American Indian racial mixing traces to earlier generations, rooted in European colonization.
- However, note we have sufficient data for only one part-Asian ancestry combination: Asian–White.

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