REVIEW

Diversity and prosocial behavior

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Immigration and globalization have spurred interest in the effects of ethnic diversity in Western societies. Most scholars focus on whether diversity undermines trust, social capital, and collective goods provision. However, the type of prosociality that helps heterogeneous societies function is different from the in-group solidarity that glues homogeneous communities together. Social cohesion in multiethnic societies depends on whether prosocial behavior extends beyond close-knit networks and in-group boundaries. We identify two features of modern societies—social differentiation and economic interdependence—that can set the stage for constructive interactions with dissimilar others. Whether societal adaptations to diversity lead toward integration or division depends on the positions occupied by minorities and immigrants in the social structure and economic system, along with the institutional arrangements that determine their political inclusion.

ost Western countries already are or are destined to become multiethnic societies thanks to recent patterns of migration and globalization. Growing immigration to North America and Western Europe (Fig. 1A) has commanded particular attention. Increased ethnic heterogeneity has renewed scholarly interest in intergroup dynamics of cooperation and discrimination and spurred debates over the consequences of

ethnic diversity for social trust and democratic integration. Many scholars have concluded that ethnic diversity negatively affects overall levels of trust, social capital, and public goods provision. Instead, we see these changes as an opportunity to ask a more important question: How does prosocial behavior extend beyond the boundaries of the in-

group and to unknown and dissimilar others? Answering this question is the key to achieving solidarity and cooperation in the heterogeneous communities we increasingly inhabit today.

Cooperation in heterogeneous versus homogeneous societies

To function, large collectivities need to foster solidarity and cooperation among their members. Most theories of political order-from Enlightenment theories of the social contract (Hobbes and Rousseau) and Tocqueville's Democracy in America to recent work on civil society and social capital-acknowledge the need for a sense of collective identity that allows trust and solidarity to extend beyond the boundaries of the family or clan to the larger community or nation. How does this come about? According to popular models of human behavior, repeated interactions within groups and close-knit networks facilitate the emergence of a shared culture, norms of reciprocity and cooperation, and peer sanctioning, inducing positive outcomes for the collectivity (1). Homogeneous communities readily nur-

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ture trust and solidarity through these avenues. In heterogeneous communities, by contrast, social ties between noncoethnics are sparser, which limits coordination and social control. In addition, social norms might not be shared across ethnic boundaries, or there might be uncertainty among members regarding the extent to which they are shared (2). Seen in this light, it makes sense to think of diversity as a challenge to the foundations of our collective social contract.

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Nevertheless, most heterogeneous communities still manage to get along. As homogeneous communities become less prevalent and more people experience life in diverse contexts, we need to move beyond traditional understandings of prosociality. In order to achieve solidarity and cooperation, diverse communities may not rely on the same mechanisms as homogeneous ones. More than a century ago, in fact, Durkheim argued that solidarity in complex, differentiated societies relies primarily on interdependence and the division of labor rather than on cultural similarity and mutual acquaintanceship (3). Following this lead, we identify two features of modern societies that have the potential to foster generalized prosociality.

The first feature is social differentiation, which refers to the growing number of identities and group affiliations that people have in their lives. As first theorized by Simmel, in modern societies individuals become less determined by a few ascribed categories—such as race, class, or gender—and experience a greater ability to choose their group affiliations. As people emancipate from family and community ties, out of choice or necessity, the number of unknown, distant others they will interact with increases, and this has been shown to

foster generalized prosociality (4,5). A second, related feature is economic interdependence: Market-integrated societies in which strangers regularly engage in mutually beneficial transactions exhibit greater levels of generalized solidarity and trust (6,7).

We should not take for granted that societies will inevitably adapt to increasing diversity in ways that further social integration. Critically important for social integration is the extent to which ethnic differences map onto class, religious, gender, or other differences. Differentiation brings about social integration when lines of social division are cross-cutting-that is, when ethnic group membership does not wholly predict membership in specific class, religious, gender, or other groups. By contrast, when social cleavages are consolidated, differentiation poses a threat to social integration (8) and democratic stability (9). Ethnic diversity may thereby foster social division.

Indeed, existing studies on the effects of ethnic diversity tend to highlight its negative consequences for social capital, economic growth, and public goods provision. We start by reviewing this literature, which has dominated

> the debate regarding the consequences of ethnic diversity in Western societies. However, to fully understand the conditions under which heterogeneous societies can achieve social cohesion across lines of ethnic differentiation, we also need to take stock of the status of immigrants and native minorities. Then, we discuss how dif-

ferentiation and economic interdependence—two core features that emerge in modern societies—set the stage for a new kind of prosociality that extends beyond the confines of the in-group by enhancing the opportunities for intergroup contact, encouraging superordinate identification, and inhibiting in-group-out-group thinking. Overall, we argue that the type of prosociality that helps heterogeneous societies function likely derives from positive experiences in the context of strategic interactions, such as those in the workplace, and is different from the in-group solidarity that glues homogeneous communities together.

The "problem" of diversity

Political economy scholars have looked to ethnic diversity in their attempts to explain societal problems in developing countries, including violent conflicts and stalled economic growth (10). On the whole, however, studies paint a nuanced picture, one in which poverty and political instability, rather than ethnic or religious divisions, increase the risk of civil war (11) and in which ethnic fractionalization is associated with lower growth only in the absence of robust democratic institutions and policies (12, 13).

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A second line of work, which focuses mainly on Western European and North American countries, instead probes within-country differences across homogeneous and heterogeneous communities. These studies typically report negative associations between ethnic diversity and desirable outcomes, including civic engagement (14), public goods provision (15), and self-reported trust (16). On the association between diversity and trust alone, a recent review covers nearly 90 studies (17). Although effect sizes are minimal, this scholarship often reaches alarming conclusions about the erosion of civic life at the hands of ethnic diversity.

However, in Western countries, homogeneous and heterogeneous communities differ in systematic ways, which cautions against concluding that diversity per se has negative effects. For one, heterogeneous communities are disproportionally nonwhite, economically disadvantaged, and residentially unstable. Compositional effects related to these differences largely account for the relationship between ethnic diversity and collective outcomes. For example, nonwhites and immigrants tend to report lower trust, and they are overrepresented in heterogeneous communities. Once analyses account for the fact that native whites, who are disproportionately represented in homogeneous communities, also score higher on prosocial indicators, negative associations with ethnic diversity are strongly reduced and even disappear. Similarly, economic hardship takes a toll on prosocial engagement, and diverse communities have much higher rates of concentrated poverty (18). Overall, economic indicators are by far stronger predictors of collective outcomes than are ethnoracial indicators (3, 19).

More generally, the consequences of ethnic diversity likely depend on the extent to which ethnicity constitutes one of many lines of differentiation or instead operates as an organizing principle around which resources are distributed. It matters whether ethnicity intersects with other lines of division and, especially, economic inequality. In their investigation of public goods provision, Baldwin and Huber found that economic inequality between groups-rather than ethnolinguistic or cultural differences—undermines welfare provision (20). They speculate that this happens because richer, more powerful groups prioritize different public goods and exclude others from access. Therefore, resource asymmetries between ethnic groups, and not the multiplicity of ethnic groups per se, undermine collective efforts.

Ethnic fractionalization has been and remains relatively low in Western Europe and North America compared with several countries in Africa and Asia (Fig. 1B). The focus on Western countries is mostly driven by growing immigration (Fig. 1A). Hence, to date, systematic ethnoracial differences between homogeneous and heterogeneous commu-

nities are an artifact of studying diversity in contexts such as North America and Europe, where heterogeneity is relatively low and homogeneous communities are, by and large, homogeneously native majority communities.

It follows that although they use measures of heterogeneity and make claims about diversity, studies in Western countries are unable to attribute observed associations to heterogeneity, as opposed to immigrant or minority share. As a result, studies of ethnic diversity rehash the findings of a long-standing literature on how native majorities react to the growing presence of immigrants and minorities. This literature links the size and growth of immigrant and minority populations to perceived threat and greater hostility toward them. For example, survey and laboratory experiments found that U.S. whites who are exposed to information about the growing share of nonwhites express greater opposition to policies and parties seen to benefit nonwhites (21). Observed effects are theorized to stem from broad concerns about native majorities' economic well-being, their cultural dominance, and their symbolic status within an intergroup hierarchy from which they derive social and psychological benefits (22).

Diversity, as both a concept and measure, treats groups interchangeably: a community that is 80% white and 20% Black is as diverse as one that is 80% Black and 20% white and one that is 80% Latino and 20% Asian (18). However, where there is differentiation, there is hierarchy: Native majorities, native minorities, and immigrants occupy different positions in the social order. Because intergroup dynamics tend to reproduce status and power asymmetries (23), the dynamics of similarly heterogeneous communities likely vary according to the specific groups represented and their relative sizes. Hierarchy raises another consideration: In heterogeneous contexts, we need to distinguish between benefits that accrue to single groups and those that extend to the whole collectivity (3).

Taken together, these observations caution against making generic claims about the effects of diversity. To ascertain the challenges and possibilities posed by diversity, we first need to disentangle its effects from those of inequality. This entails understanding the social cleavages and asymmetries that govern intergroup relationships in diverse societies.

Immigrants and native minorities in Western countries

To what extent and in what domains have immigrants and native minorities achieved economic, political, and social membership in Western countries?

In the United States, immigrants (primarily from Latin America and Asia) and native minorities (primarily Black Americans) contribute to present-day diversity. Regarding the experience of immigrants, scholars are split between those who contend that today's immigrants are on the same upward trajectory as earlier Europeans (24) and those who read, from some groups' experiences, evidence of stalled or even downward mobility (25). Evidence of integration comes from the advances made by members of the second generation over their immigrant parents (26). However, longer-term views into the third generation or later reveal remarkable marital homogamy as well as network and residential segregation for some groups, such as Mexican Americans (27).

The experience of Black Americans, the largest native minority group in the United States, challenges the expectation that full economic, political, and social membership necessarily await later-generation Americans. Black households have less wealth and lower incomes than do Asian or Latino households. And despite recent gains, Blacks are still less likely to marry whites and more likely to be residentially segregated from whites than are Asians or Latinos. Persistent, intergenerational disadvantage among Blacks is a consequence of past institutional practices, including Jim Crow segregation and redlining (28), present institutional practices such as mass incarceration, and contemporary discrimination in the labor market and other domains (29).

In Europe, immigrants from Turkey, Africa, and other regions, including former colonies, contribute to diversity. Their prospects for integration are sobering (30). Evidence of upward economic mobility is tempered by gaps in employment and earnings that may persist into later generations (31). A growing body of field experimental research uncovers discrimination against immigrants, especially Muslim immigrants and/or those of Arab origin, in formal markets such as those for employment and housing (32) and informal, everyday interactions (33, 34). Hostility toward certain immigrant groups is sometimes motivated by their observance and transmission of religious practices and cultural norms that are seen to conflict with liberal principles of gender equality and individual freedom (33, 35). These findings fuel the view that European societies are converging on a "discriminatory equilibrium" in which discrimination toward some groups drives underinvestments in human capital (30) and furthers the reproduction of values and practices that stall integration in economic and other domains.

The picture is not all negative, however. First, it is worth acknowledging that persistent, later-generation gaps in educational attainment, employment, and earnings coexist with substantial upward mobility, especially between the first and second generations (24). Second, legal status can go a long way toward securing economic mobility, as evidenced by the diverging

earnings trajectories of undocumented immigrants and legal permanent residents in the United States as well as the rise in earnings induced by amnesty laws (26). When it comes to political incorporation, government efforts to promote citizenship, whether aimed directly at immigrants or at the community organizations that serve them, boost naturalization and participation through material and symbolic channels—that is, by signaling immigrants' suitability for inclusion (36).

When such resources are not available or when discrimination is prevalent, attachment to a protective "ethnic core" may provide immigrants and minorities one path to economic, political, and cultural mobility (27, 37). However, insofar as enclaves reproduce segregation and contribute to discrimination by native majorities toward immigrants and minorities, they are a suboptimal and short-term reprieve to the challenges posed by diversity. A more robust solution for the successful integration of immigrants and minorities in multiethnic societies builds on the features of modern societies that facilitate cooperative encounters and shared interests across group boundaries.

Toward a theory of prosociality in multiethnic societies

The key to solidarity and cooperation in heterogeneous communities is the extension of prosociality beyond close-knit networks and in-group boundaries to unknown, dissimilar others. The large-scale interdependence of life in modern societies requires that individuals follow universal norms of reciprocity and cooperation rather than rely on mutual acquaintanceship or group identification. The observance of such norms is assured by the presence of strong coordinating institutions; for example, we rely on public transportation not because we know the bus driver or identify with them but because we trust that they will competently perform the job that corresponds to their role (3).

The type of prosociality that helps heterogeneous communities function is different from the in-group solidarity that glues homogeneous communities together. A large scholarship has documented the parochial nature of human altruism, convincingly showing that in-group preferences are a staple of human behavior (38). From an evolutionary perspective, parochial altruism emerged from the coevolution of intergroup favoritism and outgroup hostility during periods of violent intergroup conflict (39). Although in-group favoritism may have served us well in smallscale societies, it cannot get us far in complex, large-scale societies characterized by heterogeneity. For diverse societies to function, they must to some extent suppress members' reliance on in-group identification as the primary basis for prosocial behavior (40). Prosocial behavior in complex societies likely derives from

positive experiences in the context of strategic interactions, such as those in the workplace, rather than empathic identification (41). People in modern societies are often pushed outside the comfort zones of their familiar networks to constructively interact with unknown and dissimilar others. We have learned, from a rich literature on intergroup contact, that such interactions have the potential to reduce prejudice, especially under favorable conditions, including equal status, common goals, and lack of competition (42). Here, we discuss how social differentiation, a macrostructural feature of modern societies, may favor the emergence of generalized prosociality and the special role that market integration and economic interdependence can play in facilitating productive intergroup interactions.

Differentiation may be the key, not an obstacle, to social cohesion in modern societies because an increase in the dimensions of differentiation might bring about greater social integration. A greater number of identities and affiliations brings about distinct combinations that can foster even greater cooperation (8). This, however, occurs only when the lines of differentiation are cross-cutting, whereas division follows from consolidated lines of differentiation (Fig. 2). Ethnic heterogeneity can push societies toward either pole. On the one hand, when ethnic differences overlap with status and resource differences, in-group favoritism

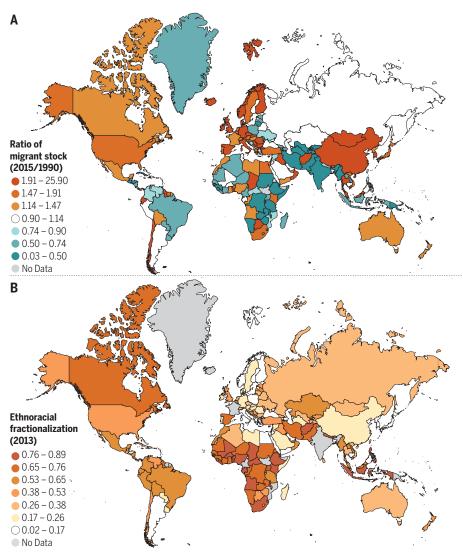


Fig. 1. Ratio of migrant stock and ethnoracial fractionalization by countries. (A) Ratio of international migrant stock (1990/2015). Europe and North America saw relatively large increases in national stocks of international migrants in the past two decades. International migrant stock refers to the percentage of foreign-born residents in a given year. Orange indicates higher ratios of migrant stock; teal indicates lower ratios of migrant stock. [Data source: United Nations Population Division] (B) Ethnoracial fractionalization (2013). Fractionalization is higher in sub-Saharan Africa and parts of Asia than in Europe or North America. Fractionalization corresponds to the probability that two randomly chosen residents belong to the same ethnoracial group. Darker colors represent higher ethnoracial fractionalization. [Data source: Historical Index of Ethnoracial Fractionalization]

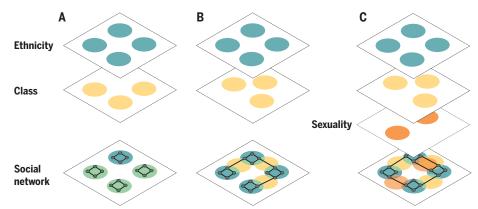


Fig. 2. Social differentiation leads to greater integration when dimensions of differentiation are cross-cutting. (**A** to **C**) The top layers represent various group identities that individuals might have in modern societies (such as ethnicity, class, or sexuality), and the bottom layer describes the social network that emerges from shared membership in these groups. In (A), the two dimensions of differentiation are consolidated and thus bring about social fragmentation. In (B) and (C), the dimensions are cross-cutting, thus favoring social integration. As the number of cross-cutting dimensions increases [(comparing (C) with (B)], so does overall network integration.

can operate more efficiently. But far from binding people together (as it does in homogeneous societies), in-group favoritism would deepen inequality and division in heterogeneous ones. On the other hand, when heterogeneity along ethnic lines cross-cuts differences in terms of class, politics, and other dimensions, it both neutralizes in-group favoritism and deepens interdependence, fostering cohesion.

Social differentiation

Social differentiation refers to the multiplicity of identities and roles that individuals may acquire and inhabit in their day-to-day lives and often leads to greater individualization. Namely, people's ability to choose, with relative freedom, their identities and group affiliations increases, and their profiles become distinctive. When lines of differentiation are cross-cutting, the process of differentiation and individualization sets the stage for broad-based cohesion through at least three pathways.

The first is by facilitating interpersonal contact beyond close-knit, kinship ties and with others who are dissimilar in terms of some identities, including, most notably, ethnicity. Research supports the claim that generalized trust and other benefits flow from interactions outside dense networks, such as those based on kinship. Cross-societal comparisons have documented greater generalized trust and cooperation in an individualistic society such as the United States than in Japan, where monitoring and sanctioning happen primarily within the confines of close, long-term relationships (4). According to Yamagishi's emancipatory theory of trust, strong ties, which are typical of collectivist societies such as Japan, produce a sense of security within the group but prevent trust from developing beyond group boundaries. Similarly, people with strong family and group ties display lower levels of trust toward generalized others in incentivized experiments. By contrast, people who are less embedded in family networks and those who have experienced uprooting events, such as divorce, are more likely to trust strangers, possibly because they have more opportunities and incentives to engage in relationships with unknown others (5). More broadly, seminal work on social networks has exposed the limits of strong ties and close-knit social relationships (43, 44). This work shines a positive light on weak ties and network positions of brokerage for their ability to connect parts of a social network that would be otherwise disconnected, facilitating access to a broader range of information and opportunities. To quote Granovetter, "Weak ties, often denounced as generative of alienation...are here seen as indispensable to individuals' opportunities and to their integration into communities; strong ties, breeding local cohesion, lead to overall fragmentation" [(43), p. 1378].

The second pathway through which social differentiation may foster cohesion is through identification, with or without direct interpersonal contact. In laboratory studies, procedures that encourage identification with a common (or "superordinate") identity have been shown to reduce prejudice across group boundaries (45). This is possible when cross-cutting affiliations enable identification with a category that spans ethnic boundaries. An outstanding question is whether identification with a superordinate category can somehow achieve deeper trust and cooperation than can lower-level ethnic identification, perhaps by "training" individuals to be more flexible about categorization in general. If not, superordinate identification may be an imperfect solution that trades favoritism toward one group for favoritism toward another, larger group. These aspects are ripe for further testing in field settings (46).

A third pathway consists in subverting humans' deep-seated capacity to think (and act) in terms of in-group-out-group categories. Category-based inconsistencies-for example, the Harvard-educated, first-generation Latina-inhibit the cognitive processes that compel us to frame encounters in "us versus them" terms, opening the door to more elaborate cognitive processes in which an alter is more likely to be perceived as "an individual rather than an (oppositional) group member" [(40), p. 854]. The distinction between this pathway and one that hinges on a common identity is subtle: Category-based inconsistencies can subvert "us versus them" thinking even if we do not share identities or experiences with a target-that is, even if we are neither Ivy League-educated, nor Latino, nor the first in our family to attend college.

Critically, the most effective way to secure multiethnic cohesion through this channel is not to promote a few minorities but rather to weaken the covariance between ethnic category membership and life chances writ largethat is, to cultivate a system in which a firstclass education is equally accessible to whites and nonwhites, regardless of their family background. There is growing evidence that cross-cutting affiliations can mitigate bias against immigrants and minorities. Experimental evidence shows that U.S. Americans report greater willingness to admit immigrants who are highly educated or have high-status jobs (47). Relatedly, high socioeconomic status mitigates mistrust toward Blacks in a cooperative investment game (48), and signals of cultural integration mitigate bias toward Muslims in Germany (33).

Taken together, the hypothesized pathways are consistent with a model of social cohesion in which cross-cutting differentiation, rather than social closure, is the unifying force. When social cleavages are not cross-cutting but instead consolidated—for example, when minorities and immigrants are systematically deprived of educational and employment opportunities and thereby relegated to the lower tiers of the social hierarchy—disadvantaged groups will continue to be cast in a separate and marginalized social category and discriminated against.

Economic interdependence

Economic exchanges are the quintessential setting for meaningful, cooperative interactions between dissimilar others. This is partly because of the specific nature of economic transactions: They occur between parties who have different goods (or skills) to exchange and thereby bring together people who may not belong to the same social circles. Along these lines, workplace relationships tend to be less homophilious than relationships in other settings. Moreover, intergroup encounters in economic settings seem to be particularly

conducive to generalized prosociality. In a series of cross-cultural studies, Henrich and his colleagues uncovered less prosocial behavior in small-scale societies based on kinship networks than in market-integrated societies in which strangers regularly engage in mutually beneficial transactions. In their words, "The more frequently people experience market transactions, the more they will also experience abstract sharing principles concerning behaviors toward strangers" [(6), p. 76)]. Market integration not only fosters prosociality toward unknown others; it can also shift boundaries to include noncoethnics. In a nationwide field experiment in Italy, market integration explained variation in prosocial behavior toward both natives and immigrants (7). Similar effects are imputed to globalization, understood as greater worldwide connectedness (49).

Workplaces, more than homes or neighborhoods, may be crucial for fostering the type of prosociality that holds modern societies together. Minorities' and immigrants' positions in the productive system and their prospects for social mobility-including employment opportunities in complementary sectors, and a legal regime that protects their rights as workers—are therefore important not only for their own material success but for society as a whole. The economic integration of minorities and immigrants also determines the extent to which they come to identify with mainstream society (50).

Most economic exchanges-for example, hiring someone or renting an apartment from them-are strategic in nature, in the sense that a person's behavior is affected by their expectations of the alter. These types of interaction entail risk and uncertainty because people have to overcome difficulties related to coordination, lack of information, and mistrust. Cooperative and prosocial behavior in these settings may still be affected by in-group favoritism but are also based on considerations that go beyond whether an ego likes or dislikes the alter, to encompass the alter's trustworthiness, competence, and reputation (40). This calls for a deeper understanding of intergroup dynamics, and the institutional arrangements, that favor prosocial outcomes in the context of strategic interactions. Some field experimental work has made progress in this direction; for example, in a study of public goods provision in diverse Ugandan neighborhoods, Habyarimana and colleagues used behavioral games to disentangle the various motives and mechanisms that bring about collective action in multiethnic contexts (2). Although they did not find evidence of ethnic favoritism, they found that the reciprocity norms and sanctioning opportunities that facilitate cooperation in risky interactions are stronger among coethnics than noncoethnics.

Market integration enhances opportunities for productive interactions across group boundaries. Additionally, the strategic nature of economic exchanges elicits decision-making processes that go beyond in-group favoritism, therefore providing new venues for institutional intervention.

Conclusion

We can approach ethnic diversity through the lens of lost homogeneity. From this perspective, we understand that members of the white majority tend to react negatively to the growth of immigrants and minorities in their communities. However, it would be premature to conclude that diversity or diversification per se are to blame for declining levels of trust and cooperation. In the Western European and North American context, diversity is synonymous with immigrant and minority share and economic disadvantage, and statistical attempts at disentangling their effects will not get us very far.

Beyond questioning the effects of ethnic diversity, scholars should develop a theory of social cohesion in multiethnic societies that considers intergroup dynamics, social cleavages, and asymmetries in resources and power. Crucial to this effort is understanding the conditions under which prosocial behavior extends beyond close-knit networks and the safe confines of the in-group. Here, we have highlighted two features of modern societies, social differentiation and economic interdependence, that set the stage for generalized prosociality to develop. We argue that, in contrast with the in-group solidarity that glues homogeneous communities together, prosociality in heterogeneous societies likely derives from positive experiences in the context of strategic interactions. Further research is needed on the mechanisms and institutional arrangements that foster this higher-level form of cooperation.

The experience of immigrants and minorities is instructive regarding the conditions and institutions that facilitate integration and mobility in Western societies. Of primary importance are employment opportunities in mainstream labor markets, especially under conditions of economic expansion, along with legal and political inclusion. Regrettably, it is precisely these conditions that are in short supply in a historical moment characterized by the rise of right-wing movements, an economic recession induced by a global pandemic. and long-standing institutional practices, such as those of law enforcement, that deepen the divides between ethnoracial groups. Whether societal adaptation to diversity moves toward integration or social division depends as much on microinteractions on the ground as on the economic and political institutions that govern these processes.

REFERENCES AND NOTES

- 1. J. Coleman, Am. J. Sociol. 94, S95-S120 (1988).
- J. Habyarimana, M. Humphreys, D. N. Posner, J. M. Weinstein, Coethnicity: Diversity and the Dilemmas of Collective Action (Russell Sage Foundation, 2009).
- A. Portes, E. Vickstrom, Annu. Rev. Sociol. 37, 461-479 (2011).
- T. Yamagishi, Trust: The Evolutionary Game of Mind and Society (Springer, 2011).
- J. Ermisch, D. Gambetta, J. Econ. Behav. Organ. 75, 365-376 (2010). J. Henrich et al., Am. Econ. Rev. 91, 73-78 (2001).
- D. Baldassarri, Proc. Natl. Acad. Sci. U.S.A. 117, 2858-2863 (2020).
- P. M. Blau, Am. J. Sociol. 83, 26-54 (1977).
- S. M. Lipset, S. Rokkan, in Cleavage Structures, Party System and Voter Alignments, An Introduction (Free Press, 1967), pp. 1-64.
- 10. W. Easterly, R. Levine, Q. J. Econ. 112, 1203-1250 (1997).
- 11. J. D. Fearon, D. D. Laitin, Am. Polit. Sci. Rev. 97, 75-90 (2003)
- 12. P. Collier, The Political Economy of Ethnicity (World Bank, 1998).
- 13. D. N. Posner, Am. J. Pol. Sci. 48, 849-863 (2004).
- D. L. Costa, M. F. Kahn, Perspect. Polit. 1, 103–111 (2003)
- 15. A. Alesina, R. Baqir, W. Easterly, Q. J. Econ. 114, 1243-1284 (1999).
- 16. R. D. Putnam, Scand. Polit. Stud. 30, 137-174 (2007)
- 17. P. T. Dinesen, M. Schaeffer, K. M. Sønderskov, Annu. Rev. Polit. Sci. 23. 441-465 (2020)
- 18 M Abascal D Baldassarri Am J Sociol 121 722-782 (2015)
- 19. R. J. Sampson, Great American City: Chicago and the Enduring Neighborhood Effect (Univ. Chicago Press, 2012)
- 20. K. Baldwin, J. D. Huber, Am. Polit. Sci. Rev. 104, 644-662 (2010).
- 21. M. A. Craig, J. M. Rucker, J. A. Richeson, Curr. Dir. Psychol. Sci. **27**. 188-193 (2018).
- J. Hainmueller, D. J. Hopkins, Annu. Rev. Polit. Sci. 17, 225-249 (2014).
- 23. C. L. Ridgeway, Am. Sociol. Rev. 79, 1-16 (2014)
- 24. R. Alba, P. Kasinitz, M. C. Waters, Soc. Forces 89, 763-773 (2011). 25. W. Haller, A. Portes, S. M. Lynch, Soc. Forces 89, 733-762 (2011).
- 26. L. G. Drouhot, V. Nee, Annu. Rev. Sociol. 45, 177-199 (2019).
- 27. E. Telles, C. A. Sue, Durable Ethnicity: Mexican Americans and
- the Ethnic Core (Oxford Univ. Press. 2019).
- 28. C. Fox, T. A. Guglielmo, Am. J. Sociol. 118, 327-379 (2012).
- 29. D. Pager, H. Shepherd, Annu. Rev. Sociol. 34, 181-209 (2008).
- 30. R. M. Dancygier, D. D. Laitin, Annu. Rev. Polit. Sci. 17, 43-64 (2014). 31. A. Portes, R. Aparicio, W. Haller, Spanish Legacies: The Coming of Age of the Second Generation (Univ. California Press, 2016).
- 32. K. Auspurg, A. Schneck, T. Hinz, J. Ethn. Migr. Stud. 45, 95-114 (2018).
- 33. D. D. Choi, M. Poertner, N. Sambanis, Proc. Natl. Acad. Sci. U.S.A. 116, 16274-16279 (2019).
- 34. F. Winter, N. Zhang, Proc. Natl. Acad. Sci. U.S.A. 115, 201718309 (2018).
- 35 C. L. Adida, D. D. Laitin, M.-A. Valfort, Why Muslim Integration Fails in Christian-Heritage Societies (Harvard Univ. Press, 2016).
- 36. I. Bloemraad, Becoming a Citizen: Incorporating Immigrants and Refugees in the United States and Canada (Univ. California Press, 2006).
- M. Abascal, Int. Migr. Rev. 51, 291–322 (2017).
- 38. H. Tajfel, J. Turner, 1979, in The Social Psychology of Intergroup Relations, W. G. Austin, S. Worchel, Eds. (Brooks/Cole, 1979), pp. 33-47.
- 39. J.-K. Choi, S. Bowles, Science 318, 636-640 (2007)
- 40. R. J. Crisp, R. Meleady, Science 336, 853-855 (2012).
- 41. D. Baldassarri, Am. J. Sociol. 121, 355-395 (2015)
- 42. T. F. Pettigrew, L. R. Tropp, J. Pers. Soc. Psychol. 90, 751-783 (2006). 43. M. S. Granovetter, Am. J. Sociol. 78, 1360-1380 (1973).
- 44. R. S. Burt, Brokerage and Closure (Oxford Univ. Press, 2005)
- 45. S. L. Gaertner, J. F. Dovidio, Reducing Intergroup Bias: The Common Ingroup Identity Model (Psychology Press, 2000).
- 46. E. L. Paluck, D. P. Green, Annu. Rev. Psychol. 60, 339-367 (2009).
- 47. J. Hainmueller, D. J. Hopkins, Am. J. Pol. Sci. 59, 529-548 (2015). 48. M. Schaub, J. Gereke, D. Baldassarri, J. Exp. Political Sci. 7,
- 72-74 (2020). 49. N. R. Buchan et al., Proc. Natl. Acad. Sci. U.S.A. 106. 4138-4142 (2009)
- 50. D. D. Laitin, Rationality Soc. 7, 31-57 (1995).
- 51. L. Drazanova, Historical index of ethnic fractionalization dataset (HIEF). Harvard Dataverse (2019); http://doi.org/10. 7910/DVN/4JORCL

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