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CULTURAL INTEGRATION OF IMMIGRANTS IN EUROPE

STUDIES OF POLICY REFORM
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Cultural Integration of Immigrants in Europe

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1

Introduction: Perspectives on Cultural Integration of Immigrants

Yann Algan¹, Alberto Bisin, and Thierry Verdier

1.1 Introduction

The concepts of cultural diversity and cultural identity are at the forefront of the political debate in many western societies. In Europe, the discussion is stimulated by the political pressures associated with immigration flows, which are increasing in many European countries, as shown in Figure 1.1. Dealing with the ethnic and cultural heterogeneity associated to such trends is one of the most important challenges that European societies will face. The debate on the perceived costs and benefits of cultural diversity is already intense. This is well illustrated, for instance, in France, where discussions about the wearing of the Islamic veil and the burqa stimulated, in turn, a public debate on national identity. Similarly, the recent vote in Switzerland against the construction of Muslim mosques clearly shows how heated and emotional arguments on ethnic and religious identity have recently become.

Sociologists have been studying the cultural integration patterns of immigrants at least since the late nineteenth century, especially in the context of immigration into the United States. Economists have instead been traditionally mainly interested in assessing the direct impact of immigration flows on market outcomes (especially on the labour market) or on fiscal transfers and public goods provision. The basic question of assimilation for economists has, then, been framed in terms of economic

¹ The research leading to these results for Yann Algan has received funding from the European Research Council under the European Community's Seventh Framework Programme (FP7/2007–2013)/ERC grant agreement number 240923.

Cultural Integration of Immigrants in Europe

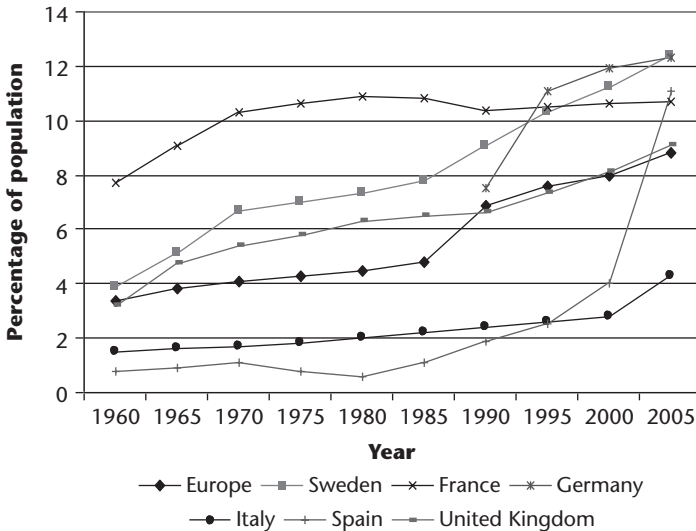


Figure 1.1 Immigration flows in European countries.

Source: United Nations Population Division

assimilation, namely in terms of the dynamics of immigrants' earnings and socio-economic positions relatively to natives. Recently, however, economists have been recognizing that, beyond interactions directly mediated through markets, prices and incomes, other non-market social and cultural interactions could also be important determinants of the socio-economic integration of immigrants. Specific patterns of cultural attitudes of immigrant groups can significantly affect their labour market performances, for instance. The common social phenomenon of 'oppositional' identities, by which certain minority individuals actively reject the dominant majority behavioural norms, can produce significant economic and social conflicts as well as adverse labour-market outcomes.

More generally, social scientists have dedicated a lot of attention to the fact that immigrants' integration patterns can significantly alter the design and the political economy of public policies in the host society. An example of this issue concerns the sustainability of welfare state institutions in the context of multicultural societies. Cultural diversity may indeed affect the sense of community and social solidarity which constitute founding pillars of democratic welfare state systems. This could lead to the erosion of the social consensus for redistribution and diminish the political support for universal social programmes. Public policies aimed at correcting for horizontal inequalities across cultural groups, might end up substituting for vertical redistribution across social classes.

For these reasons, several observers favour explicit public policies promoting, or even requesting, the cultural assimilation of immigrants to the cultural attitudes of natives. Other observers, however, argue that welfare state institutions should be designed to accommodate cultural diversity. These policies would facilitate contacts across communities, promote tolerance, trust, and respect towards other groups and, in the end, would help develop new national identities.

In either case, the study of cultural and socio-economic integration patterns of immigrants seems of paramount importance, as such patterns determine how the expression of cultural differences is translated into individual behaviour and public policy. The imperatives that current immigration trends impose on European democracies bring to light a number of issues that need to be addressed. What are the patterns and dynamics of cultural integration? How do they differ across immigrants of different ethnic groups and religious faiths? How do they differ across host societies? What are the implications and consequences for market outcomes and public policy? Which kind of institutional contexts are more or less likely to accommodate the cultural integration of immigrants? All these questions are crucial for policy makers and await answers.

In this context, the purpose of this book is to provide a modest but nevertheless essential contribution as a stepping stone to the debate. Taking an economic perspective, the collection of essays in this book presents the first descriptive and comparative picture of the process of cultural integration of immigrants in Europe, as it is taking place. We provide in the country chapters a detailed description of the cultural and economic integration process in seven main European countries and in the United States. The European countries include France, Germany, Italy, Spain, Sweden, Switzerland, and United Kingdom. We then provide in the conclusion of the book a cross-country comparison of the integration process using a unified database, the European Social Survey. The conclusion concentrates on the interplay between the cultural and economic integration process across European countries, and discusses how those various dimensions of integration correlate with specific national policies aimed at immigrants' integration.

In this first chapter, building on the recent economics of cultural transmission, we introduce the main conceptual issues which are of relevance to the study of the cultural integration patterns of immigrants and of their interaction with market and non-market outcomes. More specifically, this chapter is organized as follows. In Section 1.2 we discuss briefly the different theories of cultural integration developed in the social sciences. In Section 1.3 we introduce in more detail the economic

approach to the study of cultural integration. In Section 1.4 we provide a short overview of the main conceptual issues associated with measuring cultural integration processes. In Section 1.5 we discuss cultural integration in terms of its socio-economic impact on host countries. Finally, in Section 1.6 we conclude with a brief overview of the subsequent chapters included in this book.

1.2 Cultural integration theories in the social sciences

Three main perspectives on cultural integration confront themselves in the social sciences: *assimilation theory*, *multiculturalism*, and *structuralism*. This section briefly discusses the main elements of each of these conceptual views as well as those of a recent synthetic perspective, called *segmented assimilation*.

1.2.1 *Assimilation theory*

In the literature on the cultural integration of immigrants, the perspective of assimilation theory has dominated much of the sociological thinking for most of the twentieth century. This approach builds upon three central features. First, diverse ethnic groups come to share a common culture through a natural process along which they have the same access to socio-economic opportunities as natives of the host country. Second, this process consists of the gradual disappearance of original cultural and behavioural patterns in favour of new ones. Third, once set in motion, the process moves inevitably and irreversibly towards complete assimilation. Hence, diverse immigrant groups are expected to ‘melt’ into the mainstream culture through an inter-generational process of cultural, social, and economic integration.

This view is exemplified, for example, by Gordon (1964), who provides a typology of assimilation patterns to capture this process. In Gordon’s view, immigrants begin their adaptation to their new country through cultural assimilation, or acculturation. Though cultural assimilation is a necessary first step, ethnic groups may remain distinguished from one another because of spatial isolation and lack of contact. Their full assimilation depends ultimately on the degree to which these groups gain the acceptance of the dominant population. Socio-economic assimilation inevitably leads to other stages of assimilation through which ethnic groups eventually lose their distinctive characteristics.

Assimilation theory seemed to be rather corroborated by the experience of the various waves of European immigrants that arrived in the

USA between the 1920s and the 1950s. As indicated by assimilation theory, these groups of immigrants followed progressive trends of social mobility across generations and increasing rates of intermarriage, as determined by educational achievements, job market integration, English proficiency, and levels of exposure to American culture (see for instance Alba, 1985; Chiswick, 1978; Lieberman and Waters, 1988). In the 1960s, the classical assimilation perspective was challenged in the USA by the cultural integration patterns of more recent non-European immigrant groups. Instead of converging into the mainstream culture, these groups appeared to preserve their ethnic and religious identities, making cultural differences more persistent than assimilation theory would conventionally predict. Differential outcomes with respect to natives seemed to prevail even after long-term residence in the USA (Kao and Tienda, 1995; Rumbaut and Ima, 1988; Suarez-Orozco and Suarez-Orozco, 1995; and Landale and Oropesa, 1995). Disadvantages were reproduced, rather than diminished (Gans, 1992). Patterns of mobility across generations were observed to have divergent rather than convergent paths (Becker, 1963; Goffman, 1963; and Perlmann, 1988). This evidence turned out to lead to the development of alternative approaches to the study of cultural integration.

1.2.2 *Multiculturalism*

One such alternative approach is multiculturalism, which rejects the simple integration process proposed by assimilation theory. Scholars from this perspective view multicultural societies as composed of a heterogeneous collection of ethnic and racial minority groups, as well as of a dominant majority group. This view has been forcefully illustrated by Glazer and Moynihan (1970) and by Handlin (1973) in the context of the American society. They argue that immigrants actively shape their own identities rather than posing as passive subjects in front of the forces of assimilation. These authors also emphasize that some aspects of the cultural characteristics of immigrants may be preserved in a state of uneasy co-existence with the attitudes of the host country. The multicultural perspective offers, then, an alternative way of considering the host society, presenting members of ethnic minority groups as active integral segments of the whole society rather than just foreigners or outsiders.

1.2.3 *Structuralism*

Rather than focusing on the processes of assimilation or integration per se, the structuralist approach emphasizes how differences in

socio-economic opportunities relate to differences in social integration of ethnic minority groups. Unequal access to wealth, jobs, housing, education, power, and privilege are seen as structural constraints that affect the ability of immigrants and ethnic minorities to socially integrate. This leads to persistent ethnic disparities in levels of income, educational attainment, and occupational achievement of immigrants (Blau and Duncan, 1967; Portes and Borocz, 1989). Consequently, the benefits of integration depend largely on what stratum of society absorbs the new immigrants. Contrary to the perspectives of assimilation theory and of multiculturalism, structuralism emphasizes the inherent conflicts that exist in the social hierarchy between dominant and minority groups and therefore questions even the possibility of cultural and socio-economic integration of immigrants.

To summarize, assimilation theory, multiculturalism, and structuralism provide different views of the same phenomenon. The focus of assimilation theorists is on immigrants' succeeding generations gradually moving away from their original culture. Multiculturalists acknowledge that the cultural characteristics of immigrants are constantly reshaped along the integration process and therefore may never completely disappear. Structuralists emphasize the effects of the social and economic structure of the host country on the ability of immigrants to integrate into its cultural attitudes and to share its economic benefits. While each of the previous perspectives insists on one specific dimension of the integration pattern of immigrants, segmented assimilation theory provides a synthesis of these distinctive approaches.

1.2.4 *Segmented assimilation synthesis*

The main objective of this line of research is to provide a more complete picture of the different patterns of integration among immigrants in terms of convergent or divergent paths of cultural adaptation. More precisely, this theory envisions the process of cultural integration along three possible patterns: (1) an upward mobility pattern associated with assimilation and economic integration into the normative structures of the majority group; (2) a downward mobility pattern, in the opposite direction, associated to assimilation and parallel integration into the underclass; (3) economic integration but lagged assimilation and/or deliberate preservation of the immigrant community's values and identity (see Portes and Zhou, 1994). This theoretical perspective attempts to explain the factors that determine which segment of the host society a particular immigrant group may assimilate into. Its focus is on how various socio-economic and demographic factors (education,

native language proficiency, place of birth, age upon arrival, and length of residence in the host country) interact with contextual variables (such as racial status, family socio-economic backgrounds, and place of residence) to produce specific cultural integration patterns of a given cultural minority group.

1.3 Economic approach to cultural integration

While other social scientists tend to focus on the effects of the social environment on cultural patterns across groups, the starting point of the economic approach to cultural integration is the analysis of individual behaviour, extended to account for endogenous preferences and identity formation. Economists, therefore, emphasize the importance of individual incentives and of the opportunity costs associated with different integration patterns.

1.3.1 Cultural adoption

A first simple model capturing the incentives for cultural integration is provided by an analysis of adoption of a common language by Lazear (1999). In this framework, individuals from two different cultural groups (a minority and a majority) are matched to interact economically and socially. Cultural integration facilitates trade across individuals.² The incentives for an individual belonging to the minority cultural group to assimilate and adopt the culture of the majority are then directly related to the expected gains from trade that such a strategy provides.

More specifically, consider a simple environment in which each individual is randomly matched with one and only one other individual each period. Let the two cultural groups be denoted A and B, and let p_A and p_B denote the proportions of individuals who belong to culture A and B, respectively. Finally, let A represent the majority group: $p_A = 1 - p_B > 1/2$.³ A minority individual may encounter another individual of his own group and get an expected gain from trade V_B . Alternatively, he may interact with an individual from the majority group A, in which case he receives an expected gain V_A if he shares

² Defined broadly to include non-market interactions as well.

³ In Lazear (1999), the fractions p_A and p_B reflect the proportions of people that speak, respectively, language A and language B. Therefore, bilingual individuals belong to both cultures and $p_A + p_B > 1$.

common cultural elements with that group (i.e. if he made a specific effort at assimilating the majority culture), and a lower gain fV_A (with $f < 1$) if he does not.

When individuals of group B acquire group A's cultural values, they become 'assimilated' into group A. They may still retain some or all of their old culture, but they now have the ability to trade with the majority group. For instance, in the specific case of language adoption, assimilation can be thought of as becoming fluent in the majority language, while possibly retaining the ability to speak the native tongue. It is reasonable to assume that cultural assimilation is costly and resources must be spent to acquire new cultural traits (e.g. to learn a new language). Moreover, these costs may be individual specific. Denote, therefore, by t_i the individual-specific cost parameter that measures (inversely) the efficiency with which individual i acquires the new culture. Formally, t_i is distributed with density and distribution function $g(t_i)$ and $G(t_i)$, respectively. Individuals make their cultural assimilation choices with no coordinated group strategy. When an individual belonging to group B does not assimilate to the culture of the majority, his expected gain is $p_B V_B + p_A f V_A$. On the other hand, when he does assimilate, his expected gain is $p_B V_B + p_A V_A - t_i$. It follows that an individual belonging to group B will culturally assimilate when $t_i < p_A(1-f)V_A$; that is, if the individual cost t_i of acquiring the cultural trait of group A is smaller than the expected benefit $p_A(1-f)V_A$ of such assimilation strategy. Aggregating over all individuals of group B that find it profitable to acquire the cultural trait of group A, the fraction of assimilated individuals in the minority is $s_{BA} = G(p_A(1-f)V_A) = G[(1-p_B)(1-f)V_A]$.

Interestingly, this simple model produces three important implications. First, cultural assimilation is a decreasing function of the fraction p_B of minority group members in society. Hence the smaller and the more dispersed the minority group, the more likely we should expect cultural assimilation for that group. Second, s_{BA} is also an increasing function of the expected economic gain V_A to be obtained by interacting with individuals belonging to the majority. Hence, the larger the economic benefits to be culturally integrated, the larger the incentives to assimilate. Third, cultural integration is increasing with $(1-f)$, namely the degree of inefficiency associated with interacting with individuals of the majority without sharing their cultural traits. Hence, the more important is the sharing of a common culture to enjoy social interactions, the larger, again, are the incentives to assimilate for the minority group. Two additional implications of Lazear's model are also worth emphasizing. From a normative perspective, there is a crucial externality

in the assimilation process. Indeed, the larger the fraction of minority individuals which assimilate, the higher are the expected gains from trade for the majority. Clearly, when deciding whether to assimilate, individuals belonging to the cultural minority do not internalize these gains. At least from the point of view of the majority group, this provides a rationale for integration policies which subsidize the assimilation of minorities. Furthermore, this framework can be easily expanded to allow for multiple minority groups. In this case, cultural assimilation will be favoured in the presence of a relatively even distribution of minority groups. The existence of relatively large minorities, in fact, reduces the incentives of each minority group to adopt the culture of the majority. Again, straightforward policy implications can be obtained, favouring even distributions of immigrants by cultural identity.

1.3.2 *Identity formation*

While the model of Lazear (1999) puts its emphasis on the potential gains from trade associated with the interaction between members of different communities, Akerlof and Kranton (2000) concentrate more directly on cultural identity as an important source of the gains or losses associated with social interactions between different groups. Building on insights from social psychology and sociology, Akerlof and Kranton introduce the concept of social identity in economic models and discuss how it may interact with individuals' incentives. More specifically, identity is defined as a person's self-image, based on given social categories and on prescriptions associated with these categories. Each person has a perception of his own categories and that of all other people. Prescriptions, in turn, indicate which behaviour is deemed appropriate for people in different social categories and/or in different situations. Prescriptions may also often describe ideals for each category in terms of physical and material attributes.

In this conceptual context, Akerlof and Kranton emphasize two dimensions of identity formation which are relevant to understand cultural integration. First, categorizations and prescriptions are learned and acquired by individuals through processes of internalization and identification with respect to others who share these categories, that is, who belong to the same cultural group. This implies in particular that one's self image depends on how one satisfies the prescriptions of the category. Moreover, as identification is a crucial part of the internalization process, a person's self-image can be threatened by others' violation of the set of prescriptions he identifies with. Indeed, prescriptions

associated with one group or category are often defined in contrast to those of others. This dimension provides a source of potentially important social externalities when individuals interact with each other. Second, Akerlof and Kranton's cultural identity is not given. Individuals choose assignments to social categories (form their identity) by means of actions corresponding to these categorizations. Hence, incentives can affect the process of identity formation. As in Lazear (1999), the costs of cultural assimilation may relate to different factors such as the size of the groups, the economic gains from trade and interactions, the role of frictions in social interactions and matching.

An important application of this conceptual framework is to the study of oppositional cultures, when minorities adopt cultural categorizations and prescriptions defined in opposition to the categorizations and prescriptions of the dominant majority. Oppositional cultures often correspond to behaviour which requires significant economic costs for members of the minority group adopting the culture. At the heart of the emergence of oppositional cultures, according to Akerlof and Kranton, lie two crucial factors: social exclusion and lack of economic opportunities.⁴ Social exclusion derives from the well established sociological fact that dominant groups define themselves by differentiation and exclusion of others. This in turn creates a conflict for minority members: how to work within the dominant culture without betraying one's own. Such social differences may then open the possibility for adoption of oppositional identities by those in excluded groups. Lack of economic opportunity may also contribute to the adoption of an oppositional identity. For instance, it has been noted that the decline in well-paid, unskilled jobs could result in loss of self-respect by men who cannot support their families, and the rise in inner city crime and drug abuse (Wilson, 1996). Similarly, Liebow (1967) in a famous ethnographic work on 'corner street' men (i.e. street beggars and idlers) describes how the lack of decent-paying work leads these individuals towards the adoption of identities which severely inhibit the value of any labour market skill they may possess, in an attempt to avoid suffering the guilt of failing to provide for themselves and their families.

Motivated by these and other ethnographic accounts of oppositional identities in poor neighbourhoods in the USA and UK,⁵ Akerlof and Kranton construct a model of identity formation where people

⁴ A rapidly emerging economic literature on oppositional cultures includes, for instance, Ferguson (2001), Fryer (2004), Austen-Smith and Fryer (2005), Fryer and Torelli (2005), Battu *et al.* (2007), Battu and Zenou (2010), Darity *et al.* (2006), Pattacchini and Zenou (2006).

⁵ See for instance MacLeod (1987) and Willis (1977).

belonging to poor and socially excluded communities can choose between two identities: the dominant culture or an oppositional identity which rejects it. Each identity is defined by a set of prescriptions on certain actions/decisions that ought to be taken. From the perspective of the dominant identity, the oppositional identity is perceived as inducing bad economic decisions, self-destructive behaviour (such as taking drugs, joining a gang, and becoming pregnant at a young age) which in turn can generate negative pecuniary externalities on the rest of the community. Also, the model accounts for important identity-based externalities: individuals adopting an oppositional identity may be angered by those who assimilate, because of their complicity with the dominant culture, while on the contrary those who assimilate may be angered by those individuals who oppose the dominant culture by breaking its prescriptions. Finally, social exclusion by the majority is modeled as a loss in identity that individuals from the minority will suffer if they choose to adopt the dominant culture. It represents the extent to which someone from the minority is not accepted by the dominant group in society. On the contrary, individuals who choose to adopt the oppositional identity do not suffer such a loss.

The model generates societies which in equilibrium display a prevalence of oppositional identities and 'anti-social' behaviour. Typically, an equilibrium with full assimilation of the dominant culture by the community is possible only when social exclusion from the dominant group is small enough. On the contrary, a positive level of social exclusion will always lead some people in the community to adopt an oppositional identity and some 'self-destructive' and 'anti-social' behaviour. Importantly, the 'self-destructive' behaviour is not the result of the individual's lack of rationality, but instead derives from lack of economic opportunity and a high degree of social exclusion. The model's implications lend themselves to suggest policies designed to reduce the effects of social exclusion. In particular, training programmes which take trainees out of their neighbourhoods may eliminate the negative effects of interacting with individuals sharing oppositional identities and therefore may reduce the likelihood of the emergence of such cultures. Moreover, being in a different location may also reduce a trainee's direct social exclusion loss from assimilation to the dominant culture as this loss may be both individual-specific and situational. Finally, the model also highlights issues in the affirmative action debate. In particular, the rhetoric and symbolism of affirmative action may affect the level of social exclusion by the dominant group. On the one hand, affirmative action may increase the perception of victimization of the minority community, therefore reinforcing social differentiation and exclusion

from the dominant group (Loury, 1995). On the other hand, affirmative action may decrease social exclusion, to the extent it is seen as a form of acceptance of the minority into the dominant culture.

1.3.3 *Acculturation strategies*

One important element of the previous analyses is the fact that cultural identity formation is modeled as a simple binary choice: individuals with foreign backgrounds either choose to identify with the dominant culture or to their (e.g. ethnic) minority culture. Even when the model is extended to allow for oppositional identity, its scope and complexity is limited by assuming that a stronger identification to the culture of the majority necessarily implies a weaker identification to the ethnic minority. These views, however, have been criticized as too simplistic to capture the different possible patterns of cultural integration of minorities. Indeed, studies within cross-cultural psychology suggest a more complex model of identity formation,⁶ treating the degree of identification with the culture of the majority as separate and independent from the degree of identification with the minority culture. Individuals may, for example, simultaneously feel a strong affinity for the majority and for a minority culture.

For instance, Berry (1997) actually considers four distinct acculturation strategies regarding how individuals relate to an original ethnic culture of the minority group and the dominant culture of the majority (see Figure 1.2). The first strategy, *integration*, implies a strong sense of identification to both the original and the majority culture. The second, *assimilation*, requires a strong relationship with the majority culture but a weak relationship with the original culture. The third, *separation*, is associated to a weak connection with the majority culture but a strong connection with the original culture. Finally, the fourth strategy, *marginalization*, involves a weak link with both the majority and the original culture.

While such an identity formation structure has been discussed empirically in several recent economic studies of migrants' cultural integration (see Constant *et al.*, 2006; Zimmermann *et al.*, 2007; Nekby and Rödin, 2007), little conceptual analysis has tried to disentangle the incentives of minority individuals to adopt a particular acculturation strategy in this framework. Consider, then, a specific minority or ethnic group that is part of the larger society. Each individual member derives

⁶ See for instance (Berry, 1980, 1984, 1997; Phinney, 1990; Phinney *et al.*, 2001).

		Majority group	
		Strong	Weak
Minority group	Strong	Integration	Separation
	Weak	Assimilation	Marginalization

Figure 1.2 Two-dimensional identity model (Berry, 1997).

utility from a general aggregate consumption good as well as from a group-specific good that effectively defines the identity of the group. Consumers allocate their time between ethnic and general activities that respectively enter as inputs in the household production function of the ethnic and general goods.

Individuals may as well invest in human capital, increasing the productivity of the household technology for the group-specific good and for the general good. More specifically, human capital can be distinguished along two types: *group-specific human capital*, that enhances the skills relevant for producing the group-specific good and *general shared human capital*. Group-specific or ethnic human capital is associated with skills and experiences that are useful only for members of that group, for example language, religion, or customs affecting family relationships. On the other hand, shared human capital develops skills that raise the household's productivity of the general good, like, for example, the mastery of a common language, and general skills useful in the labour market.

Group specific human capital accumulation, in the form, for example of 'ethnic education', begins with ethnic-specific parenting styles, family customs, cultural socialization, and group-specific training within the ethnic community. The key parameter in Chiswick's model is the degree of complementarity or substitutability between the accumulation processes for group-specific and general shared human capital. The types of acculturation strategies that emerge for members of the minority depend crucially on these complementarity and substitutability effects. The model is able, therefore, to successfully connect the pattern of investments in group specific and general human capital to the acculturation strategies that minority individuals may choose. More specifically, it suggests that strong complementarities between group-specific human capital and general human capital will favour the emergence of *cultural integration*, where individuals in the minority invest in the

accumulation of both types of human capital, and consequently develop strong identification to both their original culture and the general dominant culture of society. On the contrary, substitutability in human capital accumulation promotes the occurrence of *cultural assimilation* or *cultural separation*, where individuals in the minority will only identify with one culture at the cost of the other. *Marginalization* will finally occur when substantial fixed costs dampen the accumulation of both types of human capital.

1.3.4 *Dynamic cultural adoption*

Cultural integration has an essential dynamic character across time and generations. Several recent economic approaches have tried to incorporate these features in their analyses. A dynamic approach to cultural assimilation is described by Konya (2005), who extends the static framework of Lazear (1999) to a dynamic context. Individual members of a small minority group may decide to assimilate with the dominant majority culture or not. Individuals live for one period and have exactly one child each. They are dynastic altruists in the sense that they are concerned with their own utility as well as the utility of their future 'dynasty'. As in Lazear (1999), assimilation strategies have a single dimension: minority individuals either assimilate completely into the culture of the majority or they do not, remaining as members of the minority group. Each child is born inheriting the culture adopted by his parent. Any child born inheriting the culture of the minority chooses in turn to either assimilate or not. Children of assimilated parents belong instead irreversibly to the dominant majority group. As in Lazear (1999), individuals are matched randomly in society and gains from trade obtain from the resulting social and economic interactions. A match between members of the same group generates a larger gain than a match between individuals of different groups. Belonging to the majority group is therefore relatively desirable because of scale effects. But assimilation is costly. Thus, when deciding about cultural assimilation, minority members weight the benefits and the costs. In contrast to the static approach, rational forward-looking altruistic individuals take into account the future expected benefits of assimilation accruing to their whole dynasty. An important feature of the dynamics is the fact that incentives for assimilation change for successive generations, according to changes in the population structure over time. The model highlights the crucial role of the initial size of the minority group. When the minority is initially small, the long-run outcome is full assimilation. When the minority is instead initially large, the unique long-run

equilibrium is the initial distribution, that is, full cultural separation. Interestingly, for intermediate minority sizes, multiple long-run distributions are possible, including the full and no-assimilation ones.

The subtle interactions between the initial structure of the population and the role of expectations of population changes on the future gains of assimilation explain the dynamics of the distribution of the population across cultural groups. Suppose that the members of the minority expect the population structure to remain the same as initially and that in such an environment, assimilation is too costly for any individual. Then clearly there will not be cultural assimilation and the population distribution across cultural groups will replicate itself indefinitely, confirming the initial expectations of the members of the minority. On the other hand, suppose that minority individuals anticipate a drastic assimilation process of their own group with the majority and that, under such changing circumstances, the gains to assimilation are largely increased. Then, possibly, a fraction of minority individuals assimilate. This in turn might validate the expectations of assimilation. Depending on the initial beliefs shared inside the minority community, one may end up in two very different situations in the long run, everything else being equal.

From a normative perspective, the analysis points to two basic inefficiencies that characterize the dynamics of assimilation. First of all, the speed of assimilation may be too small as there are positive external effects of assimilation on the majority that are not internalized by minority members. Indeed, when interacting with minority members, majority members benefit from meeting an assimilated minority member, but the latter do not take this into account. This suggests a rationale for policies that tend to subsidize the assimilation strategy of minorities, as in the static case. The second source of inefficiency relates to the existence of multiple equilibrium paths of cultural assimilation. One such path might Pareto dominate another, while expectations coordinate on the second, along which society would end up converging to the stationary state.

At the heart of Konya's (2005) approach to cultural assimilation is the dynastic altruism assumption: parents weigh the dynamic socio-economic gains from cultural assimilation that they and their children will enjoy against the direct costs of assimilating. However, parents' decisions about cultural assimilation may also be motivated by a desire to transmit to their children their own (the parents') values, beliefs, and norms per se. Parents may be altruistic toward their kids, but in 'paternalistic' manner. Parents, in fact, are typically aware of the different traits children will be choosing to adopt and of the socio-economic

choices they (the children) will make in their lifetime. Parents might then evaluate these choices through the filter of their own (the parents') subjective views, that is, they might not 'perfectly empathize' with their children. As a consequence of imperfect empathy, parents, while altruistic, might prefer to have their children sharing their own cultural trait. Imperfect empathy provides in fact a natural motivation for the observation that parents typically spend substantial time and resources to socialize their children to their own values and cultures. This obviously may have implications for the observed pattern of integration and identity formation of cultural minority groups.

1.3.5 Cultural transmission

Building on evolutionary models of cultural transmission (Boyd and Richerson, 1985), Bisin and Verdier (2000, 2001) incorporate parental socialization choices under imperfect empathy in their study of the dynamics of cultural transmission and integration patterns. In particular, Bisin and Verdier's model has relevant implications regarding the determinants of the persistence of different cultural traits in the population. Cultural transmission is modelled as the result of the interaction between purposeful socialization decisions inside the family ('direct vertical socialization') and indirect socialization processes like social imitation and learning ('oblique and horizontal socialization'). The persistence of cultural traits or, on the contrary, the cultural assimilation of minorities, is determined by the costs and benefits of various family decisions pertaining to the socialization of children in specific socio-economic environments, which in turn determine the children's opportunities for social imitation and learning.

More precisely, Bisin and Verdier (2001) consider the dynamics of a population with two possible cultural traits (A and B). Let q denote the fraction of the population with trait A, and $(1-q)$ the fraction with trait B. Families are composed of one parent and one child. All children are born without defined preferences or cultural traits, and are first exposed to their parent's trait, which they adopt with some probability d_i for $i = A$ or B. If a child from a family with trait i is not directly socialized, which occurs with probability $1-d_i$, he picks the trait of a role model chosen randomly in the population (i.e. he picks trait A with probability q and trait B with probability $1-q$). The probability that a child of a parent of trait A also has trait A is therefore $\Pi_{AA} = d_A + (1-d_A)q$; while the probability that he has trait B is $\Pi_{AB} = (1-d_A)(1-q)$. The probabilities Π_{BB} and Π_{BA} , by symmetry, are $\Pi_{BB} = d_B + (1-d_B)(1-q)$ $\Pi_{BA} = (1-d_B)q$. The probability of family socialization d_i can be affected by the parent

through various forms of costly effort. The benefits of socialization are instead due to imperfect empathy. For each parent, the chosen level of socialization effort will balance out the marginal cost of that effort against the marginal benefit of transmitting one's own culture.

In such a context, Bisin and Verdier (2001) analyse the resulting population dynamics of cultural traits, that is, the dynamics of the distribution of the population across cultural traits, with the objective of characterizing the conditions which give rise to persistence of cultural diversity in the long run. They show that the crucial factor determining the composition of the stationary distribution of the population consists in whether the socio-economic environment (oblique socialization) acts as a *substitute* or as a *complement* to direct vertical family socialization. More precisely, direct vertical socialization is viewed as a *cultural substitute* to oblique transmission whenever parents choose to socialize their children less when their cultural trait is more widely dominant in the population. This would be the case, intuitively, if parents belonging to the dominant majority tended to rely mostly on indirect 'oblique and horizontal' mechanisms to socialize their children, since such mechanisms are naturally more effective for cultural majorities than minorities. This property of the socialization mechanism promotes the persistence of cultural differences in the population. On the contrary, direct vertical transmission is a *cultural complement* to oblique transmission when parents socialize their children more intensely the more widely dominant their cultural trait is in the population. In such a case, the population dynamics converges to a culturally homogeneous cultural population. The complementarity between family and society in the process of intergenerational socialization gives a size advantage to the larger group (the majority) both in terms of direct vertical family socialization and in terms of indirect 'oblique and horizontal' socialization. This promotes the assimilation of the minority group and cultural homogeneity in the long run.

While Bisin and Verdier's (2001) model is stated in terms of general socialization mechanisms, specific choices contribute to direct family socialization and hence to cultural transmission. Prominent examples are, for example, education decision, family location decisions, and marriage.⁷ The simple analytics of the model are obtained when the

⁷ For instance, education choices have been studied by Pattacchini and Zenou (2004); marriage choices within ethnic and religious groups have been specifically discussed by Bisin-Verdier (2000) and Bisin *et al.* (2004). Other applications incorporating identity formation and oppositional cultures include Sáez-Martí and Zenou (2005) and Bisin *et al.* (2009). The role of horizontal socialization and peer effects is also discussed in Sáez-Martí and Sjögren (2005).

benefits of socialization are based on purely cultural motivations and are in particular independent of the distribution of the population. Many interesting analyses of cultural transmission require this assumption to be relaxed. Indeed, in many instances the adoption of a dominant cultural trait might provide a beneficial effect per se. An obvious example is Lazear (1999), where the adoption of the dominant language has beneficial effects in the labour market. In this case altruistic parents, even if paternalistic, might favour (or discourage less intensely) the cultural assimilation of their children. This trade-off between ethnic preferences and the disadvantage of minority traits in terms of economic opportunities may be central to the integration pattern of immigrants in the host country. Interestingly, when these elements are incorporated in cultural transmission models (Bisin and Verdier, 2000), they result in the existence of multiple equilibrium pattern of cultural assimilation and issues of coordination of beliefs across and within cultural groups.

In the previous sections, we reviewed some of the theoretical frameworks developed in the literature for the study of integration patterns of members of cultural minorities. These analyses stress three interesting components: structural socio-economic opportunities, complementarities and substitutabilities between the minority and the majority cultures, externalities and the role of expectations and beliefs. We discuss each of them in turn.

1.3.6 *Socio-economic opportunities*

As the structuralist approach in sociology, the economic analysis of cultural integration emphasizes the role of economic incentives and opportunities. Incentives and opportunities are in particular affected by the size of the minority group. Indeed, assimilation to the dominant culture is likely to provide scale benefits in terms of economic interactions. Therefore we should generally expect smaller minorities to culturally assimilate faster and more easily than bigger minorities. Also, the socio-economic gains of cultural assimilation depend importantly on several host country institutional factors as well as on the reactions of the dominant group to the pattern of integration of minorities. Specifically, supply factors such as forms of socio-economic exclusion by the dominant group may significantly reduce the demand for cultural assimilation by members of minorities and may stimulate, on the contrary, the adoption of strategies leading to cultural separation. In certain circumstances, socio-economic exclusion by the dominant group could

even create the conditions for the emergence of oppositional cultures, as a sort of 'negative demand' for assimilation.

1.3.7 Complementarities and substitutabilities in human capital and socialization processes

Two dimensions of the degree of complementarities and substitutabilities between the minority culture and the majority culture appear relevant to understanding and explaining different integration patterns. First, as illustrated by Chiswick's human capital formation approach, complementarities in skill learning processes tend to favour similar and positively correlated patterns of human capital accumulation in different cultures. This leads to integration when associated with high levels of investments and marginalization when associated with low levels of investments. On the other hand, substitutabilities lead to negatively correlated human capital investments between minorities and the majority. Second, as suggested by Bisin and Verdier's cultural transmission framework, complementarities and substitutabilities between direct vertical family socialization and indirect oblique mechanisms of socialization may significantly affect the intensity with which minority members engage in cultural transmission to their children. Again, group size effects matter. When socialization mechanisms are characterized by complementarities in imitation processes and exposure to role models, minority parents tend to reduce their direct transmission efforts when they expect their children to be less exposed to cultural role models of their own group. On the contrary, when family and society are interacting as cultural substitutes in socialization, minority members try to compensate by their own socialization effort for the fact that their group's cultural influence is reduced.

Combining these two dimensions suggest conditions under which the four acculturation strategies of Berry's (1997) typology, as described in Figure 1.2, are likely to emerge. This is summarized in Figure 1.3. The horizontal dimension characterizes the degree of complementarity versus substitutability between group specific human capital and general human capital. The vertical dimension describes the degree of cultural complementarity versus substitutability between family and external cultural influences. Box 1 in Figure 1.3 represents the socialization environment characterized by substitutability along both dimensions. In this case minority groups are likely to socialize their children intensively with their own group specific values and skills. Because group specific human capital is a substitute for general human capital, this is likely to lead to *cultural separation* and significant cultural resilience of the

		Human capitals	
		Substitution effects	Complementarity effects
Socialization processes	Substitution effects	Box 1: separation	Box 2: integration
	Complementarity effects	Box 3: assimilation	Box 4: marginalization

Figure 1.3 Multi-dimensional models: a synthesis.

minority group. Box 2 in Figure 1.3 represents an environment where cultural transmission is characterized by cultural substitutability, while the two types of human capital are complements. In this case, minority group individuals again intensively transfer their values and traits to their children. At the same time, the complementarity between group specific skills and general skills implies also high levels of investments in general human capital. Hence *cultural integration*, where second-generation individuals are integrated with the majority group and still preserve many of their own distinctive characteristics, will tend to obtain. Alternatively, Box 3 in Figure 1.3 represents a socialization environment with cultural complementarities in socialization and substitutabilities between group specific and general skills. In this case, minority individuals weakly transmit their own cultural traits and, correspondingly, there is more investment in general human capital. This is likely to lead to a *cultural assimilation* across generations. Finally, the last configuration, in Box 4 in Figure 1.3, corresponds to an environment with complementarities along both dimensions. Minority group individuals provide weak socialization effort and low investment in general human capital. This induces *marginalization*, with little attachment to the original minority culture and also low integration with the majority group.

1.3.8 Externalities and expectations

All theoretical frameworks developed in the literature for the study of integration patterns we have discussed previously, highlight the fact that socialization and dynamic cultural evolution processes are

characterized by several externalities. First of all, positive external effects of assimilation on the majority are by the choices of minority members, specifically when assimilation involves more efficient communication and coordination and therefore a larger surplus to be shared between minority and majority groups. A consequence of this externality is that cultural integration might proceed too slowly and would need subsidization. Second, individual socialization and assimilation choices are formed under certain sets of beliefs about the aggregate process of cultural dynamics itself. How such beliefs are formed and coordinated upon may affect the path of cultural integration. Again, this leaves scope for the emergence of collective institutions allowing individuals to coordinate their socialization and assimilation choices on a path that is socially efficient.

1.4 Measuring cultural integration

The integration process of an individual of a specific immigrant group into his host country is characterized by several dimensions, typically aggregated into four distinct but not mutually exclusive general categories: economic, legal, political, and social integration. The first category, economic integration, is associated with integration processes in 'market' relationships. These include integration in the labour market, in residential location, in education and training in skills which are valued in market interactions. The second category, legal integration, relates to the evolution of an immigrant's status and its implications for his (or her) conditions of stay. The third category is political integration. It connects to the public and political sphere, and to collective decision-making processes in the host country. Typically it includes interest in local political processes, participation in political organizations, voting, etc. Finally, cultural integration is the fourth category. It is associated with the social and cultural sphere and concerns cultural habits, values and beliefs, religion, and language. It involves dimensions which are not generally intermediated directly through markets or political processes. Measuring the cultural integration of minority groups implies, therefore, searching for indicators that essentially relate to all these categories.

1.4.1 *Behavioural data*

A first approach in measurement of integration consists in collecting empirical observations regarding the actual behaviour of minority

individuals, and assessing how it differs from that of majority group members. Typical indicators include language spoken at home, religious practice, fertility patterns, educational achievement, gender gaps in education or labour market participation, prevalence of female labour supply, social participation, and marriage behaviour (intermarriage rates, marriage rates at age 25, cohabitation, divorce, partner age gaps, etc.).

One specific measure of objective behaviour that has attracted significant attention is intermarriage. It is generally considered as evidence of growing cultural 'integration'. A high rate of intermarriage signals reduced social distance between the groups involved and the fact that individuals of different ethnic backgrounds no longer perceive social and cultural differences significant enough to prevent mixing and marriage (Gordon, 1964; Kalmijn, 1998). There are several reasons why intermarriage may be an important indicator of integration. First, marriage is an important mechanism for the transmission of ethnically specific cultural values and practices to the next generation. Hence intermarriage, by changing the scope for socialization, may fundamentally affect the boundaries and distinctiveness of ethnic minority groups (Bisin and Verdier, 2000). Also, intermarriage at significant and sustained rates leads to major demographic changes in society, in particular to the emergence of 'mixed' children. This has important implications for the evolution of ethnic categorizations. Intermarriage is constrained by a variety of factors, such as the size of groups, segregation, and socio-economic and cultural barriers. Among the variables often discussed as determinants, a major role is played by generational status (first versus second generation), educational attainment and socio-economic status, marriage pool structure of potential co-ethnic partners (group size, sex ratios at given socio-economic status), gender, religion, linguistic distances with majority group, residential integration, and spatial segregation (see, for instance, Furtado, 2006; Chiswick and Houseworth, 2008).

While it is generally assumed that intermarriage is a good indicator of immigrants' integration, a number of caveats should, however, be kept in mind. First, intermarriages measured as such may not give an adequate picture of interracial relationships as, for instance, they do not include dating or cohabitation. Second, there are difficulties related to the criteria by which a union is counted as intermarriage. The status of certain minority groups is not always clear, and what constitutes intermarriage may often depend on the specific data. As noted by Song (2009), for instance, the US Census Bureau does not regard a marriage between a Japanese American and an Indian (South Asian) American as intermarriage, but the same union would count as such in Britain. More