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Migration System Formation and Decline

A theoretical inquiry into the self-perpetuating and self-undermining dynamics of migration processes

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Abstract

The migration literature has identified various mechanisms which explain why, once started, migration processes tend to gain their own momentum and become self-perpetuating, partly independent of their original causes, leading to the formation of migration systems. However, existing theories on the internal dynamics of migration processes are characterised by three fundamental weaknesses. First, while they focus on the migration-facilitating role of migrant networks, they tend to ignore the *indirect* feedback dynamics that operate through the impact of migration on the sending and receiving contexts, altering the structural conditions under which migration initially took place.

Second, existing theories are unable to explain why most initial migration moves do *not* lead to network migration and the subsequent establishment of migration systems. It is unclear under what conditions initial moves by pioneer migrants do result in rapidly expanding network migration and the formation of migration systems, and under which conditions this does not happen. Third, the central argument of existing theories is largely circular because according to their circular assumptions migration goes on *ad infinitum*. They offer surprisingly few insights into migration-undermining feedback mechanisms that may counteract self-perpetuating dynamics and may contribute to the decline of established migration systems over time.

By drawing on various strands of the migration literature and by applying insights from the critical social capital literature, this paper proposes a comprehensive conceptual framework on the internal dynamics of migration processes by elaborating a set of hypotheses on the various migration-facilitating and migration-undermining feedback mechanisms at play at the various trajectories and stages of migration system formation and decline.

Keywords: migration theory, system feedback, networks, social capital, cumulative causation

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1. Introduction[1]

The idea that migration often leads to more migration is not new. The migration literature has particularly highlighted the migration-facilitating role of migrant networks. The idea is that once a critical number of migrants have settled at the destination, migration becomes self-perpetuating because it creates the social structures to sustain the process (Castles and Miller 2003, Massey 1990, Massey et al. 1998). However, existing theories are surprisingly unable to conceptualise why most initial migration moves do *not* set in motion self-reinforcing migration dynamics and why established migration systems fade out.

Following a familiar distinction made by Massey et al (1993), theories of migration can be divided into two groups: those which explain the origins or 'root causes' of migration and those on 'internal dynamics' which explain the perpetuation of migration. However, this distinction highlights two important gaps in migration theory. First, most initial migratory movements do not turn into self-sustaining systems. It is unclear under what conditions initial moves by pioneer migrants do result in rapidly expanding network migration and the formation of migration systems, and under which conditions this does not happen. The passage from the first group of theories to the second can therefore not be taken for granted.

Second, established migration systems may decline or re-structure; they do not simply self perpetuate. On the one hand, this is related to the failure to theorise how changes in macro-conditions or root causes of migration impinge on internal dynamics – highlighting the lack of connection between the theories on the origins and perpetuation of migration. On the other hand, this highlights the unrealistic circular logic of existing theories on the perpetuation of migration, according to which migration goes on *ad infinitum*. They critically fail to conceptualise the migration-undermining internal dynamics or feedback mechanisms that *counteract* the self-reinforcing internal dynamics which may lead to the weakening of established migrant systems over time.

In order to fill these theoretical gaps, this paper aims to outline the contours of a more comprehensive theoretical framework on the internal dynamics of migration processes. This is done by drawing on various disciplinary strands of the existing migration literature, diffusion theory and, particularly, the critical social capital literature. The paper will start by discussing existing conceptual frameworks, which focus on the role of social capital in explaining chain and network migration. It will argue that the usual focus on 'endogenous' feedback mechanisms that mainly operate through networks tends to overlook *contextual* feedback mechanisms that operate through the economic, social and cultural impacts of migration on sending *and* receiving communities and societies. By elaborating on migration systems theory and

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cumulative causation theory, the paper will identify the main contextual feedback mechanisms which tend to give migration its own momentum.

These approaches will be criticized for their circular line of argumentation, the linear causality they presume, and their failure to theorise the common non-occurrence of self-reinforcing feedback mechanisms and their inability to explain the decline of established migration systems. This paper will subsequently identify the main endogenous and contextual migration-undermining mechanisms that counteract the self-perpetuating dynamics of migration processes. The final section will put the various insights in a dynamic perspective by proposing an ideal-typical conceptual framework of the *differentiated* rise and fall of migration systems over time. By drawing on various strands of the migration literature and by applying insights from the critical social capital literature, this paper proposes a comprehensive conceptual framework on the internal dynamics of migration processes by elaborating a set of hypotheses on the various migration-facilitating and migration-undermining feedback mechanisms at play at the various trajectories and stages of migration system formation and decline.

2. Migratory social capital: Chain migration and migrant networks

2.1. 'Root causes' vs. internal dynamics

Migration may begin for a variety of reasons. Although the truism holds that economic and other opportunity differentials almost always play a major role in explaining migration, this alone cannot explain the actual, highly patterned and geographically clustered morphology of migration, typically linking particular places and regions at the sending and receiving end. Structural *forces majeures* in the international political economy such as warfare, colonialism, conquest, occupation and labour recruitment often play a role in the *initiation* of migration processes (Castles and Miller 2003, Massey et al. 1998, Skeldon 1997). Former colonial or other historical bonds, or a shared culture or language, tend to make initial migration moves more likely. Notwithstanding globalisation, geographical proximity also continues to play an important role, especially in the migration of low skilled workers from, for instance, Mexico and Morocco to the US and the EU, respectively (de Haas and Vezzoli 2009).

However, once a certain critical number of migrants have settled at the destination, other forces come into play. The deliberate or more ambiguous choices made by pioneer migrants, labour recruiters or others tend to have a great influence on the location choice of subsequent migrants, who tend to follow the 'beaten track'. Again, the idea that migration is a path-dependent process because inter-personal relations across space facilitate subsequent migration is anything but new in the migration literature (cf. Franz 1939, Lee 1966, Petersen 1958).

While the term *chain migration* has already been used by Kenny (1962) and, particularly, Price (1963), it was explicitly defined by MacDonald and MacDonald (1964). Drawing on the example of large-scale migration from Italy to the United States in the late 19th and early 20th century, they defined chain migration as "that movement in which prospective migrants learn of opportunities, are provided with transportation, and have initial accommodation and employment arranged *by means of primary social relationships with previous migrants*" (MacDonald and Macdonald 1964: p. 82, emphasis in original).

MacDonald and MacDonald's initial idea that migrant *networks* based on kinship and community membership facilitate processes of chain migration has been further elaborated by Tilly and Brown (1967) and Choldin (1973) and has retained currency in the migration literature (Boyd 1989, Fawcett 1989, Gurak and Caces 1992, Haug 2008, Taylor 1986, Waldorf 1998). In the recent migration literature, the term network migration has gradually replaced chain migration. Migrant networks can be defined as sets of interpersonal ties that connect migrants, former migrants, and nonmigrants in origin and destination areas through bonds of kinship, friendship, and shared community origin (Massey et al. 1993: 448). Networks often explain the perpetuation of migration partly irrespective of its original causes.

2.2. Migrant networks as social capital

A migrant network can be interpreted as a location-specific form of social capital. Bourdieu (1979, translated and reprinted in Bourdieu 1985) defined social capital as "the aggregate of the actual or potential resources which are linked to the possession of a *durable network of* more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, *to membership in a group*" (Bourdieu 1985: 248)[2]. Bourdieu makes an essential – but unfortunately generally ignored – distinction between the *networks* themselves and the *resources* that can be claimed through such networks by pointing out that the volume of the social capital possessed by a person depends on the (1) size of the network connections and the (2) volume of the (economic, cultural or symbolical) capital possessed by each of those to whom she or he is connected. This distinction is essential for understanding how social capital can produce and reproduce inequality, but has unfortunately been largely ignored by scholars such as Putnam (2000) as well as migration network theory .

Bourdieu argued that the profits which accrue from membership of a group are consciously or unconsciously the basis of the solidarity which makes them possible (Bourdieu 1979, Bourdieu 1985). Social capital classifies as 'capital' because it is a resource that can be converted into other forms of cultural, human and economic capital (Bourdieu 1985, Coleman 1988, Portes 1998). Since the late 1980s, the concept has been gratefully applied by Douglas Massey and his colleagues to the study of Mexico-US migrant networks (Massey et al. 1993, Massey and España 1987, Massey, Goldring, and Durand 1994, Massey and Zenteno 1999, Palloni et al. 2001). Migrant networks tend to decrease the direct costs of migration, information and

[2] This is a translation from Bourdieu's (1979:2) original definition of social capital in French. The emphasis was in the original version.

search costs as well as opportunity and psychic costs of migration. Migrant network connections can then be conceived as a form of location-specific social capital that people draw upon to gain access to resources elsewhere. Massey conceptualised migration as a diffusion process within communities, in which

> expanding networks cause the costs of movement to fall and the probability of migration to rise; these trends feed off one another, and over time migration spreads outward to encompass all segments of society. This feedback occurs because the networks are created by the act of migration itself .... Once the number of network connections in an origin area reach a critical level, migration becomes self-perpetuating because migration itself creates the social structure to sustain it (Massey 1990: 8)

Thus, besides (1) financial and (2) human capital, (3) social capital is a third crucial factor determining people's motivation and ability to migrate. Already settled migrants function as "bridgeheads" (Böcker 1994), reducing the risks and costs of subsequent migration. Therefore, the formation of an established migrant community at one particular destination will increase the likelihood of subsequent migration to that particular place. This largely explains the fundamentally patterned and geographically clustered nature of migration.

The 'migration industry' is the other main example of intermediate, self-sustaining structures largely created or reinforced by migration processes themselves. This includes travel agents, lawyers, bankers, labour recruiters, brokers, interpreters, housing agents as well as human smugglers and traffickers (Castles 2004). All these agents have an interest in the continuation of migration, and for many facilitating migration is a major business (Salt and Stein 1997). The cost and risk-reducing role of networks and other intermediate factors makes migration, once set in motion, notoriously difficult for governments to control, let alone stop.

3. Contextual feedback mechanisms

3.1. Linking theories on the initiation and perpetuation of migration

Most studies on the perpetuation of migration focus on the role of networks in autonomously sustaining migration processes. Network effects can be classified as first order feedback mechanisms, which are *endogenous* to the migration process itself. The migration process itself affects the ability of individuals and households with social links to migrants to migrate themselves. Unfortunately, the focus on networks has coincided with a limited theorisation of second order, *contextual* feedback mechanisms, which operate more indirectly, that is, through the ways in which migration transforms the broader social, cultural and economic contexts in sending *and* receiving communities (meso-level) and societies (macro-level). Examples include the impact of migration on inequality, social stratification, entrepreneurship and cultural change.

These broader contexts conditioned (constrained and enabled) specific forms of migration in the first place, but are reciprocally affected by the same migration processes. The crux is that such migration-engendered contextual changes constitute feedback mechanisms which have their own, reciprocal effects on the occurrence of subsequent migration. At any particular time T_1, a set of contextual factors at the sending and receiving end, facilitated and constrained migration. However, the migration process itself will modify and/or reproduce the structural conditions future migrants face at T_2 in both sending and receiving contexts. Although contextual effects as such have received ample attention in the literature on 'migration and development' (for sending contexts) and integration and assimilation (for receiving contexts), these strands have remained strictly separated and have rarely been conceptually connected with theories on the perpetuation or 'internal dynamics', which have largely focused on networks. Past attempts by Mabogunje (1970) and Massey (1990) to forge such conceptual links have unfortunately received little following. This is unfortunate, because these contextual feedback effects provide the vital conceptual link between theories on the initiation and perpetuation of migration.

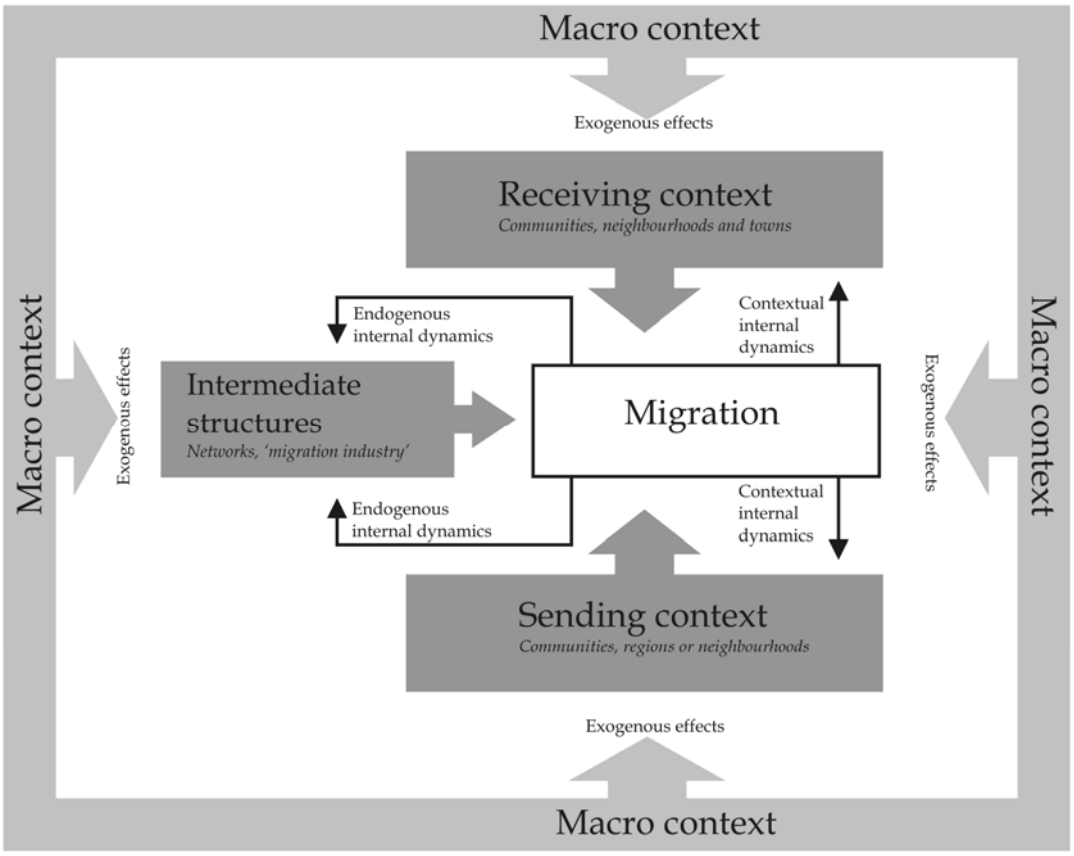
In order to gain a more comprehensive understanding of such feedback mechanisms and to overcome the artificial distinction between theories on the initiation and perpetuation of migration, it is necessary to study migration processes in their constant interaction with their wider context. This implies the necessity to conceptualise migration as a process which is (1) an integral part of broader processes of contextual change and broader social transformations (Castles 2008), but (2) also has its internal, self-sustaining *and* self-undermining dynamics, and (3) affects such processes of contextual change at the macro and, particularly, meso-level. In their turn, (4) such migration-affected contextual change affects subsequent migration patterns. Where (2) refers to direct (endogenous) internal dynamics, (4) refers to indirect (contextual) internal dynamics of migration processes. These various feedback mechanisms have been depicted in figure 1.

It is analytically useful to distinguish between meso- and macro-level contextual effects. Meso-level effects operate at the level of the concrete communities and localities of migrants and are most relevant for the daily social interaction of migrants. We can hypothesize that the impact of migration at the meso-level context increases with the degree of geographical clustering of migrants from particular origins in particular places and areas at the destination. Macro-level factors refer to the national and global processes of social, economic, political and cultural change. Obviously, migration also affects macro-level contexts, for instance through the impact of migration on labor market structures, economic growth, national culture, political processes (e.g., rise of xenophobic political parties, but also targeted wooing of large migrant groups by political parties, or the extension of voting rights to migrants), migration policies (e.g., large-scale emigration or immigration might lead to more restrictions) and foreign policy. Such macro-level structural effects of migration are more indirect, diffuse and fundamentally limited.

Although this paper will focus on meso-level contextual feedback mechanisms, we have to bear in mind that specific macro-level responses to migration can have profound effects on the migration processes themselves, particularly through migration policies. Table 1 summarises the most important endogenous and meso-level contextual feedback mechanisms, which will be discussed in the remainder of

this paper. Obviously, the distinction between endogenous and contextual effects is partly an artificial one, as it is difficult to make a rigid separation between networks and the wider meso-context. For instance, it is difficult to separate the diffusion of migration practices from the context in which such practices spread. Also the distinction between meso and macro scales of analysis has been criticized by recent work in geography on the social construction of scale (Marston 2000).[3] Still, such distinctions remain useful, not as rigid categories, but primarily as heuristic devices which help to distinguish between the different feedback mechanisms at play.

Figure 1. Conceptual framework of endogenous and contextual feedback mechanisms of migration processes



3.2. Beyond networks: Migration systems theory

Migration systems theory as pioneered by the Nigerian geographer Akin Mabogunje (1970) has been the most comprehensive attempt at theorising contextual feedback mechanisms so far. A migration system can be defined as a set of places linked by flows and counter-flows of people, goods, services, and information, which *tend* to facilitate further exchange, including migration, between the places.[4] Mabogunje

[3] I would like to thank Michael Collyer for drawing my attention to this issue.
[4] It is also possible to distinguish migration systems at the macro, country-to-country level. However, such as analysis would go beyond the aim of this paper, which is focused on micro and meso level migration processes.

(1970) focused on the role of feedback in the form of flows of information and new ideas (such as on the "good life" and new consumption patterns) in shaping migration systems. Such feedback mechanisms would lead to situations of

> almost organized migratory flows from particular villages to particular cities. In other words, the existence of information in the system encourages greater deviation from the "most probable or random state"… [The] state of a system at any given time is not determined so much by its initial conditions as by the nature of the process, or the system parameters… since open systems are basically independent of their initial conditions (Mabogunje 1970:13-4)

Information is not only *instrumental* in facilitating further migration, but new ideas and exposure to (urban or foreign) life styles transmitted back by migrants may also increase *aspirations* to migrate. Migration systems link people, families, and communities over space. This results in a rather neat geographical structuring and clustering of migration flows, which is far from a "random state". While Mabogunje focused his analysis on rural-urban migration in Africa, migration systems theory can be extended to international migration (Fawcett 1989, Kritz, Lim, and Zlotnik 1992). It is common for particular regions, villages, or ethnic groups to specialize in migration to particular areas, cities, or even city neighbourhoods, either within the same country or abroad.

Migration systems theory as formulated by Mabogunje goes beyond the usual focus on networks by pointing out the role of flows of information and ideas in facilitating and inspiring people to migrate in order to achieve (newly set) life objectives. However, migration systems theory does not really go beyond that point and ignores various other contextual feedback mechanisms through which migration changes the initial social, economic and cultural conditions under which prior migration took place (see table 1). The following sections will build upon migration systems theory by discussing the most important feedback mechanisms which tend to give migration its own momentum. These operate through the impact of migration on (1) inequality and relative deprivation; (2) economies and labour markets; and (3) cultural change.

Table 1. Examples of endogenous and meso-level contextual feedback mechanisms

Type	**Level**	**Domain**		
		Social	***Economic***	***Cultural***
Endogenous (First order effects)	Intermediate - (migrant group)	Migrant networks; 'Migration industry'	Remittance-financed migration	Transfers of migration-related ideas and information
Contextual (second order effects)	Origin community	Social stratification and relative deprivation	Income distribution, productivity and employment	Social remittances; culture of migration
	Destination community	Patterns of clustering, integration and assimilation	Demand for migrant labour generated by clusters of migrant businesses	Transnational identities, demand for marriage partners

3.3. Inequality, social stratification and cumulative causation

Massey's (1990) hypothesis of the cumulative causation of migration is the most comprehensive effort so far at synthesising relevant insights into internal migration dynamics. Massey reintroduced Myrdal's (1957) concept of circular and cumulative causation, or "the idea that migration induces changes in social and economic structures that make additional migration likely" (Massey 1990: 5-6). Although this is rather similar to Mabogunje's (1970) migration systems theory, cumulative causation, as interpreted by Massey, identified some additional contextual feedback mechanism, mainly focusing on the impacts of migration on the distribution of income and wealth and the economic structure of sending communities.

One of the most important contextual dynamics through which migration becomes self-reinforcing is the effect of remittances on income distribution in sending societies. In particular in the case of international migration from poor to wealthy counties, remittances may significantly increase income inequality. This is likely to increase feelings of relative deprivation among non-migrants, and increase their aspirations to migrate. There is a broad consensus in the literature that relative deprivation is an important migration incentive (Quinn 2006, Stark 1991, Stark and Taylor 1989). Relative deprivation and network effects can easily reinforce each other, because the first effect increases the migration aspirations while the second effect lowers the costs and risks of migration. Remittances can also directly or indirectly finance migration of family and community members (van Dalen, Groenewold, and Fokkema 2005), although this is an endogenous rather than contextual effect. While pioneer migrants are often among the *relatively* well-off, these feedback mechanisms can make migration more accessible for other groups.

3.4. The vicious circle of the migrant syndrome

The second main second order internal migration dynamic identified by Massey operates through the hypothesised negative impact of migration on the economic structures and productivity in migrant sending communities and regions (Massey 1990: 12). Massey hypothesises that large-scale out-migration of the most productive members of the household often leads to less intensive farming and overall disruption of agrarian organisation. Moreover, migrant households would be more likely to let their lands lie fallow, whereas remittances would be mainly invested in labour saving techniques, further restricting local opportunities for production and employment. This would then further exacerbate a negative feedback loop connecting migration, agrarian change and further migration. Cumulative causation fits well into "pessimistic" theories on migration and development, which gained popularity in the 1970s and 1980s under the influence of a paradigm shift away from developmentalist theory towards neo-Marxist and dependency theories of development (see also Castles and Miller 2003, de Haas 2010)

Cumulative causation theory postulated that migration undermines economies of sending communities and regions by depriving them of their valuable human and material capital resources and increasing their dependence on the outside world (Almeida 1973, Binford 2003, Lewis 1986, Lipton 1980, Reichert 1981, Rhoades 1979, Rubenstein 1992). Migration-induced dependency, instability, and developmental distortion are assumed to result in economic decline (Keely and Tran 1989:501). The resulting pauperization is seen as encouraging further out-migration. Negative perspectives were amalgamated into what might be called the "migrant syndrome"(Reichert 1981), the vicious circle of migration – more underdevelopment – more migration, and so on.

3.5. Social remittances and cultures of migration

Besides the effects of migration (1) social stratification and relative deprivation and (2) the economic structure in sending communities, the framework of migration systems theory can be extended with a third contextual system feedback in the form of (3) migration driven forms of cultural change. While the role of flows of information and ideas on migration capabilities and aspirations was already acknowledged by Mabogunje (1970), Levitt (1998) coined the term "social remittances" to describe ideas, behaviours, identities and social capital flowing from receiving to sending communities. Migration and the close confrontation with other norms and practices, as well as increased awareness of livelihood opportunities and lifestyles elsewhere, can have a profound influence on identity formation, norms and behaviour in migrant sending communities.

This may lead to the emergence of a "culture of migration", in which migration becomes a social norm or even a modern *rite de passage* (cf. Massey et al. 1993: 453). If international migration becomes strongly associated with personal, social, and material success, migrating can become the norm rather than the exception and staying home is associated with failure. Such migration-affected cultural change is likely to generate self-sustaining dynamics by further strengthening migration aspirations along established pathways in communities and societies that can even become obsessed with migration. This *aspirational* effect should be distinguished from the *facilitating* role of migrant networks and remittances in lowering costs and risks of migrating.

It is also possible to hypothesise other ways in which the cultural impacts of migration encourage more migration. Migration is often held responsible for the disruption of traditional kinship systems and care structures (King and Vullnetari 2006) and the loss of traditional community bonds (cf. Hayes 1991). The exposure to the wealth of (return) migrants and the goods and ideas they bring with them, would contribute to changing rural tastes (Lipton 1980:12), lowering the demand for locally produced goods, increasing the demands for imported urban or foreign-produced goods, and thereby increasing the general costs of living in sending communities. The resulting increased perceived needs can also increase the perceived necessity to migrate as a way to meet these needs. This exemplifies the close (and difficult to disentangle) links between financial and social remittances and, more generally, of migration-related social, cultural and economic change.

3.6. Receiving end contextual feedback mechanisms

Because of huge power and wealth inequalities, the contextual impact of migration on relatively poor sending communities and countries is arguably larger than its contextual impact in relatively wealthy receiving communities and countries. In a recent paper, Alejandro Portes argued that migration rarely alters the *fundamental* structure of receiving societies; because "the bedrock value system and power structure operating through the existing institutional network ensure that whatever "melting" occurs will be decidedly asymmetrical" (Portes 2008: 23). However, there are also contextual feedback mechanisms at the receiving end that can sustain migration processes, which we will only elaborate briefly, because they have already been described extensively in the literature on immigrant integration.

Cumulative causation theory predicts that migration-driven employment growth is likely to generate more migration, and so on (Massey 1990: 15). Cumulative causation theory hypothesizes that migration is a selective process – attracting the most talented members of society – which contributes to economic growth and labour demand in receiving societies, while having the opposite effects in sending societies, engendering further opportunity disparities, leading to more migration, and so on (Massey 1990, Myrdal 1957).

Ethnic enclaves might provide labour in ethnic businesses. If they are sufficiently large in number, immigrant populations might therefore produce network externalities that will attract other migrants (Epstein 2008: 568). More generally, patterns of occupational specialisation (also outside of "ethnic businesses") and segmentation of labour markets tend to perpetuate the demand for migrant labour within specific economic niches (Castles and Miller 2003, Massey et al. 1993, Piore 1979). The rich literature on immigrant entrepreneurship confirms the hypothesis that the creation of migrant businesses generates demand for migrant labour (cf. Rath 2002).

Castles (2008) argued that the increased use of employment practices such as sub-contracting, spurious self-employment, temporary employment, casual work and irregular employment (for instance in domestic service or care work), and the associated growth of informal economies in wealthy countries, has fuelled (often irregular) migration. However, the process of migration itself has further reinforced these trends and the (ethnic) segmentation of labour markets, sustaining the demand for migrant labour. In particular, if migrants cluster at the destination and develop transnational identities, this can create a demand for marriage partners among the second and even further generation, a mechanism which can sustain migration over several generations (Lievens 1999, MacDonald and Macdonald 1964, Reniers 2001).

4. What existing theories *cannot* explain

4.1. Questioning circularity

Existing theories which focus on the internal dynamics of migration processes are characterised by three weaknesses. First, the common focus on network dynamics

tends to conceal contextual feedback mechanisms, which were described in the previous sections. Endogenous and contextual dynamics reinforce each other and taken together they form a useful heuristic tool for understanding why migration processes tend to become self-sustaining.

Second, these theories are unable to explain the frequent *non-occurrence* of self-reinforcing internal migration dynamics. Because studies of migration networks and migration systems tend to sample on the dependent variable, they tend to ignore and fail to explain the majority of cases in which initial migration moves do not set in motion self-reinforcing endogenous and contextual feedback dynamics. A third fundamental weakness of network migration systems and cumulative causation theories is the linear circularity of their core arguments, according to which migration seems to go on *ad infinitum*. They give surprisingly little insight into the external and, particularly, internal (endogenous and contextual) dynamics that may *counteract* the self-perpetuating dynamics of migration processes and which may lead to the weakening of established migrant systems over time.

There is not only a failure to explain why most initial migration moves do *not* result in network migration and migration system formation, but do also not give any meaningful insight into the *internal* mechanisms leading to the weakening and disappearance of migrant networks. Network decline is either explained from more or less 'exogenous' factors such as migration policies or declining wage gaps or as the result of the gradual weakening of transnational social ties. Although this latter explanation seems to make sense, this is logically inconsistent with the idea that network migration would continuously 'refresh' these ties. A largely similar critique on circularity and logical inconsistencies applies to migration systems and cumulative causation theory. Such criticism will be explored in the remainder of this section.

4.2. The conflicting internal logics of cumulative causation

Migration systems and migratory cumulative causation theory suffer from some logical inconsistencies and have also been challenged by empirical evidence pointing at the complex, heterogeneous and non-linear character of contextual migration impacts. First, as with network theory, there is a problematic circularity in the feedback mechanisms according to which the vicious cycle of impoverishment of "pauperization" (and sustained migration) in the periphery and growth at the core goes on *ad infinitum*. It seems unrealistic that there are no counter-mechanisms which level off or change the nature of this supposedly *linear* process over time.

First, there is an inherent logical contradiction between two central arguments of cumulative causation theory. On the one hand, migration is said to increase inequality because migrants come from relatively well-off groups within communities. On the other hand, further impoverishment at the community and regional level is expected to lead to more migration. This is logically inconsistent, as the first argument rightly supposes that a certain threshold of wealth is needed to precede migration and the second argument supposes a positive correlation between poverty and migration. This reveals an *inconsistent* analysis of the causes of migration. The conceptualisation of

migration as the result of impoverishment is at odds with theoretical and empirical evidence that people need certain financial, human and social resources in order to be able to migrate. There is ample evidence from the migration transition literature that the relationship between development and emigration rates is inverted U-curve like rather than linear (de Haas 2007b, Hatton and Williamson 1998, Martin and Taylor 1996, Skeldon 1997, Zelinsky 1971). This undermines the central argument of cumulative causation theory. The crucial issue is that migration-development relationships are non-linear. Even if the predicted negative development of impacts of cumulative causation hold, at some point below a certain average level of wealth, the continuous impoverishment-through-migration should *decrease* migration from the sending country, because fewer and fewer people can afford to migrate.

This brings us to a second problem, which is that the predicted negative impacts of migration have been challenged by empirical evidence. The deterministic nature of cumulative causation does not give room for heterogeneity in the specific, localized migration impacts. Partly inspired by the new economics of labour migration (Stark 1991, Taylor 1999), an increasing body of empirical research has indicated that, under certain circumstances, migration and remittances can significantly improve living conditions, reduce poverty and contribute to the social and economic development of regions and countries of origin (cf. Agunias 2006, de Haas 2007a, Taylor et al. 1996a, Taylor et al. 1996b). Massey and his colleagues themselves have later challenged the prevailing view that migration inevitably undermines development and promotes economic dependency (cf. Durand, Parrado, and Massey 1996).

Apparently, the self-reinforcing mechanisms of asymmetrical development cannot be taken as axiomatic. Contextual impacts of migration can be both positive and negative and can change over time. Under unfavourable economic and political conditions, migrants may set in motion cumulative causation-like processes. On the other hand, if conditions are favourable or improve, migrants may reinforce these positive trends by investing in and returning to their origin countries (de Haas 2009). Such positive impacts may increase migration as long as their role in increasing migration capabilities outweighs the effect of declining opportunity differentials with receiving areas.

Third, as with network theory, the circular character of cumulative causation also goes along with an inability to conceptualise which contextual feedback mechanisms may lead to *less* migration and may thus counter-act self-reinforcing contextual feedback mechanisms. Besides network saturation, the other main explanation for declining migration provided by Massey (1990: 8) was that

> "the rate of out-movement ultimately reaches a stage where labor shortages begin to occur and local wages start to rise… These developments act to dampen the pressures for additional migration and cause the rate of entry into the migrant work force to decelerate and then to fall off"

This argument seems to be directly drawn from neoclassical migration theory, which expects migration to cause labour to become less scarce at the destination and scarcer at the sending end. Capital is expected to move in the opposite direction. In a perfectly neo-classical world, this process of "factor price equalization" (the Heckscher-Ohlin model) will lead to growing convergence between wages at the

sending and receiving end (Harris and Todaro 1970, Lewis 1954, Ranis and Fei 1961, Schiff 1994). In the long run, this process would remove the incentives for migrating. However, this neoclassical argument is problematic since it is incommensurate with cumulative causation theory, which predicts divergence instead of convergence. This illustrates the logical pitfalls of combining incommensurate theories.

4.3. Theorising migration system decline

It is common to attribute the rise and fall of migrant networks and migration systems to 'exogenous' changes in the macro-level factors that caused migration, such as income differentials, political transformations or migration policies. For instance, there is evidence suggesting that migration tends to fall sharply if wage differentials between sending and receiving countries fall below a critical threshold level (Böhning 1994, de Haas 2007b, Martin and Taylor 1996). Beyond such a threshold level, the advantages of staying apparently start to outweigh the financial, psychological and social costs of migration.

Restrictive emigration and immigration policies – which are typically more successful to implement in authoritarian states than in liberal democracies – can also increase the costs and risks of migration. This may lead to a change in migration strategies such as increased irregular migration and an increasing dependence on networks for migration. However, if marginal increases in externally determined migration costs start to outweigh marginal reduction of migration costs through networks, we can expect a decline or reorientation of migration.

This shows the danger of arguing that internal dynamics give migration its own momentum *independent* of its initial causes, because this would de-link the conceptualisation of the perpetuation of migration from theories on the initiation of migration. Although various internal exogenous and contextual dynamics of migration processes tend to increase capabilities and aspirations to migrate, this only applies if the *ceteris paribus* assumption holds, so it does not render its fundamental macro-causes irrelevant at all. While the internal dynamics of migration processes tend to operate on the meso level through their effects on individuals' capabilities and aspirations to migrate, opportunity differentials and state policies are determined by economic and political factors at the macro-level.

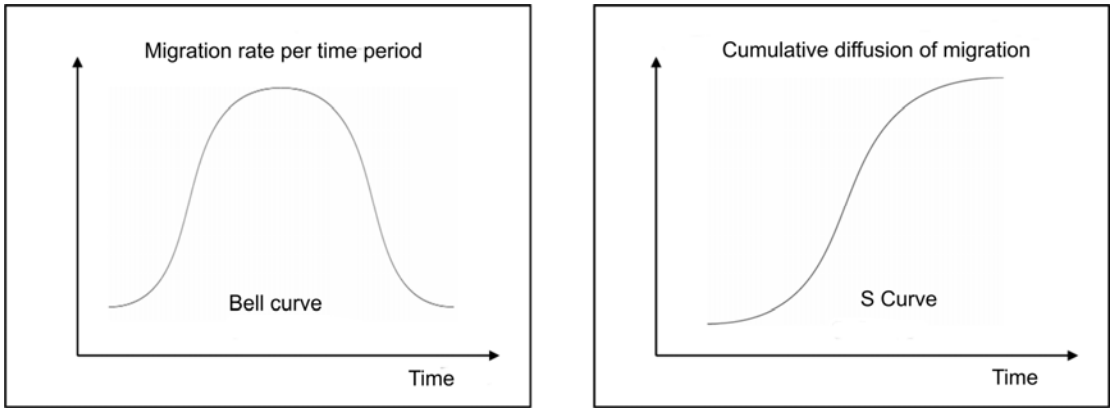
However, the main point that this paper tries to make is that, apart from the obvious role of macro-level changes, there are also migration-undermining *internal* and *contextual* feedback mechanisms which counteract migration-facilitating dynamics and may weaken migration systems over time. It is important to theorise such migration-undermining dynamics in order to explain descriptive evidence that migrants are not necessarily only the stereotypical "bridgeheads" facilitating subsequent migration, but may also become restrictive "gatekeepers" (Böcker 1994, Collyer 2005), being (increasingly) hesitant or unwilling to assist prospective migrants. The following sections will analyse the various endogenous and contextual feedback mechanisms which explain the decline of migration networks and migration systems.

5. Migration-undermining internal dynamics

5.1. Introducing non-linearity: migration as a diffusion process

Linear interpretations of network theory are unrealistic because, according to their logic, a whole community should end up at the destination. Massey (1990), Haug (2008) and others have rather conceptualised migration as a diffusion process which follows a classical S-shaped curve, while the migration rates follow the shape of a bell curve (see figure 2). In his more sophisticated hypothesis of the mobility transition, Zelinksy (1971) linked demographic transition theory to the spatial diffusion of innovations, through which he managed to reach a more spatio-temporal understanding of the spread of migration. He conceptualized the demographic transition – which can in many ways be considered as a proxy of modernization and development – as a process diffusing outward through space and time and linked this process to patterned regularities in the overall *growth* of personal mobility (Zelinsky 1971: 220-222).

Figure 2. Hypothesised migration diffusion (Bell and S curves)



The application of diffusion theory to the study of migrant networks dynamics is useful to explain the common empirical observation that migration rates between particular places, regions and countries are seldom constant but rather tend to level off and even decline after an initial period of fast growth. Everett Rogers (1962), the founder of diffusion theory, proposed that adopters of any new innovation or idea can be categorized as innovators, early adopters, early majority, late majority, and laggards. Rogers argued that people's attitude toward an innovation is a key element in its diffusion.

Applied to migration, pioneer migrants fit within the first category of innovators and, perhaps, early adopters. Empirical evidence suggests that such early migrants are often from *relatively* well-off households, as early migration—analogous to the adoption and diffusion of most innovations across space and populations—often entails high costs and risks. Networks diminish the costs and risks of migration. Once

these costs and risks decrease below a critical threshold level (equal to, for instance, median or mean 'affordability' of migration), an increasing proportion of the population will be able to migrate, leading to an exponential growth of migration rates.

More contentious points are *when* does saturation occur, and to what extent is it realistic to expect that migration will slow down. Haug (2008) hypothesised that with each new migrant, social capital declines at the place of origin, resulting in an attendant drop in the potential loss of social capital at the place of origin. According to this rather mechanistic line of reasoning, however, there would not be a built-in tendency for network migration to slow down beyond a certain point, and, *ceteris paribus*, we can expect the whole community to end up at the destination.

Yet empirical evidence suggests that, generally, only a minority of community members actually migrate. This can only be explained if we conceive migration as part of broader trans-local or transnational livelihood strategies pursued by household and families to spread income risks and to overcome local market constraints as proposed by the new economics of labour migration and other household approaches (cf. de Haas 2010) – rather than as individual strategies for utility maximisation in unconstrained world, as assumed by neo-classical migration theory. If spatial diversification of income risks, improvement of wellbeing and wealth of family members and the generation of capital (remittances) to invest in sending communities are an important rationale behind migration, it is generally not in the interest of households that all members end up at the destination, but rather to have one or several "best suited" (generally young) household members migrating.

Human *and* social capital theories provide relatively straightforward explanations why early migrants tend to be young, as they have greater expected returns on their human capital and they have invested less in social capital at the origin, and therefore literally less to lose. On this basis, we could hypothesise that saturation occurs when most households willing to participate in migration have actually done so. Any further declines in costs and risks through network effects will only allow a small number of the remaining, most deprived members – the late adopters or 'laggards' – to migrate.

Massey (1990:8) asserted that saturation occurs when

> "virtually all households have a close connection to someone with migrant experience . . . When networks reach this level of development, the costs of migration stops falling with each new entrant and the process of migration loses its dynamic".

Put differently, the marginal returns of increasing network connections on the odds of migrating diminish as migrant communities and network connections grow. These marginal positive returns are large and growing in earlier stages of migration, when the costs and risks diminishing effects of network lower the threshold level at which migration becomes possible for large sections of sending communities. Such returns will diminish when most households have access to migration and migrant network connections have become less scarce. However, we can expect the right tail of the diffusion graph to be less steep and longer than depicted in figure 2, because the threshold levels for migration to occur will, all other things being equal, have declined through network effects. In addition, other than technical innovations or demographic

transitions, migration is a social phenomenon that tends to reproduce itself over the generations, so it would be naïve to assume an 'end' of migration.

Diffusion theory combined with network theory and household approaches are useful theoretical tools to understand the typical sequences of rising and falling migration rates between specific places. Saturation is the only endogenous mechanism identified by conventional network theory to explain *declining* migration over time.

Migration diffusion theory has a number of conceptual caveats. First, the theory implicitly assumes that migration is an anomalous, new behaviour, which echoes the "myth of the immobile peasant" (Skeldon 1997: 7-8); or the implicit assumption that pre-modern societies consisted of stable, static, homogeneous peasant communities, in which migration was fairly exceptional, which is generally inconsistent with empirical evidence. So, as much as there was not a "beginning" of migration, we should not assume an "end" of migration at the right hand side of the bell curve. This model and, in fact, this paper is rather about the evolutions of particular migration systems linking particular communities, places and areas to particular destinations. It does not pertain to migration generally.

Another risk of diffusion theory is to adopt a dogmatic, evolutionary view of the migration stages communities "have to" go through. Empirical realities tend to depart from this ideal type, in particular if macro-contextual conditions (which are assumed constant) change.

A more fundamental problem is the assumption that "over time migration spreads outward to encompass *all* segments of society" (Massey 1990: 8, emphasis by author). From empirical studies, we know that this is often *not* the case because communities and societies tend to be socially and/or ethnically stratified, and group boundaries can impede the diffusion of the migration experience across communities. Instead of spreading to *all* segments of society, migration tends to be a socially stratified process, in which particular families, ethnic groups or classes participate in specific forms of migration. This is likely to coincide with the *exclusion* of other groups from migration.

This evokes the necessity to incorporate structure and power in the analysis and to shift away from neo-classical interpretations of network theory which somehow assume a 'level playing field'. It particularly compels us to embark upon a more critical discussion of the fundamentally mixed blessings of social capital in migration processes.

5.2. The downsides of migratory social capital

Social capital in the form of strong kinship and social bonds facilitate the migration of group members. However, the flipside of the coin is that such strong group bonds tend to *exclude* outsiders from access to migration. Particularly in relatively poor communities where social organization and trust are mainly based on strong kinship ties and 'bonding' social capital (see further), these bonds also tend to be a prime channel for gaining access to international migration, either through marriage, assistance with securing visas, financing (often) irregular migration, finding work and

housing, and so on. Often migrants, and their children, tend to prefer to marry partners within their own extended family or their own ethnic lineage (cf. de Haas 2008).

Therefore, kinship or class-based access to migrant networks also tends to coincide with kinship- or class-based inequality in access to such networks. This also explains why the supposed "diffusion" of migration within communities can remain largely limited to particular ethnic groups, families or classes which monopolize access to international migration. So, the predicted spread "to all segments of society" (Massey 1990: 8) does not necessarily occur. Although networks tend to be of great help for insiders, they also tend to be exclusionary for outsiders.

This points at the "downside of social capital", a concept coined by Portes and Landolt (1996) and further elaborated by Portes (1998) in his seminal paper on the origins and applications of social capital. Portes introduced this concept to criticize uncritical and fashionable applications which celebrate social capital as a "key to success and development". As Portes argues, popular views now portray social capital as wholly beneficial, and thereby naively assume that social capital can resolve the classic dilemmas of collective action. However, as Portes (1998) argued, social capital also has at least four possible negative implications:

1. *Restricted access to opportunities through exclusion*: The same strong ties that bring benefits to members of a group often enable the group to exclude outsiders (Portes 1998: 18, Portes and Landolt 1996: 3);
2. *Excessive claims on group members:* Tight social networks and obligations may undermine individual economic initiatives through pressing social obligations and excessive claims on such successful individuals to support family and community members.
3. *Restrictions in individual freedom*: Community or group membership creates demands for conformity, which can be asphyxiating to the individual spirit. A high level of social control can also be quite restrictive of personal freedoms.
4. *Downward levelling norms*: Particularly if group solidarity is cemented by a common experience of adversity and discrimination by mainstream society, individual success stories undermine group cohesion "because the latter is precisely grounded in the alleged impossibility of such occurrences" (Portes 1998: 17). This may lead to the emergence of downward levelling norms that keep members of a group in place and force the more ambitious to escape from it.

This paper argues that these four "downsides" of social capital as identified by Portes can be applied to the study of the internal dynamics of migration processes. The concept is particularly useful in explaining pioneer migration, the limited diffusion of migration across group boundaries, and why migrants may increasingly act as 'gatekeepers' instead of 'bridgeheads'. Incorporation of negative forms of social capital in our conceptual framework will enable us to improve insights into the internal dynamics that may block or undermine self-perpetuating migration dynamics.

5.3. The exclusionary dynamics of migrant networks

Social capital in the form of migrant networks tends to invariably be seen as an unmixed blessing facilitating more migration. However, if access to migration networks is for instance based on ties of kinship or ethnicity, this implies that although current migrants may indeed act as "bridgeheads" for prospective migrants within the same group, they may also act as "gatekeepers", who are unwilling to assist outsiders. This also highlights the abovementioned importance to decompose social capital into (1) the social relationship itself and (2) the amount and quality of resources that can be accessed through such relationships. This distinction was essential in Bourdieu's original definition of social capital (see above), but these two elements have unfortunately been confused in much of the later literature (cf. Coleman 1988, Putnam 2000). Portes argued that the inherent danger of such analytical fuzziness is tautological reasoning. After all, "defining social capital as equivalent with the resources thus obtained is tantamount to saying that the *successful succeed*" (Portes 1998: 5, emphasis added). The implication is that strong social networks only facilitate migration if network members have access to *resources* facilitating such migration.

It is important to stress that *networks as such are neither a necessary nor a sufficient condition for migration to occur*. Bourdieu (1985: 241) emphasized that the different forms of capital are fungible. This implies that economic, human, cultural[5], and social capital can be converted into each other. Social capital in the form of migrant networks can be a useful resource enabling people to migrate and, hence, potentially gain access to economic, human and cultural capital. However, strong social connections *as such* do not enable migration. Networks do not automatically lead to more migration, because they require that migrants are both (1) able to mobilize the necessary resources (or capitals) to facilitate migration and (2) willing to help prospective migrants because of moral obligations, self-interest or a combination thereof.

For instance, impoverished and marginalised migrants might simply be *unable* to deliver "help" because they lack the resources to do so. Assimilated migrants who lost close transnational ties will be capable but generally not willing to provide migration assistance. Therefore, successfully integrated migrants who have retained strong transnational ties seem ideal migration facilitators.

It is also crucial to observe that migration is not necessarily achieved through social capital (networks), but can also be achieved through other forms of capital. We can therefore hypothesize that relatively poor, low skilled migrants are generally more dependent on social capital in the form of networks in order to migrate than relatively wealthy, high skilled migrants. People possessing high levels of economic, human and cultural capital will be better able to migrate without the help of others. This relatively high dependence on social capital helps to explain why low skilled migrants tend to cluster in specific towns and neighbourhoods as opposed to the more individualized

[5] Bourdieu (1979; 1985) did not use the term human capital, but this concepts seems to be more or less included in his definition of cultural capital (see also Portes 1998).

and spatially more diffuse settlement patterns of high skilled, wealthy migrants who are able to migrate more independently.

Several empirical studies have shown that this can lead to situations of "involuntary immobility", in particular in communities where past migrations have increased people's aspirations to migrate, but where access to international mobility has become more costly and selective through restrictive immigration policies (Carling 2002, de Haas 2003, Jónsson 2008). This exemplifies that networks are a double-edged sword which include some groups, but therefore inevitably exclude others. "Sociability cuts both ways", to speak with Portes (1998: 18). We can hypothesise that the more closed groups are and the higher the migration costs are, the higher the level of outsider exclusion will be.

5.4. Migration undermining contextual dynamics

Because communities and societies tend to be socially or ethnically stratified, diffusion of migration does not tend to diffuse throughout entire societies, and while it may enable migration from group members, such dynamics tend to exclude non-members. There are also a number of contextual feedback mechanisms which may undermine migration in the long term. First, diseconomies of scale of migrant networks through increasing competition for jobs and pressure on wages might further decrease the willingness and ability of settled migrants to provide migration assistance.

Epstein (2008) hypothesised two opposing effects resulting from the increase of the size of networks. The first effect is direct and increases the migrants' benefits from the network. The second is negative *via* the decrease of wages, which potentially decreases the migrants' benefits. Initially, both new migrants and settled migrants benefit from network growth through mutual support and economies of scale involved in growing migrant clusters. However, these advantages tend to decrease over time, and at the point that the marginal costs of having more immigrants start to exceed the benefits for the already settled migrants. Then the existing migrants become less likely to wish more migrants to join them (Epstein 2008: 573). There is some empirical evidence confirming that the probability of an individual migrating to a particular destination has indeed an inverse U-shape relationship, with regard to the stock of immigrants already in the host country (Bauer, Epstein, and Gang 2000, Epstein 2008: 573).

If the number of immigrants increases, there is potentially more competition for jobs, which potentially lowers immigrants' wages. Such negative network externalities may eventually cause the attractiveness of a destination to decrease (Epstein 2008). This seems to be corroborated by macro-economic evidence suggesting that whereas immigration often has a positive, albeit small impact on total economic growth, it may have adverse effects on lowest income earners, often (former) immigrants themselves (WorldBank 2005). In particular, if immigration is subject to adverse selection (often as a consequence of threshold-lowering network effects), early, high-productive immigrants have fewer incentives to assist low-productive community members or co-nationals to immigrate (Epstein 2008, Stark 1991).

In addition, once an immigrant population reaches a particular size and maturity, and second and even third generations start to come of age, an individualistic culture can take hold and relations can become more impersonal, explaining why "the arrival of someone from 'back home' may not evoke the same feeling of responsibility and benevolence" (Epstein 2008: 580). Although migrants and their descendents often maintain a strong attachment to their homeland and develop transnational identities, such transnational attachments *tend* to become more diffuse and general and less directly tied to kinship relations and implicit social contracts with family "back home".

Also at the sending end, several social, cultural and economic feedback mechanisms tend to contribute to the long-term breakdown of migration systems. First, network-driven diffusion processes might also have a non-linear impact on income inequality, relative deprivation and migration aspirations. *Ceteris paribus*, network effects and the hypothesized diffusion of migration is likely to decrease the selectivity of migration over time and, hence, will dampen or even reverse the initial inequality (and relative deprivation) increasing effect of migration. Empirical evidence suggests that, as a consequence of this diffusion process, the initially negative effect of remittances on income equality might, therefore, be dampened or even reversed in the long term (Jones 1998, McKenzie and Rapoport 2007). Such processes can eventually also attenuate migration aspirations and propensities. In addition, diffusion of the international migration experience throughout communities may result in a declining prestige attached to international labour migration. This may even lead to negative values attached to migration, as a last resort for people who cannot make it at home[6].

We can also hypothesise other contextual feedback mechanisms contributing to the decline of networks and migration systems, which can be explained by the desire among resident, remittance-receiving migrant families to avoid negative social capital. If international migrants and the family they left behind are continuously confronted with excessive claims by more distant family and community members for financial and migration assistance, this can eventually cause a social and also spatial distancing from non-migrant community members. In rural Morocco, for instance, migration-related tensions between the migrants' wives and their families-in-law over remittance use. This has accelerated the nucleation of extended families and the concomitant construction of new houses for migrants' nuclear families outside the village, such as in nearby towns (de Haas 2003, De Mas 1990, Hajjarabi 1995). Such spatial lifting out of nuclear families can be interpreted as an attempt to escape from social pressures to "help" excessive claims by family and community members, the second form of negative social capital identified by Portes (1998).

Portes (1998: 16) argued that "cosy intergroup relations of the kind found in close-knit communities can give rise to a gigantic free-riding problem, as less diligent members enforce on the more successful all kinds of demands backed by a shared normative structure". Nonmigrants can put strong moral pressure on migrants to help them and share their wealth. "Good" migrants are expected to share their wealth with

[6] I observed this during fieldwork I conducted in Emirdag, a rural area in Turkey in 2005, where youth now increasingly aimed to study and build their futures in big cities such as Istanbul, Ankara and Izmir. Labour migration to Europe was increasingly seen as behaviour typical for "losers". There seems to be an obvious link between this shift in orientations and Turkey's recent spectacular economic growth.

poorer villagers or to help them with establishing businesses or migrating (de Haas 2003). Those not acting conform to norms of "shared poverty" (cf. Geertz 1963) risk being criticized. This can eventually encourage the relocation of migrant households and the breakdown of migrant networks.

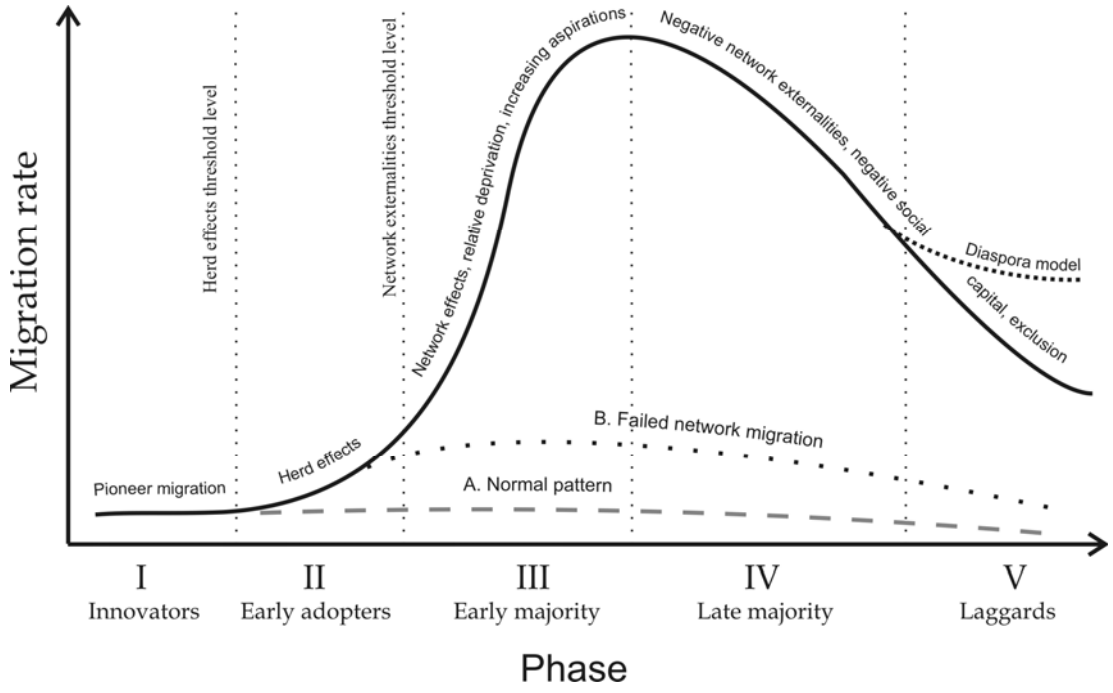
6. The formation and decline of migration systems

So far, this paper has argued that existing theories on the internal dynamics of migration processes excel in explaining the expansion of already established migrant network and migration systems, but fail to analytically capture their creation, different trajectories and demise. While exclusionary mechanisms of group formation help to explain the limited diffusion of migration across communities and societies, it is also important to theorise the factors explaining why only a minority of initial migration moves set in motion self-reinforcing endogenous and contextual feedback mechanisms resulting in the creation of migrant networks and full-blown migration systems.

Network dynamics are not immediately set in motion after the departure of the first migrants. After all, if these self-reinforcing processes apply from the beginning, all initial migration moves would evolve into migration systems. It has been argued that the number of migrants and network connections first has to reach a certain *critical level* (cf. Massey 1990: 8) before effects of clustering and economies of scale start to give migration processes their own momentum through endogenous and contextual feedback mechanisms. However, the existence and level of such a threshold has neither been satisfactorily theorised nor empirically identified. This illustrates the need to improve insights in the processes that precede the establishment of migration systems, *before* migration gains its self-reinforcing internal dynamics.

This requires synthesising the various hypotheses developed so far into a temporal conceptual framework. To this purpose, this section proposes an ideal-typical framework on the various processes and relationships which explain the *differentiated* rise and fall of migration systems across space and time. It is important to emphasise that this is an ideal-type, which does not presume universal applicability, linearity or irreversibility, but is rather a heuristic device to identify the various migration-facilitating and migration-undermining endogenous and contextual feedback mechanisms that are typically at play during the various trajectories and stages of migration system formation and decline. This framework, which is depicted in figure 3, will be based on the notion of migration as a spatio-temporal diffusion process, but will be extended and amended with various theoretical insights discussed above. Because of significant data gaps, this exercise is primarily meant to provide a set of hypotheses, which will need further verification and modification through empirical research.

Figure 3. Ideal-typical migration trajectories of migration system formation and decline



6.1. Migration as innovation: pioneer migration

How does migration start? While the macro-contextual factors which tend to condition migration (such as opportunity differentials, policies, infrastructure, or violent conflict) are well documented, the factors which actually trigger initial migration moves and destination choice are less well known. Even in the case of labour recruitment or conflict-induced migration there is usually some degree of agency and destination choice involved. Explanations such as ‘coincidence’, ‘luck’ or the ‘bright lights of the city’(cf. Harris and Todaro 1970) are intellectually unsatisfactory.

Under different guises, the migration literature has made a classic distinction between pioneer (active, innovating) and chain (passive, conservative) migrants (Hägerstrand 1957, Petersen 1958). Pioneer migrants are generally recognised to be among the relatively well-off, risk-prone and entrepreneurial community members (MacDonald and Macdonald 1964, Vecoli 1964). This also implies that they are likely to be rather non-conformist, as the adoption of new ideas and behaviour (such as migrating to a particular destination) often implies violating social norms and therefore requires an independent spirit. This leads to the hypothesis that *negative* social capital can be an important cause of pioneer migration. As Portes (1998: 16) pointed out, a high level of social control restricts personal freedoms, “which is the reason the young and more independent minded have always left”. In particular, the second (excessive claims on group members) and third form (restrictions on individual freedom) of negative social capital can explain why particularly non-conformist and entrepreneurial community members have a desire to escape from their social context.

This reveals the danger of *automatically* conceiving migration as an act of group solidarity or as part of household livelihood strategies, which has been the overall tendency in the literature. Although such approaches constituted a welcome departure from neo-classical, individualistic approaches, this entails the danger of reifying the household or family as a harmonious unit with a clear will, plans, strategy, and aims. This leaves no place for dissent, conflict and the desire to escape. In particular, pioneer migration can under certain circumstances be motivated by the desire to *escape* from asphyxiating and oppressive kinship and community bonds. Negative social capital can also give a theoretical explanation why not all migrants maintain intensive social and financial ties, although once established, financially secure and socially independent, pioneer migrants might renew such bonds at later stages of the life cycle (cf. Stockdale 2002).

6.2. Early adopters: Chain migration and herd effects

Pioneer migrants tend to end up in a range of destinations while others return, but only a small minority of such moves will eventually result in network migration to the destination. If pioneer migrants settle at the destination, limited chain migration[7] of close family members or friends might follow, after which migration largely ceases. This most common scenario of countless initial migration moves that never result in take-off migration is represented by line A in figure 3. It is important to emphasise that this non-occurrence of self-perpetuating dynamics is the hypothesised *normal* pattern or trajectory of migration systems formation.

But the crucial question remains: under which conditions do initial moves by pioneer migrants result in rapidly expanding network migration and the formation of migration systems, and under which conditions does this not happen? To understand the growth and clustering processes of migration to particular destinations *before* the hypothesised network threshold level is reached, it is useful to draw on Epstein's (2008) distinction between (1) *herd* and (2) *network* effects. Epstein (2002, 2008) argued that those without information about destinations will migrate to where most initial migrants have gone to. Because full information on all possible destinations is never available, migration choices are made under conditions of uncertainty. It is then a rational choice for new migrants possessing no or limited information to follow previous migrants on the supposition that previous emigrants enjoyed information that they did not have and that so many other people cannot be wrong (Epstein 2008: 569).

Such herd effects can explain that migration can become self-reinforcing *before* the hypothesised network threshold level is reached. This effect needs to be distinguished from network effects. As more individuals migrate, unobserved conditions at the destination are further reduced (Radu 2008), leading to an increasing clustering around a few specific destinations. Theoretically, even rather tiny initial leads in the

[7] We define chain migration as the migration of direct kind family members of pioneer migrants to distinguish it from network migration. Migration chains then refer to direct, vertical family ties, whereas networks suppose transversal connections between migratory family chains both at the community level at both the origin and the destination.

number of migrants at a particular destination will be magnified many times through the increased clustering of migration through herd effects. The crucial corollary of such increasing spatial concentration means that most migration and herd behaviour to other destinations will remain limited and will die off below the migration take-off threshold level. This hypothesised pattern of "failed migration systems" is represented by line B in figure 3.

6.3. Take-off migration: Mutually reinforcing network externalities and contextual impacts

Only a few initial clusters will reach a certain critical threshold level at which endogenous and contextual feedback mechanisms start to make the process self-reinforcing. Although we hypothesise the existence of such threshold levels or tipping points, this still needs to be confirmed empirically. A recent national survey among rural Mexican households showed that community and family networks are substitutes in facilitating migration, but that, once migration is well established in a community, family networks become less important and community networks become more important (Winters, Janvry, and Sadoulet 2001). The study also revealed that the development of strong community networks decreases the role of household characteristics in migration, allowing those initially least favoured to also participate in migration. While this is consistent with the diffusion hypothesis, it points to the importance of disentangling family chain and network migration.

Networks not only facilitate migration but also facilitate settlement and adjustment to a new location by providing migrants with access to local resources. Beneficial network externalities arise when the stock of migrants is sufficiently large to provide accommodation, work, and other economic assistance, and reduce the stress of cultural adaptation (Epstein 2008). While networks decrease the costs and risks of migration, positive network externalities and economies of scale created around immigrant clusters make the destination more and more attractive for new migrants. At the same time, 'ethnic' businesses and niches in the mainstream economy create a demand for migrant labour. This makes an increasing number of migrants gravitate to that particular destination, reinforcing such feedback effects.

At the sending end, several feedback effects tend to increase aspirations and capabilities to migrate. First, networks and remittances facilitate the financing of the migration of other family and community members. Second, the initially inequality-increasing effects of remittances are likely to increase feelings of relative deprivation among non-migrants and, hence, their *aspirations* to migrate. Social remittances are likely to reinforce these processes reciprocally and can even lead to a shift in preferences sometimes dubbed as a "culture of migration", in which increasing prestige is attached to migration. Third, remittance-driven increases in local consumption and investment in houses and businesses may stimulate local economic growth and, hence, increase employment and income of non-migrants through multiplier effect. This will enable an increasing share of the population to reach the threshold level at which they can assume the costs and risks of migration. Conjointly with network effects, such indirect economic effects will increase people's *capabilities* to migrate.

To summarise, internal dynamics at the sending and receiving end tend to reinforce each other during this take-off phase by (1) lowering migration threshold levels through network effects; increasing (2) capabilities and (3) aspirations to migrate. This can explain increasing migration even if other opportunity differentials between destination and origin decrease. We can hypothesise that as long as people's aspirations increase faster than increases in local opportunities, migration will continue to increase, while internal dynamics of migration processes will increase people's ability to migrate.

6.4. Social capital and the selective formation of migration systems

A *certain* level of spatial clustering at the destination is a prerequisite to generate the threshold externalities necessary to make the transfer from chain to network migration, which then becomes partly self-sustaining. This happens when a sufficient number of migrants have started to independently establish ties so as to create a sense of community at the destination. Spatial clustering is more likely to generate contextual feedback mechanisms described above which give migration its own momentum.

On the basis of migratory social capital theory discussed above, we hypothesise that such self-reinforcing dynamics are more likely to occur among relatively poor and low skilled migrants who face relatively high material, social and psychological migration costs, and who are consequently more dependent on social capital for migration and, hence, more likely to cluster at the destination. Because high-skilled migrants are generally less dependent on social capital for migrating, their settlement patterns are more diffuse and they are likely to assimilate more rapidly (Choldin 1973, Epstein 2008).

Thus, the evolution of pioneer migration into full-blown network migration and migration system formations seem to be the exception rather than the rule. So, why and how do only some small clusters of family migration *chains* eventually evolve into community-wide migration *networks* and local and regional migration systems? Because of the pivotal role of *information* in migration in the pre-network stage, it is useful to consider Granovetter's (1973) hypothesis of the "strength of weak ties". Granovetter criticized conventional social network models for confining their applicability to small, well-defined groups, by stressing the cohesive power of weak ties. He argued that the degree of overlap of two individuals' networks and, hence, information, correlates positively with the strength of their tie to one another. Diffusion of new information, opportunities and behaviours are therefore more likely to enter groups through "no strong ties" or "bridges", which provide the links between primary groups (Granovetter 1973: 1364).

Later interpretations of Granovetter's initial hypothesis have evolved into the now conventional distinction between 'bonding' and 'bridging' social capital (Putnam 2000). While bonding social capital refers to the value of networks for homogeneous groups, bridging social capital is generally attributed a more positive value believed to increase community cohesion and the society-wide spread of information and innovative ideas and behaviours. So, while Portes (1998) pointed out that strong intra-community ties tend to exclude outsiders, we may add that the reverse applies as well: strong bonding and weak bridging social capital tends to exclude *insiders* from new information and ideas: the fifth downside of social capital.

Applied to migration, this means that information on new destinations is more likely to spread through relatively distant connections than through very close contacts. From this, we can hypothesise that the more closed and isolated social groups are (i.e., groups with strong bonding and weak bridging social capital), the lower their participation in migration will be. Groups which *combine* strong bonding with strong bridging capital are more likely to migrate because of their access to information on migration opportunities, but they are more likely to concentrate in particular enclaves at the destination. This will create externalities that will be of great benefit to group members.

In particular, this seems to apply to tightly knit ethnic and religious groups specialising in trade, such as the Mourid Sufi brotherhood in Senegal, who have developed vibrant and highly successful global trading and migration networks (cf. Stoller 1996). Through trading, they tend to be well informed and economically successful, but at the same time they have a strong group identity and tend to fiercely resist assimilation. If such transnational networks linking migrants from the same (imagined or real) motherland across several destinations are sustained over generations, migrant groups may eventually become "diasporic" (Cohen 1997). Yet, this will also coincide with exclusion of outsiders and, hence, a lower degree of diffusion of migration participation across communities and regions in origin countries. So, this will not lead to enough diffusion outside the group for large-scale network migration to occur.

If we simultaneously apply Granovetter's (1973) hypothesis of the "strength of weak ties" and Portes' (1998) hypothesis on the "downside of social capital" to the theory of migration system formation, we can therefore hypothesise that, a certain optimal balance between strong intra-community ties and 'weak ties' is a necessary condition for migration to gain its own momentum. Large-scale migration diffusion through network effects seems most likely to occur among relatively poor, low skilled migrant groups with a "moderate" level of group identity, cohesion and "strong ties", which should be strong enough to guarantee clustering and prevent too rapid an assimilation, but also loose enough so that group norms do not prevent the establishment of "weak ties". This seems to apply particularly for rural communities in relatively poor but rapidly modernising and transforming societies.

This perspective also makes it possible to link cultural and social change in explaining how modernisation-affected cultural change in the form of loosening group ties and growing connectedness to the outside world can spur migration. Most international migration does not occur from the poorest "margin of the margin" communities, as migration not only requires a certain threshold level of wealth, but also the necessary

aspirations and "weak" social connections. It seems no coincidence that international migration propensities are often particularly high in "moderately marginal" areas and towns in middle income countries (such as Mexico, Turkey and Morocco), where modernizing cultural influences are fundamentally changing local culture, loosening community ties, but where local or even national opportunities cannot meet surging aspirations. Communities who do not resist cultural change, and whose younger members are rapidly expanding their imaginative and geographical horizons, are often better culturally and socially connected to the outside world through education, travel and – last but not least –migration.

Table 2. Hypothesised effects of migrants' group cohesion, human capital and migration costs on internal migration dynamics

		Networks	
		Many bonding ties, low skilled	*Many bridging ties, high skilled*
Migration costs (distance, infrastructure, policies)	*Low*	Initially strong clustering, after which intra-community diffusion occurs through 'herd' and 'network' effects, transfer of family to community networks; declining relevance of networks over time	Networks less important, low spatial clustering, spatially diffuse flows, rapid diffusion of migration through spread of information
	High	Highly clustered flows perpetuated over long time periods, limited diffusion, highly facilitating for members, but highly and increasingly exclusionary for non-members.	Importance of networks at family and friends level (chain migration), rapidly declining over time

6.5. Stagnation and migration systems decline

Once migration networks and systems are established, the internal dynamics of migration processes at the sending and receiving end tend to be mutually reinforcing and give migration its own momentum. However, the core of our argument is that these self-reinforcing mechanisms are not linear and tend to give way a range of dynamics that may undermine migration networks and migration systems.

First, migration networks do generally not expand across entire communities and societies, particularly if strong bonding social capital within ethnic and other social groups coincides with the exclusion of outsiders and prevents a wider diffusion of the migration experience. Second, once networks and migration systems reach a certain size and maturity, marginal positive externalities often start to decrease and diseconomies of scale might occur through increasing competition for jobs and other resources (Bauer, Epstein, and Gang 2000, Epstein 2008). Also on the sending side, negative social capital in the form of excessive pressure of non-migrants on migrants to share their wealth and assist them with migration can over the longer term lead to increasing social and spatial distancing (de Haas 2003). Hence, established migrants may gradually transform from "bridgeheads" facilitating subsequent migration to restrictive "gatekeepers" (Böcker 1994).

Long-term network and migration system contraction and breakdown is particularly likely to happen if (1) migrant communities start to experience socio-economic mobility, usually coinciding with increasing assimilation, geographical dispersal and less clustering; (2) if severe legal migration restrictions increase costs of migration and negative social capital in the form of the claims put upon settled migrants or if (3) opportunity gaps with origin and destination countries are dramatically reduced. We can hypothesise that in the phases of network contraction and breakdown, network migration will largely cease and most "late majority" and "laggards" migrants will move through family chain migration channels, as in the early phases of migration system formation.

Under the first and/or second conditions, migration flows occurring from the origin will not necessarily decrease but are more likely to shift to new destinations. Collyer's (2005) analysis of the spatial reorientation of recent Algerian asylum seeker migration from France to new destinations such as the UK is a case in point. Because family members of asylum seekers started to avoid claims on their assistance, migrants actively started to seek new, more attractive destinations, thereby mainly drawing on "weak" links. This is how new migration clusters might start to evolve. This again exemplifies the importance of both (1) weak ties and (2) negative social capital in the exploration of new destinations by pioneer migrants, which in this way may sow the seeds for future migration systems.

Although the declining, right-hand tail of figure 5 often occurs in practice due to gradual integration and assimilation processes, it is not inevitable, as is testified by migration systems which survive several generations and even centuries. In particular tightly-knit ethnic and religious groups might sustain transnational relations and develop transnational identities, which can become trans-generational and truly "diasporic", in the way Cohen (1997) defined them. Secondly, several studies have indicated that integration does necessarily goes along with declining transnational ties, or vice versa (Guarnizo, Portes, and Haller 2003, Snel, Engbersen, and Leerkes 2006). In particular, migrant groups that combine successful economic integration with limited cultural assimilation and maintenance of a strong group identity, seem to represent a high potential for network migration because they will combine a high willingness and capabilities to provide migration assistance.

6. Conclusion

Past research has identified the role of networks in explaining why migration processes become self-perpetuating leading to the establishment of migration systems. However, by focusing on the role of migrant networks in endogenously perpetuating migration processes, current theories have largely obscured the feedback mechanisms operating through migration-affected changes in the sending and receiving contexts. Second, current theories are remarkably unable to explain why these network effects do not always occur and are actually fairly exceptional. Third, the central argument of conventional network theories is *circular*, according to which migration goes on *ad infinitum*, assuming a naïve linearity of causality between the growth of migrant communities and (positive) network externalities.

Current theories give surprisingly little systematic insight into the feedback mechanisms that counteract the tendencies that lead to increasing migration through networks and which may lead to the weakening of migrant systems over time. This paper has provided theoretical and empirical evidence in order to outline the contours of a theoretical framework on internal migration dynamics.

As a starting point, the paper conceptualised migration as (1) an integral part of broader socio-economic transformation processes, which (2) also has its internal, self-sustaining *and self-undermining* endogenous dynamics, which (3) affects such processes of change in its own right. In their turn, these migration-affected contextual changes affect subsequent migration patterns. Where (2) refers to direct (endogenous) internal dynamics, (4) refers to indirect (contextual) internal dynamics of migration processes. Taking a dynamic perspective of migration as a diffusion process, the paper has attempted to achieve an improved understanding of migration system dynamics by elaborating a set of hypotheses on the various migration-facilitating and migration-undermining feedback mechanisms at play at the various trajectories and stages of migration system formation and decline.

The core of the argument was that internal dynamics operate in a fundamentally non-linear way. These internal dynamics tend to be positive and self-reinforcing at early stages of the growth of migrant communities, but tend to decrease over time and eventually become self-undermining. While positive network externalities derived at the destination from the clustering of migrants are likely to increase fast during early build-up phases of migrant communities but will decrease and can become negative at later stages through diseconomies of scale and increased competition for jobs and other resources. With the growth of migrant communities and the passing of time, positive externalities of network formation and economics of scale of the growth of immigrant clusters tend to decline and may finally become negative.

In the same vein, the initial inequality, relative deprivation and income increasing contextual effects of financial and social remittances on sending communities tend to *increase* people's capabilities and aspirations to migrate. At later stages of migration diffusion processes, such effects *tend* to be dampened or even reversed, if migration selectivity and, hence, remittance-propelled inequality and the social prestige attached to migration may decrease.

This paper also showed an urgent need to improve theories on the processes that precede the moment that migrant communities reach the critical threshold value at which migration processes become self-reinforcing. Although there is a significant research gap here, the paper has hypothesised the different mechanisms that might be at play during the early phases of migration processes. We might explain initial migration movements by theorising pioneer migration as innovative behaviour by non-conformist community members escaping *negative* social capital such as the lack of personal freedoms. In order to explain why only some initial migratory moves by pioneer migrants result in large-scale group migration through networks, the analysis has drawn on Epstein's distinction between "herd" and network effects to explain the fact that migrants tend to quickly gravitate around a few number of destinations.

The analysis also showed that major achievements in migration theory can be achieved by applying concept and theories developed in general social theory. In particular, concepts derived from the critical social capital literature as pioneered by Portes (1998) can be successfully applied to develop a more nuanced of the positive *and* negative role of social capital in migration processes. Such perspective helps to counterbalance one-sided positive views on the role of social capital in facilitating migration through networks. This can fill a crucial gap in our understanding of the factors that might contribute to the breakdown of migration networks and migration systems. Closed networks may facilitate migration of group members, but also tend to be exclusionary for outsiders and may therefore effectively *impede* the diffusion of migration within and across communities.

In addition, negative social capital in the form of excessive claims by non-migrant community members and strong moral pressure to support them, seems to play an important role in the crumbling of migration systems. This explains why settled migrants and their descendants often evolve from being “bridgeheads” to “gatekeepers”. This highlights the need for a more critical discussion of the fundamentally mixed blessings of social capital in migration processes.

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