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# Broadcast feedback as causal mechanisms for migration

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## The IMI Working Papers Series

The International Migration Institute (IMI) has been publishing working papers since its foundation in 2006. The series presents current research in the field of international migration. The papers in this series:

- analyse migration as part of broader global change
- contribute to new theoretical approaches
- advance understanding of the multi-level forces driving migration

#### **Abstract**

This paper is based on the findings of the Theorizing the Evolution of European Migration Systems (THEMIS) project, which explores how the migration of people at one point in time affects subsequent patterns of migration to the same area. It focuses on the feedback processes: the social mechanisms that link migration experiences across time and space. Drawing on THEMIS data, this paper looks at the role of migration narratives disseminated through publicly visible examples in shaping attitudes to migration, aspirations and decision making. These can be found at a local level – in migrants' houses, clothes, cars, or changed attitudes and behaviours for instance. They are also available globally through broadcast media and the internet. In the case of Ukrainians moving to Portugal in the early 2000s, the scale of the movement rapidly became a subject of public debate, ensuring that stories about migrants were present in newspapers and on television and radio. As a result the impact of earlier migration was seen far beyond social networks. Likewise, a Brazilian soap opera showing Brazilians studying in the Netherlands increased the profile of the Netherlands as a potential destination country. The news of the economic crisis in Europe and its impact on the employment prospects for migrants has also been widely disseminated in origin countries, changing people's imaginations of Europe and their interest in migration. This paper shows how this type of social mechanism stands apart from the idea of normative pressure or influence carried through social networks: it is a more nuanced mechanism, which may become normative only when it creates new conditions in which migration (or the rejection of migration) is broadly perceived as a social requirement.

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#### 1 Introduction

This paper examines the social mechanisms by which migration between localities in one period can affect subsequent migrations, giving rise to rather stable and recurrent patterns of migration. This feedback from earlier migrations is generated by the flow and counter flow of people, goods, information and ideas in what are often referred to as migration systems (Mabogunje 1970; Fawcett 1989; Kritz, Lim et al. 1992; Bakewell 2013). Much of the literature to date has focused on feedback arising from the operation of migrants' social networks. The idea of the social networks is certainly a powerful one and helps to explain the dissemination of ideas and behaviour between people and places. It has long played a central part in theories of migration, helping to explain why many migrants from the same origin location may end up at the same destination (Greenwood 1969; Levy and Wadycki 1973; Massey 1990; Gurak and Caces 1992; Singhanetra-Renard 1992).

In the literature on social networks and migration, however, there is often far too little discussion about the nature of the networks involved or explanation of how they come to affect migration aspirations and behaviour. This paper therefore differentiates between forms of network behaviour that are based on social networks and those shaped by the shared context more than personal interaction. We make this distinction by demanding rather a strong definition of a social network as a potential causal mechanism. This can be compared to a much looser idea of a network associated with co-residence, co-location or other shared characteristics which does not necessarily entail *social* network relationships.

This paper draws on qualitative and quantitative data collected during the THEMIS¹ project in three origin countries (Brazil, Morocco and Ukraine) and four destination countries (the Netherlands, Norway, Portugal and UK). It examines the extent to which migration patterns are influenced by factors that operate at the level of this common context – where each individual receives or has the potential to receive the same messages, information or assistance regardless of their position in social networks. We refer to this feedback as being *broadcast*, metaphorically and as we shall see sometimes literally through TV and radio. Broadcast feedback is available to all without discrimination on the basis of one's social network. Of course, the extent to which it is picked up and the meaning with which it is imbued will be mediated by individual and collective characteristics – including aspirations – and also connections to social networks. All those who pass a house built by a migrant may see it, but it may generate interest only among a particular social group.

In the next section, we critically reflect on the extent to which social networks can be seen as a cause of new migration, tease apart the different ways that network effects might influence migration patterns, and outline our concept of broadcast feedback. In the third section we introduce the data from the THEMIS project, which provides the empirical basis for the analysis. Drawing on this data, we show that social networks are not necessarily the primary medium for potential migrants learning of potential destinations or gaining practical advice before moving. Instead, as we show in the subsequent section, different forms of broadcast feedback can be identified and this plays an important role in shaping people's migration outcomes. After acknowledging the fuzzy boundaries between this broadcast feedback and social networks, we conclude that a comprehensive analysis of migration must take both into account.

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<sup>&</sup>lt;sup>1</sup> The THEMIS project explores the conditions under which initial moves by pioneer migrants to Europe result in the formation of migration systems, when this does not happen, or migration systems are in decline. Financial support from NORFACE research programme on Migration in Europe - Social, Economic, Cultural and Policy Dynamics is acknowledged. The views expressed here are those of the authors. They are not necessarily those of the THEMIS project and NORFACE. For more information, please see <a href="http://www.imi.ox.ac.uk/completed-projects/themis">http://www.imi.ox.ac.uk/completed-projects/themis</a>

#### 2 The limits of social networks as causal mechanisms

The operation of the social network, as an explanatory or causal mechanism for migration (or indeed any other behaviour), implies that there is some common bond between the people in the network. It is more than simply a correlation between people sharing some characteristic (such as living in the same neighbourhood) and a particular outcome (perhaps using the same supermarket); the relationship must be of 'substantial significance' (Granovetter 1978: 1361). There must be both a meaningful and a sustained connection between the people that can be hypothesised to change outcomes. Both aspects are important. It is easy to envisage connections that are meaningful without being sustained. Life is full of important interactions, from the transactions in shops that secure our food and clothing to the exchange with the beggar on the street. For the most part however, these interactions are relatively fleeting and we do not have on-going contact with the people involved beyond the single transaction. Likewise, we can think of connections that are sustained but have little significance for us. We may see the same people every day on our way to work or walking the dog, and start to exchange nods and smiles. Left at this level, the connection is rather superficial and does not involve the exchange of information about each other's lives or emotional commitment to the other.

Perhaps, we also need to take this further to include a multifaceted or multiplex relationship. One may have a meaningful and very important interaction with a solicitor at key points of life, when buying a house, getting divorced, or making a will, for example. If the interaction is simply limited to this formal contact governed by a (usually expensive) contract, it seems a stretch to say we are in a social network relationship. It starts to look like a network, when there is more contact outside the contract – perhaps by socialising or playing sport together for example. The same could be extended to the virtual social network, where a functional relationship developed around one aspect of life on LinkedIn, for instance, may be extended to become a multifaceted social relationship.<sup>2</sup>

Just because people live in the same place does not mean they are in the same social network. Their shared context may mean they observe similar things – like new businesses or buildings – but the view of a labourer may be rather different from that of an accountant. What we are concerned with here is the influences of these shared contexts, where images, information and advice may freely flow, undirected and be picked up by those moving in these common spaces. It is important to emphasise that we are considering, what Granovetter refers to as 'absent ties' (Granovetter 1973: 1361) rather than the strong and weak ties that are the focus of his analysis.

The important role of social networks in migration dynamics has been extensively studied. We focus here on the existing research on their role in migration feedback processes. Massey (1990) noted the role of migrants providing information and assistance to non-migrants in their social networks in the areas of origin to reduce the cost and the risks of migration. This help in form of assistance and information spreads migration behaviour. These self-sustaining effects are part of the idea of the cumulative causation of migration (Massey 1990). If migration experiences are perceived negatively by the majority, network mechanisms can generate negative feedback loops and call into question the theory of cumulative causation (Garip and Asad 2013).

DiMaggio and Garip (2012) identified three types of social network effects that can take place in migration contexts: *social learning effects* that occur when social networks provide pieces of information that have an impact of the costs and risks of migration; *normative influence effects* where social networks can change the way that migration is valued thereby affecting social pressure to either migrate or stay; and finally, what they refer to as *network externalities* – the common resources available

<sup>&</sup>lt;sup>2</sup> Exploring in detail the nature of social relationships online is beyond the scope of this paper.

through previous migrant flows and its resulting migration industry. While they describe these network externalities as social network effects, it is not clear that they are necessarily related to the operation of a *social* network. Nonetheless, they reduce the costs of migration and increase its value (Garip and Assad 2013).

As de Haas observes (2010), when analysing patterns of migration, it also important to consider the impact of feedback on the wider social, cultural or economic conditions in which migration takes place. As he argues, the focus on social networks has tended to obscure these rather more extended feedback loops. However, social networks may also play a role in these wider transformations as migrants send social remittances. Defined as the flow of ideas, behaviours, identities and social capital transmitted by migrants individually or as a member of a formal or informal group in a transnational social field, social remittances transform ideas, behaviours and organisational practices (Levitt 1998; Levitt and Glick Schiller 2004; Levitt and Lamba-Nieves 2011).

Levitt initially made a clear differentiation between social remittances and other types of – socio-cultural exchanges (Levitt 1998). The former are identifiable and transmitted intentionally to a specific audience, and the latter are unsystematic, unintentional and sometimes received involuntarily (Levitt 1998: 936). Nevertheless, the literature has subsequently included under the definition of social remittances more impersonal transmissions through local television channels or the internet (Levitt and Lamba-Nieves 2011). Ideas and behaviours transmitted through TV or the internet, even if they are sent intentionally to a specific group can be unintentionally transmitted to and received by a wider audience.

This starts to move us away from feedback operating through social networks towards what we will describe as broadcast feedback, which is not dependent on social networks but can still change migration decisions and outcomes. Our evidence from the THEMIS project suggests that these broadcast feedback mechanisms are likely to be become more important in the current global context where social practices are no longer transmitted exclusively in the physical space but also remotely (Castells 2010).

In this paper we tease apart the different impact of the influence of feedback operating through social networks – direct contact with people known through interactions that are not necessarily associated with migration – and that of broadcast feedback operating through more impersonal channels. This is not clear cut and we argue that one can differentiate five forms of feedback:

- 1. *Personal network feedback*: where a potential migrant has direct individual communication with a personal contact with experience of migration. Here we are thinking of letters, phone calls, emails, Skype and Facebook chat, and so forth.
- 2. *Narrowcast feedback*: where a personal contact sends news, information or advice in an impersonal form. In the past, this would have been newsletters, but today it is more likely to be blog posts or other online news items, which is directed at members of the network, but may be available to all.
- 3. *Induced broadcast feedback*: here the potential migrant sets out to discover online or through other means new contacts not in their existing social network in order to gain advice, information or other help to further a potential migration project. While this may result in the expansion of a person's social network, the resultant migration decision cannot be said to be caused by the potential migrant's network as that feedback has generated the network. In other words, it is the migration aspirations and decisions that can induce the feedback of information and advice from existing migrants, and in due course this may generate new social networks. This is closely related to the network externalities effect identified by DiMaggio and Garip (2012) as it relies on the physical and virtual resources resulting from previous migration flows. It operates beyond social networks at the level of the broader common context.

- 4. General broadcast feedback: where the information, images and ideas about migration are transmitted indiscriminately to a wide audience either intentionally (in TV and radio programmes or webpages that set out to spread messages about migration) or less consciously (where migration features in a story line). Here, feedback is generated in *mediascapes*; in other words, it comes from information disseminated through, and images of migration created by the mass media (Appadurai 1990).
- 5. Embedded broadcast feedback: where images and ideas are transmitted indiscriminately through the transfer of tangible (objects) and intangible (ideas and behaviours) evidence of migration outcomes to a particular context. They will only have meaning in a local area or for a particular audience that have local knowledge or understand that context. This is concerned with both the stories and rumours of people in the area who have migrated the tales of wealth or woe, or visible signs of the houses they have built, the businesses they have set up or the clothes they wear, and also changes in behaviours and attitudes observed by non-migrants, evidence of migrant's collective and individual social remittances (Levitt and Lamba-Nieves 2011). These images and ideas will only resonate among those who can see the change in condition of the migrant since they know where they have come from. Like the general broadcast, this transmission can either be intentional, for example, where the migrant ostentatiously parades her wealth in public view, or subconscious, where a migrant starts sending his girl children to school and the change is noted by non-migrants.

We acknowledge that distinguishing these forms in this way is primarily a heuristic device and the boundaries between them are extremely blurred. Nonetheless, we argue that we can see different causal mechanisms at work and making this distinction enable us to understand the interplay between this broadcast feedback and feedback operating through social networks.

In the rest of this paper, we focus on the last three forms of broadcast feedback. Using the THEMIS data, we show how they operate and help to shape migration decisions and outcomes for different people in various contexts. We start by arguing that while social networks play an important role in shaping migration patterns, they do not offer an adequate explanation in themselves. We suggest that taking account of broadcast feedback is one element that helps to fill this gap and we then discuss the different forms of feedback outlined above giving examples from the data.

#### 3 Data and context

This paper draws on the dataset gathered between 2010 and 2013 for THEMIS. This four-year international project aimed to fill theoretical gaps in migration systems theory by examining the emergence of different migration patterns between localities in three origin countries – Brazil, Morocco and Ukraine – and cities in four destination countries – the Netherlands, Norway, Portugal and UK. The project collected both qualitative and quantitative data.

The research team conducted 362 semi-structured interviews among people aged 16 or more born in Brazil, Morocco and Ukraine or with at least one of their parents born there, and living in the European areas under study. In the areas of origin 271 semi-structured interviews were conducted with return migrants and migrant's family members (up to the third degree of kinship) aged 16 or more, with links to the Netherlands, Norway, Portugal or UK, and mainly born in their country of residence. The respondents were selected using snowball sampling strategically, aiming for a diverse group in terms of gender, age, social class, motive of migration, and duration of stay in the case of migrants in Europe. The 633 interviews were transcribed and coded in NVivo 9 software using a common coding scheme. For our analysis in this paper, we have used compound searches on all the interviews combining text searches with particular pre-coded nodes.

Quantitative data was also collected in both destination and origin. For the former, a survey was conducted with a total of 2,859 from Brazil, Morocco and Ukraine in cities in the Netherlands, Norway, Portugal and the UK (see Table 1). In the absence of solid sampling frames that include all members of the target population and the scattered and small populations making migrants difficult to reach (especially if they are irregular), it was impossible to use standard probability sampling to obtaining unbiased estimates. Therefore, respondent-driven sampling (RDS) – a form of chain referral sample with a dual incentive system making it feasible to draw a sample in which bias are better known and can be taken into account – was used (Heckathorn 1997). In three target groups, RDS did not achieve the expected number of surveys and the method was stopped and replaced with snowball sampling.<sup>3</sup>

Table 1: Details on the implementation of Respondent-driven sampling in each target group (destination dataset).

Target group	RDS replaced with snowball	Final sample after data cleaning			
Brazilians in Amsterdam		214			
Ukrainians in the Hague	Yes	215			
Moroccans in Rotterdam		420			
Brazilians in Oslo	Yes	186			
Ukrainians in Oslo		172			
Moroccans in Oslo	Yes	80			
Brazilians in Lisbon		400			
Ukrainians in Lisbon		306			
Moroccans in Algarve		207			
Brazilians in London		239			
Ukrainians in London		240			
Moroccans in London	Partially	180			

Despite the efforts to secure a random sample, we observed differential recruitment processes in some of the final samples; in particular those in higher levels of employment remained in general difficult to reach. Brazilian women married to Dutch men in Rotterdam were also underrepresented. On the contrary the samples in London are biased towards students in the Brazilian group, and 30-years and older married men with children settled for many years in UK in the survey of Moroccan migrants. There is also an overrepresentation of older respondents, women, unemployed and irregular migrants in the survey of Moroccans living in Rotterdam.

There is still considerable debate about the suitability of RDS for multivariate inferential statistics (Gile and Handcock 2010; Tomas and Gile 2011; McCreesh, Tarsh et al. 2012) and the three samples where RDS would have to be excluded from any such analysis. For the purpose of this paper however, we make no claims that our sample is representative of the whole populations under study. Therefore, for the analysis that follows we simply use unweighted data for descriptive statistics and we limit the inferential statistics to bivariate regressions.

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<sup>&</sup>lt;sup>3</sup> For a more detailed discussion of the approach see Ezzati and Wu 2013, Friberg and Horst forthcoming, Kubal et al forthcoming, and Montealegre et al forthcoming.

In the origin areas, individual households were selected using multi-stage stratified sampling based on sampling frames where available,<sup>4</sup> with random route, and random selection of one adult living in the household. In practice, the research teams used non-random snowball sampling in some cases in four localities (Nador in Morocco, Campinas in Brazil, Lviv and Kiev in Ukraine) These cases have been dropped for our analysis in all cases but in Nador where there is no record of the few non-randomly selected respondents.<sup>5</sup> We have used the data of the non-European sites for descriptive and multivariate inferential statistics – one regression per country controlling for the effects of the research areas – taking into account the multiple stages of the stratified cluster sampling and the associated intragroup correlations. We do not consider the biases observed in the quantitative datasets as problematic for the purpose of our paper.

#### 4 It is not all about social networks

There is no doubt that high levels of transnational connectedness exist among most of the people surveyed in the THEMIS project. The vast majority of respondents in the localities of destination had known somebody living in the destination before migration. The Ukrainians who migrated to Oslo were the exception, where only 52 percent of the respondents knew someone in Norway before migrating there. For all the other groups, the proportions range from 74 to 94 percent. These high proportions reflect the general trend in most of the studied regions in the origin countries. The most striking cases are in the Moroccan regions of Nador and Rabat where over 90 percent of the respondents reported knowing people living in Western Europe. In contrast, in Campinas (Brazil) it was just over a third of the respondents who knew anybody.

This apparent transnational connectedness may imply that social networks play the most important role in shaping attitudes to migration, aspirations and decision making. We however, argue against this intuitive conclusion on the following grounds. First, from the perspective of our stricter definition of social networks, just because you know people in another country does not mean that you communicate with them; you may have no substantive connection. Second, even those who have no communication with people in Europe acquire information on both migration and potential destinations. Moreover, in many cases their knowledge and attitudes are not markedly different from those who are enmeshed in transnational networks. While accepting the importance of social networks, we suggest that other mechanisms may shape migration among populations in the same locality.

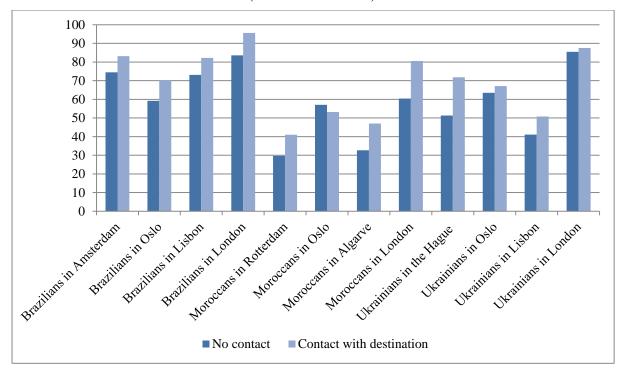
Turning to the first point, we examine the extent to which our respondents claimed to communicate with people abroad. Of our origin areas, the respondents in Nador and Rabat not only have the most contacts in Western Europe, but they are also more likely to be in direct communication. In contrast, in Ukraine and Brazil, over 20 percent of those who know people in Western Europe reported that they never communicated with people there. In the Brazilian city of Governador Valadares this rises to nearly a third. Outside Morocco, only Lviv had a majority of respondents claiming to have any communication with Western Europe. Over half of those from Kiev and the Brazilian sites said that they have no contact. The destination data suggests that vast majority of migrants who had known somebody in the destination had some communication before migration. It is impossible to tell whether this communication helped to initiate ideas about migration, or was used by potential migrants with the aim of facilitating their movement once an aspiration to migrate has taken root.

<sup>&</sup>lt;sup>4</sup> Sampling frames were available in the sites of Brazil (census tracts) and Ukraine (voters lists).

<sup>&</sup>lt;sup>5</sup> Our analysis in the origin areas is based on 1158 surveys: 200 in Governador Valadares, 157 in Campinas, 203 in Nador, 198 in Rabat, 200 in Kiev and 200 in Lviv Oblast.

Where there was no contact or communication with people in Western Europe, it suggests the absence of any social network in the destination that would directly influence migration decisions. However, the data suggests this does not necessarily result in people being either less aware of the possibilities and implications of migration or less receptive to images and stories about Europe broadcast in the media. Within the studied corridors, in many cases the proportions of surveyed migrants having seen images or heard stories in the media before leaving are similar among those who were in touch with people in destination and those who were not —there are two exceptions in the corridors of Moroccans in London and Ukrainians in The Hague (see Figure 1). Bivariate logistic regressions on the results of the surveys in the destination areas show that the likelihood of having seen images or stories in the media before migrating is higher among those who had contacts in the destinations but the effect is not significant. In addition, the significant positive effect of communicating with people in Europe is only observed in the respondents of four out of the twelve corridors. Other factors related to the digital divide — level of education and age — or to the coming of the information age (Castells 2010) — arrival to the destination country before or after the year 2000 — appear to play a more significant role than communicating with people in Western Europe.<sup>6</sup>

Figure 1: Comparing proportion of respondents who saw images or stories of [destination] in newspapers, on television or the internet before migrating, for those in contact with people in destination and those with no contact (destination dataset).



<sup>&</sup>lt;sup>6</sup> Several bivariate logistic regressions are calculated for each corridor. In all cases, the dependent variable is a dummy called 'image' coded 1 if respondents had seen images or heard stories in newspapers, on television or the internet before leaving, and 0 if they didn't. The independent variables used for each regression measure the level of education (ordinal), age (ordinal), year of arrival (continuous), the type of region of origin with a dummy variable called 'rural' coded 0 if the respondent answered that they lived in a city and 1 if he lived outside the city before leaving –the distinction between more urban and rural areas was only made in the Ukrainian and Moroccan corridors but difficult to implement in the case of the Brazilian corridors due to the higher dimensions of its regions-, gender, with a dummy called 'woman', and a proxy of class based on the current occupation, coded with a scale from 1 to 9, where 1 is the lowest category (informal labour) and 9 the highest one.

We might anticipate that having some personal transnational contact may affect an individual's knowledge and understanding of the foreign setting. With this in mind we examined the responses to the questions posed in the localities in Brazil, Morocco and Ukraine about people's knowledge and attitudes about Western Europe and migration. Logistic models run to determine the effect of direct transnational social contacts on clear views of Western Europe show that both economic and noneconomic aspects of Europe are more likely to be unknown for those who do not communicate with people in Western Europe, but the results are only significant in Ukraine for four out of the five noneconomic aspects considered. Likewise, inferential statistics measuring the effect of being in touch with people in Western Europe on clear ideas about migration show only a slight and significant effect in the Ukrainian regions in two out of the three dimensions studied – the need of assistance from acquaintances living there in order to migrate, and the idea that migration has a negative impact in the country of origin. The latter is also significant in the Moroccan sites. Further inferential analyses, 8 to understand if the contact with existing social networks shape people's imaginations of Western Europe and migration, show that not being in touch with people in Western Europe does not have a significant effect on the views of Europe – with only one exception in Ukraine regarding the views on corruption issues or migration – it is only significant in Morocco when respondents are asked about the need to know somebody there who can help to migrate (see Table 2).

This suggests that if contact with social networks plays in many cases only a limited role in shaping ideas about migration or places, other factors also need to be taken into account. It implies the influence of previous migration spread not just through social networks but also through other means, one of which, we argue, is broadcast feedback and we turn now to consider this.

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<sup>&</sup>lt;sup>7</sup> Nine dummy variables were coded 1 when respondents answered 'agree' or 'disagree' to the following questions: 'In Western Europe, there are good economic opportunities', 'In general, people in Western Europe have a friendly attitude towards immigrants from [origin country]', 'Corruption is not very widespread in Western Europe', 'In Western Europe, immigration policies are very strict', 'The legal system treats everybody equally in Western Europe', 'In Western Europe, everybody has access to health care', 'If you want to move to Western Europe, you need to know somebody there who can help you', 'Moving to Western Europe is a way of gaining respect in [origin country]', and 'It is bad for [origin country] when people move to Western Europe'. The dummies were coded 0 when respondents answered 'don't know'. They were used as dependent variables in logistic regressions run for each country. The main independent variable measured the effect of not being in touch with people in Western Europe –dummy based on question 'How often would you say that you communicate with people in Western Europe' coded 1 when people answered 'never' and 0 for other response options. The models controlled for the effects of gender, age, having a partner, having children, the level of education, personal migration experience, the migration experience of close family members (spouse, parents, siblings and children), and for the fixed effects of the region of residence.

8 In this case, the nine dummy variables were coded 1 when people agreed with the statements and 0 when they disagreed.

Table 2: Effect of not being in touch with social networks in Western Europe on clear views and differing views of economic and non-economic aspects of Western Europe and about ideas of migration (origin dataset).<sup>9</sup>

			Brazil		Morocco		Ukraine	
			coef.	z.	coef.	z.	coef.	z.
	Western Europe	Economic opportunities	1.450	(0.85)	0.313	(-1.26)	0.575	(-0.82)
		Attitude towards migrants from [origin]	0.771	(-0.66)	0.668	(-0.56)	0.455	(-1.88)
		Corruption	0.527	(-1.60)	0.549	(-0.81)	0.379*	(-2.41)
eas		Immigration policies	0.445	(-1.86)	2.038	(0.44)	0.417*	(-2.33)
r id		Equality against the law	0.577	(-1.17)	0.372	(-1.42)	0.425*	(-2.60)
Clear ideas		Access to health care	0.463	(-1.91)	0.507	(-0.62)	0.285**	(-3.23)
	Migration	Need of assistance in WE to migrate	0.577	(-0.84)	0.543	(-0.67)	0.142*	(-2.12)
		Migration as a means of gaining respect	0.606	(-0.81)	†		0.480	(-1.33)
		Migration as negative for the origin country	1.091	(0.12)	0.140*	(-2.16)	0.0974*	(-2.14)
	Western Europe	Economic opportunities	0.681	(-0.86)	1.446	(0.89)	0.938	(-0.09)
		Attitude towards migrants from [origin]	1.348	(0.90)	1.025	(0.05)	0.591	(-1.62)
70		Corruption	0.921	(-0.18)	2.105	(1.16)	0.385*	(-2.45)
deas		Immigration policies	1.150	(0.27)	3.914	(1.39)	1.538	(1.46)
ing i		Equality against the law	0.657	(-0.97)	0.964	(-0.09)	0.764	(-0.75)
Differing ideas		Access to health care	0.559	(-1.34)	0.911	(-0.17)	0.607	(-1.34)
	Migration	Need of assistance in WE to migrate	0.544	(-1.45)	6.309*	(2.68)	0.980	(-0.08)
		Migration as a means of gaining respect	0.717	(-0.78)	0.967	(-0.08)	0.929	(-0.35)
		Migration as negative for the origin country	1.035	(0.10)	0.610	(-0.88)	1.101	(0.28)

#### 5 Broadcast feedback as causal mechanisms

What is common to all broadcast feedback processes is that transmitters and receivers are not initially linked by any social network. Ideas, information and images about migration outcomes can be consciously or unconsciously broadcast. At the same time, the receiver can adopt a more active or passive role in terms of deliberately looking for specific pieces of information or not. In addition, what is broadcast may not reach everybody and may generate different responses according to the particular characteristics of the receiver. For instance, the survey of migrants in the European destination cities shows that the likelihood of a person having noticed houses built with money earned abroad before leaving Brazil, Morocco or Ukraine decreases among those in the higher socio-economic groups (as indicated by occupation) and in seven corridors this is significant. Likewise, programmes broadcast on TV during office hours may not reach those who are working (although they may be able to record or download the missed programmes).

<sup>&</sup>lt;sup>9</sup> Perfect prediction in the logistic regression marked with †.

<sup>&</sup>lt;sup>10</sup> Bivariate logistic regressions calculated for each corridor. The outcome variable is a dummy coded 1 if respondents answered 'yes' and 0 if they answered 'no' to the question 'Before leaving [origin countries], had you seen houses that [origin countries] had built in with money earned abroad?'. The explanatory variable is a proxy of class based on the current occupation, coded with a scale from 1 to 9, where 1 is the lowest category (informal labour) and 9 the highest one.

As happens with personal and narrowcast feedback, the transmission of broadcast feedback can take place in a physical space or virtually. Therefore, we do not conceptualise online feedback as a separate category of feedback. We understand the internet as a communication medium that links people and information (DiMaggio et al. 2001) like any other mass medium – such as a newspaper – or any social place – like a shop or a public square (Agre 1998).

Broadcast feedback can cause positive, undermining or self-correcting effects on migration – when people readapt their strategies in order to fulfil their unchanged migration aspirations or decisions. Reading in a magazine in Brazil that the UK is facilitating visas to those Brazilians willing to invest and open a business in the country could have a positive effect on those who have the capacity to invest and have the aspiration to migrate (Liliam, 28, female, BR-UK, returned migrant). Likewise, the information available on the Canadian or Australian websites to apply for a visa to migrate there can have an undermining effect on low-skilled potential migrants and a positive effect on those talented high-skilled aspiring to migrate (Miro, 26, male, MO-NL, family member).

Broadcast feedback can be classified in three categories: general broadcast, embedded broadcast and induced broadcast. They imply distinct dimensions of time and space. In this section, we provide empirical examples of how this type of migration feedback operates and shapes migration ideas, aspirations and decisions using the qualitative data gathered in origin and destination areas of Brazilian, Moroccan and Ukrainian migration corridors during the THEMIS project.

#### 5.1 General broadcast

Here we are concerned with information, images and ideas scattered widely through the media without being clearly targeted at particular people in given localities. This is the material broadcast shared via television, radio, newspapers and the internet. There are ever fewer limitations in time or space for such broadcasts; if material is made publicly available online, for instance, it can hypothetically be reached almost anywhere and at any time unless exogenous factors such as technical problems or state censorship take place.

The THEMIS data provided two very clear examples of such broadcast feedback. First, respondents from Brazil noted the significance of soap operas in shaping people's ideas and aspirations. 'Brazilians come to know the world through the Brazilian soap-operas ... It is always like this, what's on the soap-opera is what sells and what people wants to do' (Juliana, 33, female, BR-NO). Brazilian TV was credited with establishing potential destinations by raising their profile. For example, when Norway was proclaimed to be the country with the highest standard of living in the world, Brazilian journalists sought out migrants living in Norway to write about their experiences in the 'best country in the world'. As a result of the publicity, one Brazilian respondent living in Norway was inundated with email requests for information about the country. The idea of the Netherlands as a destination was promoted by a story line on the popular soap opera *Paginas da Vida*, broadcast on the largest Brazilian television network, Globo, which featured characters studying in the Netherlands (Miguel, 36, male, BR-NL). In these cases, the migration element is incidental to the larger story. Nonetheless, it may play an important role in instilling an aspiration. Perhaps it helps start the idea of migration in some sections of the audience, or more likely it may simply bring to life or sharpen a rather vague idea of migration and point in new directions that were previously beyond the horizon.

Second, respondents living in Morocco introduced the example of documentaries and news programmes that portrayed the hardships facing Moroccan immigrants in Europe. These programmes were understood as having the intention of affecting migration outcomes. For instance, a Moroccan TV program broadcast the 'sufferings of the migrants which might have impacted a lot potential migrants' (Cherif, 68, male, MO-NL, family member). Here the broadcast feedback provides a set of social

examples to shape behaviour. The message of the broadcasts aligns with a set of other information sources to help reshape a view of migration. The response of Rabha, which is laden with rather normative ideas, perhaps gives evidence of how such feedback may help to generate normative pressure – which may then be relayed to others through social networks:

Migration as a phenomenon has decreased because of ... the role of media which sensitize the youth about the bad conditions of low skilled migration and also they show photos and talk about cases where migrants are on the dole; they inform people that migrants work some hours and cannot find full time jobs. Some young people prefer to work there with dignity and not venture in migration and work under indecent working conditions. (Rabha, 58, female, MO-UK, family member)

Hence, this broadcast feedback can be seen as a way of reinforcing or amplifying other feedback channels.

Of course, the message transmitted may generate a different feedback than that expected or desired by the broadcaster. Some European states have invested considerable resources in placing advertisements on television across North and West Africa to deter potential migrants but the impact has been very mixed. In some case, it seems the very fact that they want to advertise against migration, may reinforce the message that migration is desirable and valuable.<sup>11</sup>

#### 5.2 Embedded broadcast

Embedded broadcast is more local and instantaneous; it is what one perceives in a particular place and in a particular time and it can also happen more or less unconsciously. The higher visibility of embedded broadcast of migration outcomes in some areas could be due to the spread of the migration flows in that region. Other factors such as the size or the cultural diversity of a specific place can also play a role. For instance, houses built by migrants in their origin countries might be more visible in some areas such as in Governador Valadares, Nador or Lviv, where about 80 percent of the respondents have seen houses or apartments in their region that people have built or renovated with money earned abroad. In other places, migrant's investments in housing might be less obvious such as in Campinas (24.3%) or Kiev (19.5%). In a city such as Rio de Janeiro with 6.3 million inhabitants migrants' investments or initiatives are difficult to perceive:

Here in in Rio de Janeiro the impact of emigration gets melted amongst the crowd because it is a very big city; for sure, houses are being built here in the city, and apartments being purchased with money from [abroad]; for instance, I know about somebody who can pay the university fees of his son because they earned money out there, but all this gets dissolved in Rio de Janeiro (...). (Luma, 38, female, BR-NO, returned migrant)

The impact of migration is much clearer in the case of Lviv and in the Moroccan localities – especially in Nador (Berriane 1994a; Berriane 1994b; McMurray 2001), which have been subject to very high levels of emigration in recent years. Not surprisingly, these provide our clear examples of embedded feedback. This is most evident in the case of Moroccans who for decades have seen the return of migrants from Europe on their summer holidays. Some respondents referred to this phenomenon as the origin of their intention to emigrate:

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<sup>&</sup>lt;sup>11</sup> For example, in 2007 IOM produced a TV advertisement 'Prevention Campaign of the Dangers of Illegal Migration Departure from Cameroon' financed by the Swiss Government and European Union portraying the hardships faced by irregular migrants in Europe.

I had dreamt of migration from the 1970s, and I had always thought of going abroad. It was a big dream for me as I wanted to be like those migrants who would usually come back with new and expensive clothes, who bought nice cars. (Hamid, 62, male, MO-NL, returned migrant)

This embedded feedback can also operate across families and generations. This is the case of Zenhour, a 60 year-old woman in Nador. She was frustrated to see migrants coming back during the summer holidays with nice cars and clothes. She perceived them as being happy and she decided to invest in her son's migration to London in order to 'enjoy life a little bit' through his migration outcomes (Zehour, 60, female, MO-UK, family member). Recollecting her image of migration as a child, Fadila mentions the clothes of migrants but also their better education and knowledge of foreign languages. Later, her brother emigrated to Norway:

When I used to see my neighbours coming from abroad and giving such assistance to their families, I dreamt of migrating. I was still a little girl and heard them talking foreigner languages. I was fascinated by their capacity of switching from Arabic to another language and I hoped that I would, one day, talk other languages fluently. I felt that they were educated more than I was. I saw their relatives [dressed] in beautiful and colourful clothes. I hoped owning such attractive dresses. I thought that I would find that kind of clothes only abroad. I admired the way they help their families especially their parents. I had a wish to migrate and support my family too. (Fadila, 27, female, MO-NO, family member)

The extent of emigration in a particular community was also noted as a factor shaping people's ideas about moving, as one respondent from Lviv showed:

Yes, I think I may tell you such information, because, for example in Lviv, in our house, in every second apartment a woman is working abroad, in Italy. It means byturn that children grow without parents for some time; the second thing is that they get used to that money is sent and it decides everything. It has a big influence because they do not earn it by themselves, but they know that it will be sent to them every month. (Irina, 36, female, UA-NL, returned migrant)

The rather negative connotations presented by this respondent are countered by others who refer to contributions of migrants' capital to the public finances and local economy. In Lviv, the mother of one migrant suggested that the amount of money sent by migrants is comparable to the city budget, they have invested in shops and are also buying cars and apartments (Kateryna, 62, female, UA-NO, family member). Migrants are also building houses. Their investments in housing are a good example of the meanings and values embedded in commodities (Appadurai, 1988). Sofia, a 28 years old female from Ternopil, illustrates this when she talks about the 'fancy, amazing and big' houses in the village where she spent her childhood. They are positively valued for their characteristics, but also because migrants had to work hard in order to get them: 'Each of these houses was built with immigrant's money... and my grandmother is always saying "Look, this guy works on construction in Portugal!". People are working very hard over there and they are sending money back home, so their family can invest in their own construction'. (Sofia, 28, female, UA-PT, family member)

Embedded feedback can arise from less tangible aspects than houses or business, such as from the perceived positive effects of migration in the regional economic dynamics of a high emigration area such as Nador. Nordin, a 59 year old Moroccan who migrated to the Netherlands and now owns two bakeries in Nador, recalls the few houses, and the lack of coffee shops, restaurants and cars in his neighbourhood before migration outcomes were visible in the area (Nordin, 59, male, MO-NL, returned migrant). Changes are also perceived in the regional economy:

The city of Nador, where I currently live, owes a lot to its migrants. The migrants have brought good and developed machines for a better plantation and farming. We used to import fruits and vegetables from the city of Agadir, but now they are grown locally in many farms especially those of some migrants. Others have made good cafés to which people bring all the family and have nice moments. Hence, we would go to the suburbs and find many good houses and villa built by migrants. Whether we like it or not, migrants have brought many advantages to the city and to Morocco as well (Jalil, 51, male, MO-NL, returned migrant)

Embedded feedback can also concern less visible negative aspects, such as the poor quality of life of migrants in Europe: 'For me, the economic crisis has scared many young Moroccans of failure and homelessness in Europe. Since migrants themselves take the plane to come to Morocco, become mean in their shopping and in other activities during summer vacation, people get assured that Europe is undergoing a severe crisis'. (Mouloud, 55, male, MO-UK, returned migrant), or back in the origin communities:

There are many big, 2 or 3-storeyed, houses, for example, in Lviv region, built, mainly, by migrants. We call them "match boxes", because the exterior is primitive, they are too big for one family. It is really hard to pay for utilities if the person earned some money abroad, but don't have a well-paid job here in Ukraine after coming back. (Taras, 40, male, UA-PT, returned migrant)

All these examples show how embedded feedback is identifiable, but unlike the effect of social remittances as described by Levitt (1998), it can be transmitted unintentionally and unsystematically, and it is often received involuntarily.

#### 5.3 Induced broadcast

The induced broadcast feedback demands a more active role of the receiver than general and embedded broadcast feedback. Initially this type of broadcast feedback it is not linked to any individual social network but the receiver can make use of existing impersonal network to become connected – possibly to the extent of becoming part of the network. For instance, somebody who wants to migrate can search online for webpages, social media profiles and blogs that are publically accessible. This may require sending an invitation to connect but it offers an avenue for pursuing their migration ideas.

This type of feedback is based on the active intention of the receiver to get something from existing pieces of information arising from previous migrants – mainly online through the use of social media (Dekker & Engbersen forthcoming) but also transmitted in magazines or newspapers, by informal and formal networks such as NGO's, private companies, or migrant networks or even by a group of friends or family members that are initially external to the receivers' social networks. It plays a facilitating role in different phases of the migration project, especially when social networks are not available and migration aspirants recur to other strategies in their decision-making process. In these cases, the broadcast feedback is associated with a 'social learning effect' (DiMaggio and Garip 2012) helping to reduce the costs and the risks associated with migration, but here this effect is not caused by any personal social network. This feedback can generate the network to provide the missing social assistance to those who lack the necessary social networks.

This seems to be particularly important in the case of Brazilians moving to Europe, who tend to have less contact with social networks in the region compared to Ukrainians and Moroccans. Migrants refer to making contact with previous migrants through social media to find out information about a particular destination. Moreover, once they have moved they may be contacted by complete strangers online with requests for information or advice. This is the case for a 25 years old student in

Campinas who spent several years in Portugal. She received many information requests from strangers on her Orkut account: 'I always said "Look people, you will not get rich here, but life here is great, you can do this, can do that ..." The advice I gave to almost everyone was: "Do not come over here illegally".' (Dinorá, 25, female, BR-PT, returned migrant). Some go a step further and establish blogs to share their experiences and answer such queries in one place. There are also websites to collate such information:

(...) I have a blog and I write down everything I think with regards to the Netherlands. ... So people react to what I write: "Ah, [Juan], I agree with what you are writing. I would love to live in the Netherlands. Would you be able to give me more information?" (...) I tell them "Look for the website 'Brasileiros na Holanda'". If you are really interested in living in the Netherlands, you only have to click on that name and you go straight to the website, on Google. (...) I don't know if you had a look at this website, but all the information Brazilians need to know is over there. This lady, Marcia Curva, collected all possible and imaginable information and put it on one website. It is very handy. She used the practicality of the Dutch to group information in Portuguese for Brazilians. Impressive. (Juan, 36, male, BR-NL)

The proliferation of magazines, blogs, virtual communities, and websites such as <a href="leros.co.uk">leros.co.uk</a> and <a href="brazileirosnaholanda.com">brazileirosnaholanda.com</a> with many testimonies of Brazilians living in London or in the Netherlands, and the use of these resources as feedback generating networks seem more common in settings where social networks are less accessible. It could also be due to a combination of geographical factors —extended/remote territories where a particular group is too spread or far away to meet by chance-, and cultural factors —such as the level of digital literacy, or the lack of tradition to meet with people of the same community in a particular place such as a mosque.

The influence of such feedback extend through the migration process so the blog that can provide information for someone before they move can help them as they find their feet in the new residence. The input of the media carries across into the destination countries where migrants' journals help new migrants find their way:

One thing that helped me a lot when I got there were Brazilian journals, through these magazines, besides friends, there were these magazines where you could make contact with other Brazilians, these magazines had information about restaurants, hotels, workplaces, city map, means of transportation, so I think that helped a lot. (Tiago, 35, male, BR-UK, returned migrant)

Another example is observed in the way migrants' newspapers or websites are used in order to find a job abroad or to ease migrants' integration in their new environments once in the country of destination. Vita, a 29 year old female of the Lviv region who moved in 2002 to England, used to read newspapers published by migrants in Russian to be aware of what was happening in her residence country because she couldn't understand or read English TV and newspapers (Vita, 52, female, UA-UK, family member).

Adverts published in newspapers or websites, particularly in the context of Ukrainian migration, can facilitate migration projects enabling people aspiring to migrate to get in touch with migration industry actors such as intermediaries to find a job as care providers (nurses, au-pairs, etc.), to get travel and migration documents, or to find a partner abroad. However, these adverts can also make migration less accessible because of the fear of being a victim of fraud or human trafficking:

I think there are a lot of varieties of such organizations, as the internet is full of advertisements of employment assistance abroad. But we know that there are a lot of

false ones connected with human trafficking cases. People can easily be captured in the slavery, especially girls, who agree to work as dancers and so on. As for the real companies, I think they exist, and a lot of them are dealing with documents preparation. (Sergei, 52, male, UA-NL, family member)

# 6 The interplay between broadcast feedback and feedback operating through social network

These examples of induced feedback clearly show that the boundaries between broadcast feedback and social networks are rather fuzzy. When somebody posts an image or a message in a Facebook account, we will be talking about broadcast feedback if the post is received by somebody outside the broadcaster's social network. If the recipient is one of the 'Facebook friends' of the broadcaster, it is more likely that we will be talking about causal mechanisms induced by social networks. They are also permeable as the stranger to the network becomes a Facebook or Orkut 'friend' and starts up an online relationship. Furthermore, in some cases causal mechanisms induced by social networks and broadcast feedback can be complementary and reinforce each other. This is the case, for instance, when a migrant explains to his sister who stayed in the origin community that he is unemployed and cannot find a job to pay his mortgage in his residence country, and whereas she can see on TV the images of the queuing unemployed in front of a job centre in Portugal in times of economic recession. In other cases however, the causal mechanisms induced by social networks could have the opposite effect to broadcast feedback. Keeping the same example, the positive feedback of the social networks about the opportunities in Portugal or elsewhere could neutralize the negative broadcast feedback about the economic crisis in Europe: 'For instance, whatever you see on TV about the striking crisis, if you have a friend who says "come here because I have a job for you", "come here because you can stay at my place", you go. A Brazilian would go' (Monica, 37, female, BR-UK, family member).

We might think that feedback from personal social networks could have more impact than broadcast feedback, but the normative influence the latter can create is not negligible, and it can foster a 'culture of mobility' and transform (temporary) migration into a social requirement. This happens in Brazil where 'It is the message of "going outside Brazil" which is disseminated. Let's say that you pick a magazine, [and you read] this about France, that about [somewhere else] (...) this shapes people's images (...)' (Liliana, 61, female, BR-NL, family member).

Broadcast feedback can also lower the necessary individual threshold before a potential migrant makes the decision to migrate or to choose a particular destination (Granovetter 1978). This may happen when broadcast information inflates the perceived popularity of a particular destination making it easier for others to go in the same direction. As with the impact of a Brazilian TV programme showing migrants positive experiences in Norway despite only a tiny number of Brazilian migrants living there. We might expect this broadcast feedback to have a greater effect in areas without a strong migration tradition where social networks are less likely to include migrants. This is the case for example in areas where migrants invest in houses outside their communities of origin, thereby broadcasting news of their successful migration outcome far beyond their social networks.

In addition, over time, the influence of broadcast feedback can fluctuate due to changes in the strength of people's social ties. For instance, after many years living in Western Europe, what is broadcast on TV can become more relevant to shape a migrant's perception of their country of origin if contact with their initial social networks there has substantially decreased:

You see there are four stages of migration. The first one is the stage of euphoria when you just come abroad and during about a year you love everything there. When the

second stage begins you begin to hate everything, everything irritates and annoys you, you miss your country, miss your national cuisine, food and items that are not sold in that country. .... The next stage appears when you calm down and don't care about different trifles. You just clearly realize all the pluses and minuses of both countries. And the last stage is when a person understands that his or her country has nothing but drawbacks and there will be never homecoming. Such stage can be caused when a person doesn't come back for quite long time to his country and the image of one's motherland at that very period is created by different unpleasant news on TV or in newspapers or so on. So a person is afraid of coming back, as the possibility to be disappointed is too high. (Olga, 31, female, UA-NO, returned migrant)

While broadcast feedback may interact with and moderate the social network effects identified by DiMaggio and Garip (2012), its origins lie outside the social networks that they discuss. Moreover, on occasions broadcast feedback may be a more important mechanism in shaping people's migration decisions and behaviour and the emergence of new migration patterns.

#### 7 Conclusion

The analysis of the THEMIS surveys conducted in different areas of Brazil, Morocco and Ukraine shows that even those who do not communicate with people in Europe obtain information on both migration and potential destinations before migration. Often their acquired knowledge and attitudes are not markedly different from those with direct transnational networks. Without questioning the relevance of social networks to explain migration aspirations and behaviour, other mechanisms shape migration patterns simultaneously.

This paper differentiates between the effects of social networks defined as meaningful, sustained and multifaceted personal interactions and those of broadcast feedback operating through more impersonal channels in a shared common context. It identifies three types of broadcast feedback that imply distinct dimensions of time and space –general, embedded and induced broadcast. What is common to all is that transmitters and receivers are not linked by any social network – at least at the start of these transfers. Ideas, information and images about migration outcomes can be transmitted in a physical space or virtually in a more or less conscious way and the receiver can voluntarily or involuntarily look for specific pieces of information. Broadcast feedback can generate different responses according to the characteristics of the receiver and can have positive, negative or self-correcting effects on migration.

We make no claim that broadcast feedback is the most important factor shaping migration patterns; most likely (substantive) social networks play a more significant role in many if not most cases. Through our empirical examples, however, we show that broadcast feedback can have a marked influence on the migration behaviour of those who receive it. This suggests that it is worthy of further exploration.

As we have argued, the boundaries between broadcast feedback and social networks are sometimes fuzzy and permeable. Causal mechanisms induced by these two types of feedback can be complementary and reinforce each other, or can have the opposite effect. Even though the importance of personal social networks can neutralise the impact of broadcast feedback in some cases, in other cases the normative influence that this latter can create should not be underestimated. Broadcast feedback can lower the necessary individual threshold before a particular migration-related behaviour is taken. Finally, the impact of broadcast feedback can fluctuate over time according to the changes in the strength of social ties.

Our analysis of how the migration of people at one time affects the subsequent migration of others from the same origin will be limited if we only focus on people's social networks. Moreover, as we have argued, social networks are often invoked even when there is no substantive link between people. We can start to develop a more nuanced picture that reaches beyond social networks by exploring more carefully the broader context in which potential migrants learn of others' experience, see the outcomes of earlier migrations, and even seek contact where there was none before. The outcomes of migration are broadcast by various channels for all to see. Our understanding of migration attitudes, aspirations and decision-making may be improved by paying more attention to how these broadcasts are received.

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