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Place Attachment and Social Ties – Migrants and Natives in Three Urban Settings in Vienna

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ABSTRACT

With ongoing immigration from 'all over the world', European cities are realising that the local level is gaining importance as a setting for interethnic coexistence. In this article, we investigate the attachment of migrants and natives to their local context in three neighbourhoods (one better-off, two more deprived) in Vienna that differ in contextual, structural, and socio-economic characteristics. We ask how the place attachment of natives and migrants is related to weak and strong social ties. In all three neighbourhoods, we found a majority of residents reported high or medium levels of attachment proving that urban neighbourhoods are still important contexts for local residents. A closer look revealed differences across groups and research areas: The strongest place attachment is displayed by natives in the middle-class area of Laudongasse, with migrants being significantly less attached, but still more than migrants (and natives) in the two deprived settings. In social housing (Am Schöpfwerk), migrants are more attached than natives, whereas in Ludo-Hartmann-Platz, the difference is not significant. The first result is that obviously deprivation reduces individual place attachment. In contrast to previous studies we found that socio-demographic factors are not relevant, it is social contacts that are important in explaining local attachment. For natives and migrants alike, close ties in the neighbourhood raise local attachment. Small talks are relevant for migrants but not for natives. This is in line with previous studies emphasising the special relevance of weak ties for migrants in supporting the integration process in a new environment. **Copyright © 2015 John Wiley & Sons, Ltd.**

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INTRODUCTION

At the beginning of the 21st century, growing diversity and persistent social and spatial inequalities are challenges for social cohesion and (interethnic) coexistence in many European cities. Intercommunity conflicts have drawn rising political and scientific attention to the spatial microscale of the neighbourhood. But do urban neighbourhoods really matter?

Despite globalisation processes, place obviously continues to be an object of strong attachment (Lewicka, 2010, 2011; Gustafson, 2014). Although rising mobility has led to a decline in social contact with neighbours, the process was less dramatic than might have been anticipated (Knies, 2009). Thus, the urban neighbourhood is (still) a relevant setting for social coexistence and cohesive action between different social and ethnic groups (Forrest, 2000; Völker *et al*., 2007; Robinson, 2009). Recent research (e.g. Bridge, 2002; Dekker, 2007; Greif, 2009) has proved that in fact the neighbourhood still matters. This makes everyday social interactions and perceptions of neighbourhood cohesiveness an issue of permanent importance, raising questions about the nature of locally bound social ties and the attachment of individuals to their place of living (Forrest & Kearns, 2001; Portes & Vickstrom, 2011; Górny & Toruńczyk-Ruiz, 2014). In the local context, place attachment and social

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interactions are strongly interrelated (Altman & Low, 1992; Lewicka, 2011).

Local ties are often higher in more homogeneous areas where individuals have common backgrounds and lifestyles (Markowitz *et al*., 2001; Uzzell *et al*., 2002; Charles, 2003; Putnam, 2007; Greif, 2009; Oliver, 2010). However, not only diversity but also deprivation on the local level may also reduce solidarity and trust among residents (Livingston *et al*., 2008, 2010; Bailey *et al*., 2012).

Previous studies related to social ties in a local focus were often limited to single neighbourhoods (e.g. Hipp & Perrin, 2006; Greif, 2009). Comparative analyses tended to focus on disadvantaged neighbourhoods (Corcoran, 2002; Friedrichs & Blasius, 2003; Dekker, 2007; Livingston *et al*., 2010), making it difficult to map similarities and differences across varying local contexts within one city. Kennett and Forrest (2006: 716), in their survey about the importance of the neighbourhood in the European context, claimed that comparative studies should embrace a wider set of neighbourhood types to provide a more balanced understanding of social life in urban neighbourhoods. Thus, in taking up their suggestion, we have chosen three Viennese neighbourhoods which differ in terms of the socioeconomic status of their population, physical structure and ethnic diversity. We aimed to investigate how attached migrants and natives are on a local level and how this is related to different types of social ties of the local population.

In Vienna – as in many other European cities – the discussion about immigration as a possible threat to social and interethnic coexistence began in the mid-1990s, due to a rising number of migrants. In 2013, 34.6% (602.881) of the 1,741,246 inhabitants of the Austrian capital had a 'migration background',[1] a term used officially in Austrian statistics. The current multiethnic structure of Vienna's urban population is the outcome of several immigration flows: guest worker immigration from (former) Yugoslavia and Turkey since the 1960s, the re-emergence of East-west migration following the fall of the Iron Curtain, large-scale immigration from Western countries after Austria's accession to the European Union (1995), and asylum migration (in particular from Chechnya, Iraq, Pakistan, Afghanistan, and recently Syria) as an outcome of military conflicts.

The migrant population is not evenly distributed throughout the city. Residential patterns are strongly dependent on the structure of and opportunities in the local housing market and the socioeconomic status of the migrants. There are concentrations of the population with a migration background in the former working class districts surrounding the inner city with its old (mostly 19th century) and often dilapidated and deficient building stock. Although spatial small-scale concentration tendencies can be found there (and also in better-off districts), there are no neighbourhoods dominated by one particular migrant group (Kohlbacher & Reeger, 2008). This means that 'ethnic ghettoisation' is nonexistent due to a policy of social mixing by the municipality using the communal housing stock (with 220,000 units, the largest in Europe) and a pronounced subsidy policy for cooperative housing as counter-strategies.

Our paper starts with a review of the research on place attachment, with special attention to the implications of social ties in the local context. Afterwards, a description of the three neighbourhoods is given and then followed by an overview of sampling, the procedure of variable-selection, and methodological statements. Next, the main results of the empirical enquiry with a strong focus on the sections measuring the social component of place attachment are presented. In the final section, we offer conclusions drawn from our empirical findings and discussed in light of the theoretical approaches presented at the outset of this study.

THEORETICAL PERSPECTIVES ON PLACE ATTACHMENT AND ITS DETERMINANTS

Defining Place Attachment

Sociologists and environmental psychologists recognise place attachment as an important construct for exploring the phenomenon that links individuals to certain places (Hidalgo & Hernandez, 2001, 2002; Kyle *et al*., 2004). In their landmark book, Altman and Low (1992 suggested that place attachment '*is an integrating concept, comprising interrelated and inseparable aspects*' (1992: 4). Their construct refers to bonds between place and people based on affection, cognition, and social practice (social interaction, behaviour) or as Brocato (2006: 11) expressed it '*includes the physical setting, human activities, and social processes rooted in a setting*'. Also, Hernandez *et al*. (2014) recently stressed the theoretical and methodological problems

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resulting from the multidimensionality inherent in the concept. An urban neighbourhood is not a closed place but includes several, relatively independent local settings. Among these settings, the physical environment is considered as an important resource and necessary condition that exists inseparably from social interactions (Henning & Lieberg, 1996: 4). Following Milligan (1998), place attachment encompasses both the built and social environments as '*physical sites become stages for social interaction, stages that are both physically and socially constructed*'. In order to offer a firmer concept, Scannell and Gifford (2010) recently synthesised the various definitions of the concept into a three-dimensional, person–process–place organising framework. Attachment to one's own residential area is generally seen as having a positive impact on both individuals and for the neighbourhoods. Satisfactory social ties in the local context are associated with individual satisfaction, security (Markowitz *et al.*, 2001) and stable, cohesive neighbourhoods. As an outcome, this encourages resident engagement in the neighbourhood in a positive way (Livingston *et al.*, 2008).

In psychological research, primacy is given to the emotional component of place attachment (Lewicka, 2011; Scannell & Gifford, 2014). Livingstone *et al*. (2008, 2010), defining place attachment as a resident's sense of belonging to their neighbourhood, looked at the affective attachment that people feel to deprived areas in the UK. As a psychological implication, place attachment also promotes individual identity and identification processes (Twigger-Ross & Uzzell, 1996) and is a partial aspect of neighbourhood attachment (Vorkinn & Riese, 2001).

The social component of place attachment has received continued interest from researchers. It may be interpreted as an indicator of social cohesion and manifestations of social cohesion can be found in shared norms (Portes & Vickstrom, 2011) and positive social bonds (Forrest & Kearns, 2000, 2001; Dekker & Bolt, 2005). Hidalgo & Hernandez (2001) investigated both the social and physical elements of place across differing types of spatial ranges. They found that social bonds were stronger than physical attachment, highlighting the importance of the social environment for developing some kind of attachment to the place of living. Mesch and Manor (1998) identified the number of friends and neighbours and the strength of these relationships as a major determinant of the strength of place attachment. Scannell and Gifford (2010, 2014) argued that the concept of place attachment has recently moved from a conceptual stage into a more applicative one, mirrored in the analysis of Mihaylov and Perkins (2014) who applied it to the field of community development and social capital.

Determinants of Place Attachment

Asking whether and how the social context of the immediate neighbourhood influences place attachment raises questions about the relevant determinants. Social ties covering formal and informal aspects are linked with social capital and take place in a local social environment. One's attachment to the place is crucially influenced and sustained through interactions with others. These ties are able to provide subtle support and thus are usually experienced positively, as they help the individual to maintain bonds and to produce higher levels of trust. Bridge (2002: 11) characterised social ties in the neighbourhood as '*multi-stranded ties in a close knit network over an identifiable geographical area providing social support and a sense of identity and place'*.

Social ties are not only an important resource for the individual but also a glue for the social structure of the wider urban society. With reference to Kasarda and Janowitz (1974), evidence of the positive effect of contacts on neighbourhood cohesion was reported from studies in the UK (Sampson, 1991) and the US (Lee *et al.*, 1991; Lee & Campbell, 1999). Forrest and Kearns (2001) proved that individuals with a larger number of ties in the neighbourhood reported a higher perception of neighbourhood attachment. This positive relationship is even stronger once the ties can be defined as strong (i.e. close friends), and this has further positive effects on social cohesion (Hipp & Perrin, 2006, 2009).

Analysing the social component of place attachment, it is logical to assume that strong ties to family members and close friends per se have a positive effect (see above), but this is not so clear in the case of Granovetter's (1973) 'weak ties'. This may lead to an unjustified underestimation of the significance of everyday loose contacts. The separation of networks of strong and weak ties in the local context was endorsed by Henning and Lieberg (1996). They came to the

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conclusion that there are three times as many 'weak' contacts in the neighbourhood than strong ties. Bearing in mind the number of weak ties, defined as '*unpretentious everyday contacts*' (*ibid*., 1996: 6), the local arena gains significant importance in the urban context. Rose *et al*. (1998: 5) said that '*in contemporary … cities the neighbourhood is first and foremost a milieu of weak ties*'. This is because proximity and continuity promote the development of these social contacts, which can be easily established in the vicinity (Henning & Lieberg, 1996). Weak ties in the neighbourhood context form the only connection between individuals who may not really know each other very well but nevertheless are able to foster some kind of cohesion.

Granovetter (1973) stressed the importance of weak ties due to their potential of offering new sources of information. Thus, people estimate them highly because of their functionality and at the same time these ties strengthen the attachment to the local context, fostering the individual wellbeing there. These contacts provide a feeling of home, practical, and social support. Weak ties are important for the things they deliver and for the fact that they provide a type of relationship that can be most easily sustained in the neighbourhood but need to be refreshed with regular contact (Henning & Lieberg, 1996). Strong and weak ties work differently and both are necessary for a healthy social network.

Access to weak ties may become a key element in social integration processes of migrants because of their potential to open up access to resources (e.g. finding a job) (Rose *et al*., 1998) and reducing the dependency on strong ties (Hanson & Pratt, 1995). Aroian (1992: 180 f) suggested that weak ties in the neighbourhood may be poor sources of emotional support but best for helping immigrants learn new roles. Bridge (1995) and Schiefloe (1990) emphasised the 'strength of weak ties' in a sense that even small gestures of recognition of one's neighbours, which one may classify as 'nodding relationships' can be important for migrants in a process of social integration. It is not only the strength of contacts that matters for fostering attachment to the neighbourhood but also with whom ties are made and how they are connected through the neighbourhood (Hipp & Perrin, 2006). In accordance with Allport's (1954) contact hypotheses, it can be assumed that the more contacts people have with neighbours that are 'unlike' themselves, the more likely a reduction in prejudices is.

As well as social ties, individual level determinants have been explored as predictors of place attachment. To begin with, personal and household characteristics might be influential factors (Kasarda & Janowitz, 1974; Giuliani, 2003). *Families with children* have significantly more neighbour contacts than those without children (Henning & Lieberg 1996: 14). Immigrant women with small children maintain more weak ties with neighbours (Rose *et al*., 1998) and thus are more locally attached than the male population. *Gender* differences in urban neighbouring were highlighted in the analyses of Campbell and Lee (1990). Manzo (2003: 47 ff.) emphasised the relevance of psychological factors for gender variations in attachment to localities. Livingston *et al.* (2008: 44) in their analysis of deprived areas came to the conclusion that women and older people tend to rate their neighbourhood slightly higher in terms of cohesion/networks than men and younger cohorts. Henning and Lieberg (1996: 23) characterised the neighbourhood as an arena for social networks, which is important for the elderly, the disabled, or children and for all groups of people that lack access to a more extensive social network. Lewicka (2010) postulated that the variance of place attachment is predicted by three groups of factors, among which the socio-demographic contain gender, *age*, and education.

With respect to age, it is likely that older people show greater levels of place attachment (Hidalgo & Hernandez, 2001; Völker *et al*., 2007) because they are less mobile. A similar line of argument applies to *length of residence*, which has been found to have a positive effect on neighbourhood attitudes (Lee & Campbell, 1999). According to Livingston *et al*. (2008: 39), age and length of stay in a neighbourhood had even the greatest impacts on place attachment (see also Theodori, 2004). Long-term residents often become acclimated to conditions in the neighbourhood and learn to take advantage of its resources (Logan & Molotch, 1987; Taylor, 1996; Fried, 2000). Smaldone (2006) emphasised that time spent and experiences made in a locality are important for deepening the meanings and emotional ties central to the person–place relationship.

Blasius *et al*. (2008) emphasised the role of *professional status*. Economically inactive people do not have the need to leave the neighbourhood

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on a regular basis and are therefore more likely to concentrate their networks in the neighbourhood (see also Livingston *et al*., 2008: 13). Economically active persons are less dependent on their residential area than unemployed people or multichild families (Turley, 2003).

Education has also been found to be a determinant for affecting social networks (Fischer, 1982; Dekker & Bolt, 2005; Dekker, 2007). The more educated people are, the larger their network is and the wider the geographical range of social interactions. Although education might have a negative effect on social ties in neighbourhoods, Woolever (1992) found that a higher level of education might increase positive attitudes, such as attachment, to the place of living. Furthermore, he detected a negative influence of high density and substandard housing. In contrast, Livingston *et al*. (2008: 39) emphasise that variables related to economic status, educational attainment, and housing tenure had no significant impact on local attachment once other factors had been controlled for.

The factor of *ethnic diversity* is, of course, a very relevant one. Although some (mainly US) studies (Campbell & Lee, 1991; Lee & Campbell, 1999) point to higher levels of neighbourhood attachment and satisfaction in the case of migrants, Greif (2009) uncovers the opposite patterns. According to Fried (2000), minority group members expressed less satisfaction than ethnic majority residents with their neighbourhoods. Putnam (2007) summarised that many of the components that usually foster local attachment (trust in neighbours, community co-operation, friendship) are reduced in ethnically diverse local settings. Uzzell *et al*. (2002) emphasised that cohesion and attachment are stronger on the microscale of those areas where neighbours show more similarities and this produces more social closeness. Markowitz *et al*. (2001) proved that attachment is weakened by social heterogeneity and disorder. Robinson (2009) emphasised that although social and ethnic mix ranges high on the municipal political agendas, it is a potential threat to place attachment and may have a negative outcome on native residents (Dekker & Bolt, 2005), or as Charles (2003) recognised '*for some but not all groups*', although it is clear that homogeneity is usually a strengthening factor (Uzzell *et al*., 2002).

The most recent research suggests that the neighbourhood is still a significant site of social ties and that the social component is a major determinant of the multidimensional construct of local attachment. In contrast to the psychological view, the following analysis strongly adheres to the social component, which refers to place-bound social relations of individuals. What is still required in the debate about the importance of attachment to localities is a comparative view of different neighbourhoods, analysing the connectedness to an area with social interactions and networks existing there and their impact on feelings of local belonging. This is the gap we intend to address.

The research questions we want to answer can be outlined as follows: Are there differences in place attachment between migrants and natives in the three neighbourhoods? If so, which factors influence the extent of place attachment? What is the role of different types of contacts (weak ties, strong ties, both co-ethnic, and interethnic) in place attachment? Or in other words, what is the relationship between place attachment and social attachment? What are the differences between the three areas in this respect? We take into account concrete encounters in distinct contact fields of varying social proximity or distance.

THREE VIENNESE NEIGHBOURHOODS IN COMPARISON

The present case study focuses on three selected neighbourhoods in Vienna. The rationale for the choice of these small-scale areas was to find typical areas rather than special cases. The neighbourhoods should be compact and homogenous, showing a clear structure without internal barriers and breaks such as industrial areas, hospitals, or other big non-residential zones. Furthermore, they should reflect the two dominant segments in the Vienna housing market: private rental flats dating back to the Founders' Period (1850–1914) and social housing (from the 1920s).

The building stock dating back to Founders' period is prominent in the cityscape of Vienna, comprising about 40,000 buildings (with 300,000 flats) that belong mostly to the private rental sector. Already at the time of construction, many of these buildings served to accommodate migrants from other parts of the Austro-Hungarian Empire, and during the past 50 years, many migrants have moved into the less attractive (and thus less expensive), as well as easily accessible part of the Founders' Period building stock. The second important market segment – social housing – makes

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up 30% of the present housing stock with the City of Vienna being the largest landlord in Western Europe. It is important to note that council housing was not accessible for foreign nationals until 2006.

The in-depth neighbourhood selection procedure was based on official statistics (census, population register). The following neighbourhood descriptions are complemented by the results of focus groups that have been conducted with key actors from each neighbourhood[2] in order to give a more qualitative impression of the social, as well as built, environment in the selected areas.

Neighbourhood 1: 'Laudongasse'

The first neighbourhood – 'Laudongasse' – is a typical inner city, middle-class area that is mirrored by the high percentage of economically active residents, as well as an unemployment rate below the city average. Compared to the two other neighbourhoods it can be labelled as a 'better-off area'. During the 1990s, this predominantly 19th century housing stock bourgeois area became attractive for better-off people and families, as well as single households. Former Yugoslavians are the largest migrant group, followed by Western Europeans, as well as a mixture of diverse nationalities. Overall, around 31% of the residential population have a migration background.

There are a large number of attractive shops and restaurants in the area, as well as kindergartens and schools. The building stock is in a good state of repair and some small parks offer possibilities for encounter and communication. The key actors in the focus group agreed that there was a high level of identification within the neighbourhood by both migrants and natives, which also builds upon tight social networks. They further emphasised the high level of stability in the neighbourhood in terms of built environment and population. A broad variety of participation-based projects aim to provide activities for all groups of the local population and mediate in the case of problems and conflict.

Neighbourhood 2: 'Am Schöpfwerk'

The second neighbourhood 'Am Schöpfwerk' is a social housing greenfield development at the urban fringe, built between 1976 and 1980. 'Am Schöpfwerk' is a typical lower-class housing area. This is mirrored by a share of roughly 22% low skilled workers in the local population, a proportion about 7% higher than the city average. The ethnic composition is primarily made up of former Yugoslavians, migrants from Turkey and Egypt, as well as EU-nationals (e.g. Poles). Overall, the share of people with a migration background was 36% in 2010.

In the focus group discussion, we learned about the eventful history and constantly changing tenant structures. Rent price developments in connection with the rather large flats were the main causal factors for the processes of constant flux among the tenants. At the beginning – more than 30 years ago – 'Am Schöpfwerk' was almost entirely occupied by Austrian families with many children who, because of their weak socio-economic status, received municipal subsidies. About 15 years ago, more and more families with a migration background started to move into the area and middle-class families started to leave. The key actors described the conflict potential as high, with the frequency of actual conflicts being moderate. Intergenerational or other conflicts often transform into ethnic ones. Elderly Austrians often feel insecure, whereas migrants display a pronounced level of local identification. The high density of social institutions is worth mentioning: Youth centres, a district Centre, a church, a mosque, schools, mobile youth care facilities, an education and occupation centre for women, and a very well-functioning network of professional social workers are successfully cooperating in the field. The local key actors stated that in general the area is better than the stigmatising image it has in mass media and among outsiders in general (Table 1).

Neighbourhood 3: 'Ludo-Hartmann-Platz'

The third case study area – 'Ludo-Hartmann-Platz' – is situated in a working class area built in the middle and late 19th century and was a typical target of guest workers coming to Vienna as of the 1960s, as they found comparably cheap and accessible housing there. This working class history is also reflected in the census results of 2001, with the proportion of blue-collar workers twice as high as at the city average and an unemployment rate also significantly higher. The proportion of migrants from the former Yugoslavia

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Table 1. Basic characteristics of the three selected neighbourhoods.

	Laudongasse	Am Schöpfwerk	Ludo-Hartmann-Platz
Size (square kilometres)	0.2	0.5	0.15
Distance from the city centre (km)	2.5	7.5	3.5
Total number of flats (2001)	2,400	2,500	2,100
Building period	Mostly Founders' period	1980s	Mostly Founders' period
Legal type of housing	Mostly private rental	Social housing	Mostly private rental
Total population (2010)	3,930	6,619	3,922

Sources: Census 2001, Population Register 2010.

is still four times that of the city. The second largest group are Turkish migrants and their children and grandchildren, whereas migrants from the EU-15 are underrepresented. Sixty-three per cent of the total population had a migration background in 2010.

In the focus group with key stakeholders, we again were able to gain more in-depth qualitative information: The main problems of this neighbourhood were defined as traffic overload, lack of green spaces, and the absence of adequate meeting places for young people. Generally speaking, the area has a negative and stigmatised image, paired with the absence of a local identity; however, the insiders' view of the neighbourhood is more positive. The high proportion of migrants results in a well-established infrastructure of migrant associations (in particular of the Turkish and Bosnian community, a Bosnian prayer organisation, etc.) with members embracing all generations, elderly migrants, as well as the second and third generations. Because of the low rents, we are currently witnessing first signs of gentrification, with an increasing immigration of students and young Austrian and German families into this area. This trend has caused an increased intermingling of social classes and migrant groups within the houses and in the neighbourhood as a whole. The fact that most houses belong to the old building stock of the Founders' period (densely built-up, no courtyards) is seen as a major hindrance to a fundamental improvement of the living conditions in this area.

DATA AND VARIABLES

We used the Vienna data from the *Generating Interethnic Tolerance and Neighbourhood Integration in European Urban Spaces* (GEITONIES) survey,[3] conducted from autumn 2009 until spring 2010. This is a representative sample of people aged 25 or older and resident in the three selected neighbourhoods. In each of the three neighbourhoods, a stratified random sampling method was utilised to collect the data, starting with the households as the sampling unit and household members as the respondent unit (using the birthday method to identify respondents). The sample size within each neighbourhood is $n = 200$ (two strata: 100 natives and 100 migrants) leading to a total $n = 600$. The definition of 'migration background' is based on the birthplace of the parents: If mother and/or father of the respondent had been born abroad, the person is classified as a migrant.

Checks on the socio-demographic characteristics of the sample against other surveys indicated that the survey findings of our sample are comparable with these. The GEITONIES survey is a unique data source because of the range and depth of questions it asks about subjective and perceived neighbourhood attitudes. It contains conventional attitudinal measures on trust, belonging, and identification, as well as substantial information about concrete contacts and social ties within and outside the neighbourhood.

Dependent Variable

Our dependent variable is a scale combining responses to three survey questions asking to what extent respondents agreed with the following statements: 'I feel attached to this place', 'I care about my neighbourhood', and 'I am proud about my neighbourhood'. Answer categories varied from 'disagree strongly' (1) to 'agree strongly' (5). A Cronbach's alpha of 0.84 indicates a high reliability and internal consistency of the three items and supports the creation of a compositional dependent variable, which we name

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'*place attachment*' in the following analysis. This final scale ranges from 1 to 5, with a higher score indicating an increasing level of attachment to the place of living.

Independent Variables

Our main set of independent variables captures various types of social ties within the neighbourhood, including weak and strong ties.

The first independent variable is the number of most important contacts living in the same neighbourhood. A name generator method was applied to enquire about information on the closest network of the respondents. In order to avoid an enumeration of passing contacts (Campbell & Lee, 1992), we restricted the number of named contacts to a maximum of eight persons outside the household. From these closest persons, we further collected relevant characteristics, such as their current place of residence in order to identify close contacts that are living in the same neighbourhood. This variable constitutes relatives and friends that have been named and captures the mere *size of an individual's closest network in the neighbourhood*. Although up to eight persons could be named, having five closest contacts in the neighbourhood was the maximum in our sample. Thus, the variable ranges from zero to five and is treated as a continuous variable in our analysis.

Next, we included a dummy variable to measure whether these strong ties are monoethnic or interethnic. We define 'interethnic' in line with previous studies as non-coethnic (Schlüter, 2012). The variable '*close interethnic relations within the neighbourhood*' indicates if at least one person in the closest circle of friends living in the same neighbourhood is of a different ethnic origin to that of our respondent.

Having had *small talks with neighbours* and people in the place where they live within the last 3 month serves as a proxy for weak ties in our analysis. We treat this variable as a categorical one, coded '0' if no small talks took place, '1' if small talks only happened with natives, '2' if small talks took place with both migrants and natives, and finally '3' if small talks exclusively took place with migrants.

In addition to our main measures of interest – social ties – we further include the following control variables into our analysis: To measure the socio-economic status of our respondents, we use the *highest educational level*, which is a categorical variable ranging from lower secondary education or below (1) to upper secondary education (2), to post-secondary/tertiary education (3).

We further include a dummy variable indicating whether respondents were *economically active* (1) or inactive (0) on the labour market at the time of the interview. This variable serves as a proxy for the free time that persons might have at their disposal to spend in the neighbourhood, given that economically active people are assumed to spend much of their time at work, compared to their inactive counterparts.

Since *length of residence* in the neighbourhood is often found to be of importance for the extent of place attachment, we include this information through a categorical variable: Moved in between 1 and 5 years ago (1), 6 and 10 years ago (2), or more than 10 years ago (including persons who have been born in the neighbourhood).

As to aspects of the life course and sociodemographic characteristics that might influence place attachment, we finally included three control variables: *Having children* is a dummy variable indicating whether or not respondents have children. Next, *age* is measured as age in years and is entered as a continuous variable, whereas *gender* is a dummy variable with women being the reference category.

FINDINGS

Descriptive Results

Table 2 provides summary statistics for our independent variables, broken down by neighbourhoods and target groups. We note a couple of key features: First, we find migrants and natives on average almost equally situated in local networks. The respective means range from 0.6 to 0.8 close contacts currently residing in the same neighbourhood. In other words, the majority of our interviewees have their most important ties outside of their neighbourhoods. These figures do not vary significantly between groups or across neighbourhoods. Group differences become significant, however, once the ethnic composition of the closest ties currently living in the neighbourhood is considered. Migrants are significantly more likely to have interethnic ties living in the neighbourhood as compared to

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Table 2. Summary statistics for the samples of all three neighbourhoods in Vienna, natives, and migrants (percentages or means).

	Laudongasse		Am Schöpfwerk		Ludo-Hartmann Platz	
	Natives	Migrants	Natives	Migrants	Natives	Migrants
Mean no. of close contacts in the n. (sd)	0.6 (0.9)	0.7 (0.8)	0.7 (0.9)	0.7 (1.1)	0.6 (0.8)	0.7 (1.0)
Interethnic contacts in n.: yes	10.2	49.0[a]	10.6	22.7[a]	13.3	34.7[ab]
Small talks in the n.						
None	11.1	7.2	9.1	10.0	9.8	10.6
Only with natives	28.3	34.0	31.3	10.0	14.1	9.6
Mixed	60.6	53.6	56.6	75.0	70.7	66.0
Only with migrants	0.0	5.2	3.0	5.0[a]	5.4	13.8[bc]
Mean age (sd)	52.6 (14.8)	46.9[a] (17.5)	55.2 (13.8)	44.6[a] (11.5)	43.8 (16.1)	40.7 (13.5)
Women	53.0	53.0	55.0	55.0	59.0	46.0
Has children	43.0	57.0[a]	84.0	87.0	41.0	57.0[abc]
Economically active	56.1	50.5	33.3	48.9[a]	52.6	52.0[c]
Educational level						
Compulsory	8.1	1.0	17.0	22.0	4.0	25.3
Upper secondary	32.3	44.0	69.0	47.0	51.0	40.4
Post-secondary	59.6	55.0[a]	14.0	31.0[a]	45.0	34.3[abc]
Length of residence in n.						
1–5 years	11.0	34.0	8.0	30.0	24.0	39.0
6–10 years	17.0	17.0	14.0	32.0	18.0	28.0
More than 10 years	72.0	49.0[a]	78.0	38.0[a]	58.0	33.0[abc]
N	100	100	100	100	100	100

Source: GEITONIES survey Vienna 2010.
Notes: Standard deviations in parentheses. n. = neighbourhood.
[a]Group differences within neighbourhoods are significant $p < .05$.
[b]Neighbourhood differences for migrants are significant $p < .05$.
[c]Neighbourhood differences for natives are significant $p < .05$.

non-migrant residents. This is particularly true for the better-off and inner-city neighbourhood, Laudongasse, in which roughly every second migrant has at least one close contact living in the same neighbourhood that is not of his or her ethnic origin. The respective shares are roughly 15 percentage points lower in Ludo-Hartmann-Platz (34.7%) than in Laudongasse and show the lowest values in the neighbourhood 'Am Schöpfwerk' (22.7%). It is further worth noting that roughly 1 out of 10 natives has close contacts in the neighbourhood that are interethnic, that is of migrant origin. This share does not differ significantly across the three neighbourhoods.

Turning to small talks during the last 3 months as a measure of weak social ties in neighbourhoods, we find that the share of people who did not have any small talks with neighbours in the place of living is below 11% in all three neighbourhoods for all study groups. Instead, in all three multiethnic Viennese neighbourhoods, most of our respondents had small talks with neighbours of both native and migrant origin (mixed) and therefore interethnic contacts. Two results are further striking: First, migrants in 'Laudongasse' have three times the number of small talks with natives only than their counterparts in the remaining two neighbourhoods. Second, the native population within the same neighbourhood, Laudongasse, has slightly more mixed small talks than migrants, that is interethnic social weak ties.[4]

Finally, the descriptive results of the individual level control variables mirror the particularities of the neighbourhoods outlined above in terms of the age structure, length of residence, labour market participation, and educational background. This applies especially to the relatively high educational level among natives and migrants in the inner-city district 'Laudongasse' as compared to the two remaining neighbourhoods. While the variation in the socio-economic composition of the local population in the working class district

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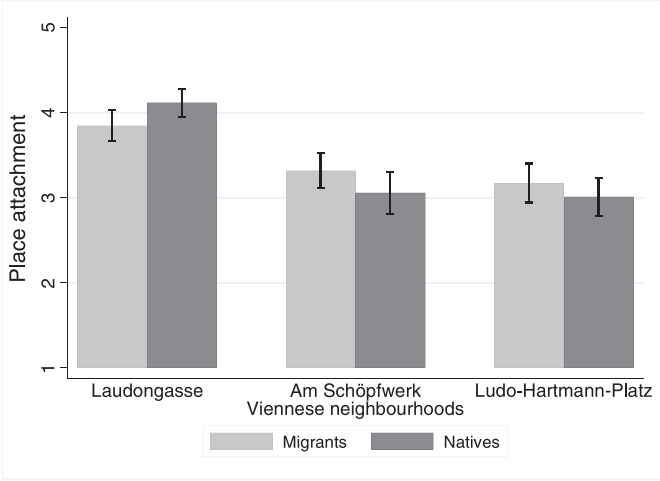
'Ludo-Hartmann-Platz' is relatively modest, our findings for the neighbourhood at the outskirts 'Am Schöpfwerk' indicate some compositional differences in favour of the migrant population when it comes to the economic activity rate or the share of highly-educated residents.

Next, we examined the distribution of our dependent variable 'place attachment' for migrants and natives in the three urban settings. Are there any differences in place attachment between the two groups and across neighbourhoods? Figure 1 shows the average extent of place attachment for the two study groups in the three neighbourhoods. A clear takeaway point of this figure is that levels of place attachment differ among residential areas, with people in Laudongasse showing on average higher feelings of place attachment than residents in the two deprived neighbourhoods. At the same time, differences between migrants and natives within the neighbourhoods vary significantly in the social housing area Am Schöpfwerk and within the better-off areas Laudongasse. In the working class area of Ludo-Hartmann-Platz, migrants and natives do not differ much in the average place attachment.

Multivariate Results

In this section, we turn to our research questions. Ordinary least squares regression is used to examine these questions empirically and to test for the influence of social ties on place attachment. We proceed in two analytical steps: First, we fit a series of models on a pooled sample that includes all three neighbourhoods and all study groups, progressively adding our independent variables of interest to assess how variations in social networks, socio-demographic and socio-economic characteristics account for differences between natives and migrants, as well as between neighbourhoods in the degree of place attachment. Three models of increasing complexity have been estimated. The first model (Model 1) shows gross differences in place attachment between natives and migrants as well as between the three Viennese neighbourhoods. In a second step (Model 2), socio-demographic and socio-economic characteristics are added to the equation. The final model (Model 3) includes our main variables of interest, that is the different social ties indicators.[5] Afterwards, and in a second step, we regress the full set of explanatory variables on place attachment separately for natives and migrants in order to access differential effects for both groups.

The results of our multivariate analyses of step one are presented in Table 3. Model 1 shows that migrants do not significantly differ from natives in their level of place attachment. However, regression results show significant differences between the three neighbourhoods. People living



Source: GEITONIES survey Vienna 2010. Differences between migrants and natives within the neighbourhoods are significant in Laudongasse ($p < .05$, two-sided) and Am Schöpfwerk ($p < .10$, one-sided). Differences for both migrants and natives across neighbourhoods are significant at the $p < .001$ level.

Figure 1. Place attachment by group and neighbourhood (means).

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Table 3. OLS regression of place attachment in three Viennese neighbourhoods.

	Model 1	Model 2	Model 3
Natives	*(Ref.)*	*(Ref.)*	*(Ref.)*
Migrants	0.03 (0.09)	**0.08*** (0.09)	**0.09*** (0.10)
Laudongasse	*(Ref.)*	*(Ref.)*	*(Ref.)*
Am Schöpfwerk	**−0.33***** (0.11)	**−0.34***** (0.12)	**−0.36***** (0.11)
Ludo-Hartmann-Platz	**−0.38***** (0.11)	**−0.34***** (0.11)	**−0.34***** (0.11)
Age		**0.12*** (0.00)	**0.14**** (0.00)
Women		**0.07**$^{+}$ (0.09)	0.06 (0.09)
Has children		0.02 (0.11)	0.01 (0.11)
Economically active		−0.01 (0.10)	−0.02 (0.09)
Compulsory Education		*(Ref.)*	*(Ref.)*
Upper-secondary education		−0.01 (0.14)	−0.00 (0.14)
Post-secondary education		0.00 (0.15)	−0.00 (0.15)
Less than 6 years of residence in neighbourhood		*(Ref.)*	*(Ref.)*
6–10 years of residence		0.06 (0.13)	0.03 (0.13)
More than 10 years of residence		**0.10**$^{+}$ (0.13)	0.09 (0.13)
No. of close contacts in the neighbourhood			**0.16***** (0.06)
Has interethnic contacts living in the neighbourhood			−0.00 (0.12)
Small talks in the neighbourhood: none			*(Ref.)*
Only with natives			0.05 (0.17)
Mixed/interethnic			**0.21***** (0.15)
Only with migrants			−0.07 (0.24)
Constant	**3.95***** (0.09)	**3.16***** (0.25)	**2.72***** (0.27)
p	0.000	0.000	0.000
Adj. R^2	0.127	0.156	0.222
N	566	566	566

Source: GEITONIES survey Vienna 2010.
$^{+}p < 0.10$. $^{*}p < 0.05$. $^{**}p < 0.01$. $^{***}p < 0.001$.

in one of the two deprived neighbourhoods, Ludo-Hartmann-Platz or Am Schöpfwerk, are significantly less likely to feel attached to the place of living than residents of the inner-city neighbourhood Laudongasse. Overall, respondent's migrant background and the place of living account for 13% of the variation in place attachment.

Model 2 controls for individual level characteristics of the respondents. Holding these variables constant, differences between natives and migrants in their degree of place attachment increase, with migrants now feeling significantly more attached to their place of living. At the same time, adding individual level control variables does not alter substantially the variations in place attachment between residents of the three neighbourhoods. In other words, even after holding socioeconomic characteristics of the respondents in the three neighbourhoods constant, neighbourhood effects remain significant. Age predicts place attachment, with older respondents feeling more attached to their place of living.[6] Gender and length of residence are also important predictors of place attachment, although at a weaker level of significance. Those who have been living in the neighbourhood for more than 10 years and female respondents report higher feelings of attachment to their place of living.[7] The non-significant effects of educational level and economic status are in line with previous studies (Hipp & Perrin, 2006). Together, migrant background, place of living and other individual control variables explain 16% of the variation in place attachment (R-squared = 0.156).

Model 3 adds our measures of social ties to the model. As predicted, a higher number of closest contacts living in the same neighbourhood are significantly associated with an individual feelings of attachment to one's own place of living. As the number of closest friends in the neighbourhood rises, people become more likely to feel attached to their place of living. However, the ethnic composition of these closest contacts does not exert a significant effect, holding all other variables constant. Turning to weak ties

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and their effect on place attachment, results show that having had small talks in the neighbourhood during the last 3 months with people of different origin to themselves (natives or other migrants) is a strong and significant predictor of place attachment, as opposed to having no small talks with neighbours during that time. Model 3 reveals further that neither the migrant background nor the neighbourhood effect that we previously observed in model 2 changed. In other words, even after accounting for differences in the amount and composition of social networks, migrants are still significantly more likely to feel attached to their place of living. As with respect to place of living, respondents in the more deprived neighbourhoods report lower levels of place attachment than in the better-off neighbourhood Laudongasse. It is worth noting, however, that women and those who have lived more than 10 years in their neighbourhood are no longer significantly more likely to feel attached to their place of living after holding differences in networks and ties constant. This is in line with Campbell and Lee (1990), Rose *et al*. (1998), Livingston *et al*. (2008) and Lewicka (2010) finding that local networks are larger and more important for women than for men and that local social ties increase with the length of residence (Fried, 2000; Theodori, 2004; Livingston *et al*., 2008). Altogether, model 3 explains 22% of the variance. In additional analysis (not shown), we replaced the migrant dummy variable with a more detailed measure including country of origin categories (e.g. Turkey, Western Balkan, EU-15, etc.) in all three models. This has been done in order to explore whether the remaining neighbourhood differences are driven by ethnic compositional differences in the three neighbourhoods. Our results proved to be highly robust to these additional controls, as the size and magnitude of the neighbourhood coefficients did not change substantially.

The most important conclusions drawn from these models are threefold: First, all else being equal, migrants are significantly more likely than native residents to report higher levels of place attachment. Second, the perception of place attachment differs significantly between residents in our three study areas. People living in the two deprived neighbourhoods are significantly less attached to their place of living than residents of the inner city, better-off area. Third, the total number of close contacts living in the same neighbourhood, as well as having small talks with people and neighbours of different origin, is strong and significant predictors of place attachment. However, because our findings on network attributes might differ for migrants and natives, and therefore its effects on place attachment, we conducted additional multivariate analysis divided by study group. More precisely, we estimated model 3 as established in the previous table for migrants and natives separately. For the sake of brevity, we only focus on the results for neighbourhood effects and social ties (but all models are controlled for individual level characteristics, as discussed above). Results are given in Table 4.

To begin with, the previously observed negative effect for place of living (neighbourhood) still remains highly significant for both study groups. Migrant and native residents in Am Schöpfwerk and Ludo-Hartmann-Platz are significantly less likely to feel attached to their place of living compared to their counterparts in Laudongasse. Next, an increasing number of close contacts in the neighbourhood make migrants and natives more likely to feel attached to their place of living. However, strikingly, having small talks with natives and migrants in the neighbourhood (as opposed to having no small talks) increases significantly the likelihood of feeling attached to the place of living for migrants, but not for natives. As social networks in general, and weak and strong ties in particular, might exert different effects across the three neighbourhoods for migrants and natives, we conducted additional analysis in which we added interaction terms between residents of the three neighbourhoods and our three measures of social ties.[8] None of these interaction terms were significant, indicating that the effects of our social ties variables remain similar for all three neighbourhoods. In other words, having small talks with native and migrant residents in the neighbourhood, for example, is strongly associated with place attachment for migrants in all three neighbourhoods. The models shown in Table 4 explain around 29% of the variance for natives, but accounts only for 19% of the total for migrants.

SUMMARY AND CONCLUSION

This paper has explored neighbourhood attachment in three selected Viennese neighbourhoods, as well its determinants and underlying mechanisms for

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Table 4. OLS regression of place attachment in three Viennese neighbourhoods for migrants and natives.

	Migrants	Natives
Laudongasse	*(Ref.)*	*(Ref.)*
Am Schöpfwerk	**−0.31***** (0.17)	**−0.41***** (0.16)
Ludo-Hartmann-Platz	**−0.30***** (0.16)	**−0.40***** (0.16)
No. of close contacts in the neighbourhood	**0.19**** (0.08)	**0.14*** (0.08)
Has interethnic contacts living in the neighbourhood	−0.07 (0.17)	0.10 (0.20)
Small talks in the neighbourhood: none	*(Ref.)*	*(Ref.)*
Only with natives	0.08 (0.25)	0.04 (0.23)
Mixed/interethnic	**0.28**** (0.21)	0.14 (0.21)
Only with migrants	−0.05 (0.29)	−0.07 (0.44)
Constant	**2.82***** (0.37)	**2.63***** (0.38)
p	0.000	0.000
Adj. R^2	0.186	0.285
N	286	280

Source: GEITONIES survey Vienna 2010.
Notes: All models are controlled for age, gender, whether respondents have children, educational level, economic activity, and length of residence.
$^{+}p < 0.10$. $^{*}p < 0.05$. $^{**}p < 0.01$. $^{***}p < 0.001$.

native and migrant residents. We paid particular attention to the significance of weak and strong ties within the neighbourhood as relevant predictors of place attachment. The three neighbourhoods under study vary in a number of important contextual and structural characteristics which might shape neighbourhood attachment directly or behavioural bonds in terms of social ties, which may determine individual attachment. While one local setting (Laudongasse) is a better-off, attractive inner-city location, the two others are more deprived. We contrasted these three areas in order to achieve a more balanced understanding of social life in urban neighbourhoods that differ in important characteristics (see also Kennett & Forrest, 2006).

We found that residents still evaluate neighbourhoods as important places, which supports the basic arguments of the persistent relevance of urban neighbourhoods (e.g. Rose *et al*., 1998; Forrest, 2000; Livingston *et al*., 2010; Manzo & Devine-Wright, 2014). In all three of the neighbourhoods under consideration, we found the majority of residents reported high or at least medium levels of attachment. However, a closer look reveals differences across groups and neighbourhoods: The first pattern uncovered through ordinary least square regressions is that, all else being equal, migrants report higher levels of place attachment than native residents in all three neighbourhoods. This finding is in line with previous studies (e.g. Dekker & Bolt, 2005; Kohlbacher *et al*., 2012). Second, the degree of place attachment varies between the three selected study areas with residents in the deprived neighbourhoods showing lower levels of attachment. Thus, the first conclusion is that deprivation obviously plays some role in reducing individual attachment to a place of living, a fact which was also proved by Bailey *et al*. (2008) and Livingston *et al*. (2010).

The analysis of different determinants of place attachment reveals the specific role played by social contacts within the neighbourhood when explaining different levels of neighbourhood attachment. Forrest (2000) stated in his study that whether neighbourhoods still matter for their residents depends on 'who you are and where you are'. We found that 'who you are' was less relevant in our study as socio-demographic factors did not play an important role in the level of place attachment. In a recent analysis by Livingston *et al.* (2008), only slight effects of socio-demographic factors such as gender and age were found too, thus supporting our results showing a weak to absent correlations between individual level factors and place attachment. We suggest changing the above cited phrase of Forrest (2000) by adding 'who you know and with whom you exchange' is important for the understanding of whether neighbourhoods are still of relevance for their residents. We found that as the number of close ties in a neighbourhood increases, so too does the level of attachment. The number of friends living nearby matters, a finding that is in accordance to the outcome of analyses by Forrest and Kearns (2001), Bridge (2002),

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and Hipp and Perrin (2006) and that is valid for both migrants and natives.

However, our findings for the three Viennese neighbourhoods revealed further that small talks with natives and migrants in the neighbourhood significantly increases the likelihood of migrants feeling attached to the place they live, but not for natives. Thus, it is the small talks of migrants with both migrants and natives that really make the difference to the level of attachment they feel. The strength of weak ties was previously identified by Bridge (1995), Hanson and Pratt (1995), Henning and Lieberg (1996), Rose *et al*. (1998), and Hipp and Perrin (2006) and was proven once more by our data. Most importantly, we found interethnic weak ties to be a significant predictor of place attachment for migrants in all three different neighbourhoods. In other words, interethnic weak ties foster place attachment by migrants regardless of the structural characteristics or the location of the neighbourhood. But why does this effect only work in the case of people with a migration background? Our qualitative data, which was collected through focus groups and additional participatory observations in our research areas, provides some insights.

As the migration process implies the loss of social ties, migrants have naturally a greater need to establish new communication networks. Migrants need assistance in order to find accommodation and a job and for better orientation in their new environment. Thus, the establishment of weak ties is an important strategy in the formation of social networks and in accumulating social capital (compare Epstein and Heizler, 2009). In addition, everyday communication is an important tool for developing some feeling of (local) integration (Aroian, 1992; Rose *et al*., 1998). As strong ties need some time to develop, the relevance of weak ties, in particular in the early phase of immigration, cannot be overemphasised (Bridge, 2002).

Finally, as stated above, we found huge and significant differences in the level of place attachment by residents of the three neighbourhoods – with people in the inner-city and better-off neighbourhood showing higher levels of attachment towards their place of living. This finding was almost unaltered after we adjusted our results for individual and socioeconomic differences in the local population. How can we explain these remaining neighbourhood effects? We have to bear in mind that this study ignored to some extent the physical environment of the neighbourhood and its impact on respondents' sentiments and emotional feelings concerning the neighbourhood. Previous studies have shown, however, that the material aspects of place, such as the attractiveness of streets and buildings, lead local residents to develop greater levels of attachment to a place (Taylor, 1996; Mesch & Manor, 1998; Stedman, 2003; Lewicka, 2010, 2011; Hashemnezhad *et al*., 2013). Although we have not empirically tested this aspect in our study, this argument might explain some of the remaining neighbourhood differences we have found. As outlined earlier, the inner city district 'Laudongasse' can be characterised as an attractive 'better-off' neighbourhood not only in terms of the socio-economic composition of its residents but also in terms of the built environment. From our qualitative data, we can conclude without doubt that better spatial conditions are translated into higher levels of place attachment among the local population, regardless of whether a person has a personal migration history or not. 'Am Schöpfwerk' might be characterised as the physical antithesis, lacking the 'organic connection' of a historically evolved built structure and a saturated local community. To a certain extent, this also applies to 'Ludo-Hartmann-Platz', with its historical but dilapidated housing stock. The implications in terms of social ties and place attachment are obvious. Future studies should pay more attention to the relevance of physical environments for local place attachment by residents.

ENDNOTES

1. People who either immigrated themselves or of whom at least one parent was born abroad (Magistrat der Stadt Wien, 2013).
2. All three meetings with local key actors took place in January 2011. The number of participants varied from six to nine and included members of the local government, teachers from local schools, representatives of pensioner clubs, and NGOs/NPOs dealing with issues of coexistence in the neighbourhoods.
3. The GEITONIES project was part of the 7th Framework Programme of the European Commission. The core element of this project was a common survey conducted in 18 neighbourhoods within six European cities. As well as Vienna, the cities were Bilbao, Lisbon, Rotterdam, Thessaloniki, and

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Warsaw. Please consult http://geitonies.fl.ul.pt/ for further information.
4. In the case of migrants, a distinction was made in the survey between small talks with co-ethnics and small talks with migrants of another origin. It is worth mentioning that only 9 out of 300 migrants in the total sample reported to have small talks only with co-ethnics in the neighbourhood. They will not be further analysed.
5. Thirty-four cases had to be dropped from the analysis due to missing values on some of the independent variables yielding to a total *N* of 566 cases. Those missing cases were almost equally distributed across neighbourhoods, gender, and among natives and migrants. Thus, we expect the bias of missing cases to be small.
6. We controlled further for a curvilinear effect of age by including age squared. We could not find any significant effect and therefore dropped this variable from the final analysis.
7. We computed the uncentered variance inflation factor to detect potential collinearity of the regressors (in particular to check for multicollinearity between age and length of residence). Results revealed than multicollinearity is low in the models presented here.
8. Not shown in Table 4 but available upon request.

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