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Out of sight, out of mind? Awareness space and mobile offenders

Stijn Van Daele

Tom Vander Beken

Abstract

Most offenders operate in the vicinity of their homes. The offender's awareness space plays herein a crucial role. This refers to all spaces of which an offender has knowledge and develops through daily routines. The role of the awareness space has been confirmed in various empirical researches. However, one may wonder whether the importance of awareness space exists only in the most common offending patterns i.e. local offending and what the role of awareness space is for mobile offenders. We have interviewed mobile offenders and our findings suggest that the understanding of the role of awareness space should be differentiated. Spatial awareness does not only provide opportunities for crime, but can actually limit it at times.

1. Introduction

Research into offender mobility has shown that, generally speaking, most offenders commit crimes in the vicinity of their homes.¹ Several approaches can be taken to explain such behaviour. One is the rational choice perspective,² stating that offenders weigh their costs and benefits. Travelling takes time, effort and money. All other things being equal, one may therefore expect offenders to operate near their starting point. This also implies that other mechanisms can function that cause offenders to travel. For example, offenders will travel further if the crimes they commit are more lucrative. Commercial robberies will likely be committed further from the anchor point (mostly the offender's area of residence) than residential burglaries.³ These offences also require more planning. The additional costs of travel are marginal compared to other investments that need to be made.

Morselli and Royer found earnings to play an important role in the journey to crime.⁴ As such, it is not the crime type itself that primarily affects crime travelling behaviour, but the size of

¹ C. White, 'The Relations of Felonies to Environmental Factors in Indianapolis', 10 *Social Forces* (1932): p.^pp. T. Reppetto, *Residential Crime* (Cambridge: Ballinger, 1974) p.507.

P. Phillips. 'Characteristics and Typology of the Journey to Crime', in D. Georges-Abeyie and K. Harries, ed., *Crime: A Spatial Perspective* (New York: Columbia University Press, 1980) p.175.

D. Capone, and W. Nichols, 'Crime and Distance: An Analysis of Offender Behavior in Space', 7 *Proceedings of the Association of American Geographers* (1975) 47.

² D. Cornish, and R. Clarke, eds., *The Reasoning Criminal : Rational Choice Perspectives on Offending*, (New York: Springer, 1986).

³ P. Van Koppen, and R. Jansen, 'The Road to Robbery: Travel Patterns in Commercial Robberies', 38 *British Journal of Criminology* (1998).

W. Rhodes, and C. Conly. 'Crime and Mobility: An Empirical Study', in P. Brantingham and P. Brantingham, ed., *Environmental Criminology* (Beverly Hills: Sage, 1981), 179

⁴ C. Morselli, and M.-N. Royer, 'Criminal Mobility and Criminal Achievement', 45 *Journal of Research in Crime and Delinquency* (2008).

the expected benefit. Bernasco and Luykx found attractiveness and opportunity are important to consider, next to accessibility, which is related to distance.⁵ Thus, both positive (expected profits) and negative (risk reduction) elements are relevant in crime travelling. These could persuade offenders to travel for all crimes, not only for those that inherently result in high earnings and/or require extensive planning.

Another element shaping offending patterns is the offender's awareness space. This has been previously described by Brantingham and Brantingham and refers to all spaces of which an offender has knowledge.⁶ It is within this awareness space that offenders choose their targets, particularly for two reasons. First, they know where the most suitable targets are situated and can better estimate and minimise the risk involved. Through knowledge of escape routes and proximity of police stations they can improve their chances of success. Second, not all crime travelling is initiated with a criminal purpose. Offenders may well be opportunistic and commit crimes at a time when they pass somewhere for other reasons. As a result, crime trips into unknown territories are relatively rare.⁷

Awareness space is said to largely influence the offending pattern, an assumption that has been confirmed through various empirical researches.⁸ However, one may wonder whether the importance of awareness space exists only in local offending. Does awareness space mainly indicate mobility restrictions or does it play a broader role? A large variation in offender mobility exists. Offenders that commit crimes near home may do so because they know the neighbourhood, but what does that say about offenders that travel far distances? Does this mean they have a larger awareness space? Or is it more, that these offences occur outside the offender's awareness space?⁹

This last question is what we will answer in this paper. In order to do so, we have interviewed 21 offenders. In the next section of this paper, we will discuss our sample and how these interviews were conducted. Afterwards, we provide our results, where we pay particular attention to the offenders' criminal movements, mobility patterns and criminal location choices. Thus, our paper does not primarily involve the study of migration waves and perspectives. Instead it focuses on mobility that refers to crime and target choice. To answer

⁵ W. Bernasco, and F. Luykx, 'Effects of Attractiveness, Opportunity and Accessibility to Burglars on Residential Burglary Rates of Urban Neighborhoods', 41 *Criminology* (2003).

⁶ P. Brantingham, and P. Brantingham. 'Notes on the Geometry of Crime', in P. Brantingham and P. Brantingham, eds., *Environmental Criminology* (Beverly Hills: Sage, 1981).

⁷ J. Van der Kemp, and P. Van Koppen. 'Finetuning Geographical Profiling', in R. Kocsis, ed., *Criminal Profiling: International Perspectives in Theory, Practice, and Research* (Totowa: Humana, 2007), 353

⁸ E. Palmer, A. Holmes, and C. Hollin, 'Investigating Burglars' Decisions: Factors Influencing Target Choice, Method of Entry, Reasons for Offending, Repeat Victimization of a Property and Victim Awareness', 15 *Security Journal* (2002).

C. Nee, and A. Meenaghan, 'Expert Decision Making in Burglars', 46 *British Journal of Criminology* (2006).

J. Kent, M. Leitner, and A. Curtis, 'Evaluating the Usefulness of Functional Distance Measures When Calibrating Journey-to-Crime Distance Decay Functions', 30 *Computers Environment and Urban Systems* (2006).

W. Bernasco, and R. Block, 'Where Offenders Choose to Attack: A Discrete Choice Model of Robberies in Chicago', 47 *Criminology* (2009).

⁹ K. Rossmo, *Geographic Profiling* (Boca Raton: CRC Press, 2000) p.187.

our research question, the information we obtained on mobility is compared with what the respondents told us about their awareness space and how they ended up committing crimes where they did. Finally, we also consider the implications of the results and possibilities for future work.

2. Data and method: a sample of Romanian offenders

We deliberately looked at mobile offenders. Previous empirical research has found Eastern European offenders in Belgium committing property crimes to be highly mobile.¹⁰ They mostly start their trips from one of Belgium's main cities. Some of these offenders have an operational range that includes both the eastern and western border regions of the country, a distance of approximately 230km. Moreover, the largest between-group differences in mobility were found not in multiple offending, but in nationality.¹¹ Of course, this does not mean nationality explains mobility, but is only an indication of such mobility. However, it makes these offenders a valid case for the study of mobile offenders.

Most common Eastern European offenders in Belgium are Albanian, (former) Yugoslavian and Romanian. Yet, typical for Romanian offenders, and what distinguishes them from Albanian and Yugoslavian offenders, is their regular involvement in burglaries and other crime types that require little preparation. For example, compared with robberies, these crimes are not expected to result in extraordinarily high profits. These offenders also avoid contact with the victims and will only rarely use violence – namely, when they see no other option. Despite their mobility, their mode of operation seems similar to that of many local offenders. As their motivations to travel cannot be traced to higher profits and rational choices, we expected to retrieve more information on other relevant issues, for example these offenders' awareness space.

From the Prison Department of the Ministry of Justice, we obtained a list of 67 Romanian offenders who were convicted for property crimes and locked up in one of Belgium's prisons. We contacted 24 of these offender who were willing to participate in our research. Two interviews provided little to no information and a third offender appeared to be in prison for other offences: not property crime, but trafficking human beings. Thus, 21 Romanian thieves were interviewed. Although the sample size only allows an exploratory analysis, the number of offenders has largely been in line with other, similar researches.¹² Procedural and temporal

¹⁰ S. Van Daele, 'Organised Property Crimes in Belgium: The Case of the 'Itinerant Crime Groups'', 9 *Global Crime* (2008).

¹¹ S. Van Daele, and T. Vander Beken, 'Journey to Crime of 'Itinerant Crime Groups'', 33 *Policing - An International Journal of Police Strategies & Management* (2010).

¹² G. Vogel, 'Straatroof in Amsterdam: Enkele Daders Aan Het Woord over Risico's, Lucrativiteit En Prestige', 17 *Justitiële Verkenningen* (1991).

I. Verwee, P. Ponsaers, and E. Enhus, *Inbreken Is Mijn Vak: Textuur En Praktijk Van Woninginbraak* (Den Haag: Boom Juridische Uitgevers, 2007).

R. Wright, and R. Logie, 'How Young House Burglars Choose Targets', 27 *The Howard Journal of Criminal Justice* (1988).

A. V. Polisenka, 'A Qualitative Approach to the Criminal Mobility of Burglars: Questioning the 'near Home' Hypothesis', 1 *Crime Patterns and Analysis* (2008).

aspects hampered a real triangulation of the results, but the information retrieved during the interviews was compared with another case file analysis of similar offenders.

The offenders were interviewed in prison. If the respondents agreed, the interviews were tape-recorded. If not – which was the case for six offenders – notes were taken. We explained how the interview would be structured and deliberately stated that we would ask about criminal behaviour and patterns.¹³ We also stressed the fact that they could withdraw their willingness to participate¹⁴ or refuse to answer certain questions, in this way reducing their need to lie.

Most offenders were suspicious at first, but as the interviews developed they often became more talkative. Several respondents told us afterwards they were glad to be able to tell their own story to someone who really listened was not just after a confession. Due to language issues, all interviews were conducted using an interpreter, his role being twofold. On the one hand, this gave offenders the opportunity to express themselves in their own language, being able to give subtle distinctions. On the other hand, the use of an interpreter hampered the development of a direct and natural-looking conversation between the interviewer and the respondent.

The interviews took about one to one and a half hours and followed a semi-structured template. We started with some general questions on personal characteristics, their trip to and stay in Belgium and length of their time in prison. Afterwards, we asked them about their criminal behaviour. Number and type of crimes, planning, movement patterns, target choice and awareness space were addressed. We did not literally ask how many kilometres they had travelled, but whether they offended in the neighbourhood where they stayed and in which regions and municipalities they operated. Finally, we briefly asked them about their experience in prison and gave them the opportunity to add anything they wanted to share and considered relevant but had not been able to tell us yet.

The specificity and size of our sample do not allow to draw general conclusions on offending behaviour. However, previous research in offending patterns has shown that much variation is hidden when only aggregated and general patterns are studied.¹⁵ Focusing on offenders that have only recently developed certain routines or even have no routines at all in the area where they stay and who travel further than others during their criminal activity allows us to study

P. Cromwell, J. Olson, and D. A. W. Avary, *Breaking and Entering: An Ethnographic Analysis of Burglary* (Newbury Park: Sage, 1991).

¹³ V. Yow, *Recording Oral History: A Guide for the Humanities and Social Sciences* (Walnut Creek: AltaMira press, 2005), p.95.

A. Fontana, and J. Frey. 'The Interview: From Structured Questions to Negotiated Text', in N. Denzin and Y. Lincoln, ed., *Collecting and Interpreting Qualitative Materials* (Thousand Oaks: Sage, 2003), p.89.

¹⁴ D. Silverman, 2 ed, *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction* (London: Sage, 2001) p.73.

R. Legard, J. Keegan, and K. Ward. 'In-Depth Interviews', in J. Ritchie and J. Lewis, ed., *Qualitative Research Practice: A Guide for Social Science Students and Researchers* (London: Sage, 2003), 146-147.

¹⁵ W. Smith, J. Bond, and M. Townsley. 'Determining How Journeys-to-Crime Vary: Measuring Inter- and Intra-Offender Crime Trip Distributions', in D. Weisburd, W. Bernasco and G. Bruinsma, ed., *Putting Crime in Its Place: Units of Analysis in Geographic Criminology* (New York: Springer, 2009).

not the most common offending patterns. As such, we can pay more attention to crime travelling and the concept of awareness space without having to deal with concepts that are otherwise closely related to this spatial awareness, such as distance decay and daily routines.

3. Results

All interviewed offenders were male, their ages between 19 and 45. Most of them had been in prison for a period between six months and two years. Two offenders had been in prison longer (three and five years, respectively).

3.1. Residence

In order to judge the offenders' criminal mobility, we first assessed their anchor points. Most offenders indicated that they had lived in several countries besides their home country and Belgium. They mentioned Italy, France and Spain, but also Portugal, Germany, Austria and the Netherlands. Some of them had quite a large routine mobility and had already stayed Belgium before.

Although offenders claimed to have stayed or lived in several countries, they have rarely used different residences in Belgium. Two offenders had lived in different regions. One resided with several friends who lived in two different cities. Another offender had stayed in four regions. Although he rented an apartment in one area, he often spent the night with family in one of the other regions.

Most offenders managed to stay in the same accommodation, or at least in the same neighbourhood, for a longer period of time. Several offenders rented an apartment by themselves, although this appeared to be a difficult undertaking. Two offenders needed their family to help them look for a place to stay. While living in Belgium, they tried to improve their living conditions and create a better situation for themselves in Western Europe. However, it turns out that several offenders had problems finding a place to sleep in this country. A number of solutions were found. Some temporarily lived with people they got to know during their trip to Belgium or shortly after their arrival. Their living conditions were poor and they often had to sleep with several people in one room, sometimes for several weeks. Three offenders did not manage to keep a roof over their heads, and were forced to sleep in railway stations, their own car or abandoned buildings. Although these people's living conditions were poor and they enjoyed little or no comfort, this gave them time to look for work and slowly try to establish some connections with others. A final group stay at hotels. Although their living conditions were better, they soon were in a desperate need for money, forcing them to engage in crime.

Thus, several anchor point types were observed, ranging from hotels to apartments to railway stations. Moreover, offenders had often stayed or lived in several countries. Part of their mobility can be attributed to the type of anchor point. However, they often stay within the

same premises, or at least in the same region, over an extended period of time, suggesting that it is not correct to explain all mobility by a so-called lack of anchor points.

3.2. Journey-to-crime

After a brief exploration of non-criminal mobility, movement patterns and criminal behaviour were addressed. Seven offenders mainly operated in the neighbourhood of their anchor points. One offender stole cars while intoxicated (alcohol and drugs). He used them for a short period after which he sold them for a couple of hundreds of euros. Four out of seven slept in hotels. One of them explained that living in hotels hampered movement, as it would more likely be noticed if they arrive only late at night to sleep. The respondents, when they remained around their anchor points, did not operate systematically and committed few crimes. Their crimes were thefts with deception, car burglaries, shoplifting and metal thefts on construction sites. Three offenders operated both nearby and far away from their anchor points. One of them was a pickpocket who operated in large shopping malls. His movement pattern was a consequence of his operation area: shopping centres were not widespread around his anchor point and he did not want to operate in the same malls all the time. Another offender had a similar motivation to travel. He monitored cash dispensers to try to obtain both the security code and the bank card of a victim through deception. The third perpetrator was specialised in shoplifting. He was a persistent offender and expanded his operation area over time because he wanted to avoid recognition at all costs.

The other offenders were mainly involved in residential burglaries, although some of them also engaged in commercial burglaries, car burglaries and cargo thefts. They explicitly mentioned operating outside the cities where they stayed. Some of them operated in one or two regions, others admitted to having committed crimes all over the country:

“We had not planned where to go. We left at dusk and started to offend when it was completely dark. [...] I never had a feeling of recognition. I might have been to the same district, but as far as I know not in the same neighbourhood, let alone the same house”

These offenders used the main Belgian traffic lines for travelling. They sometimes travelled by train, but more often used cars to reach their targets. This gave them opportunities to carry more loot and offered more freedom to travel. They regularly used motorways, but this did not necessarily mean their target was located near these roads. Using motorways to leave their home regions, it was highly possible that they would travel several kilometres in search for a target after leaving the motorway:

“Yes, we used the motorway, but this does not mean we offended nearby that motorway. It often occurred that we drove quite some time on other roads too.”

Therefore, although the use of motorways helps to understand the offenders' capacity for travelling, it cannot explain what made them choose to be mobile. After all, these facilities

could be used by other offenders. We therefore wanted to investigate the rationale for travelling and did so through questions about target choice and awareness space.

3.3. Awareness space and target choice

Despite their high mobility, respondents claimed to choose their targets based on similar elements to those observed in other research. This was the case even for the most mobile burglars. They chose against burgling houses where the residents were present and were deterred by dogs and alarms. They preferred easy-to-enter houses that were a bit secluded, mirroring the findings of other research using offender interviews in Belgium.¹⁶

Other elements were less obvious. Some offenders went for rich-looking houses because they expected more profits. Yet, two offenders deliberately did the opposite, pointing out that the looks of a house tell little about what can be found inside. Moreover, rich houses are more likely to have alarms, according to the interviewees.

“[...] And if you’re unlucky, they shoot at your head too”

As for target choice, both risk perception and opportunity play a role. In that sense, these offenders do not differ dramatically from other offenders.

Only one offender scouted targets beforehand. Taking into account the often large distances and the lack of reconnaissance, we believe the rationale for criminal mobility in our research is not to be found in actual target choice, but in the potential target region or *search space*, as it is called by Rengert and Wasilchick.¹⁷

We explicitly asked how offenders came to choose certain offending regions. For the crimes that were committed near their residence, the answer was obvious. Yet, we also wanted to find out whether other chosen districts were also part of their awareness space. Two persons committed crimes while returning from an unsuccessful job searching trip. They had obtained some – incorrect – information on where they could find work and because they needed money, they chose to commit crimes on the way back home. Two other respondents knew someone from earlier days in another region and travelled there to meet them. It was only afterwards – and not necessarily in the company of the person living there – that they offended. Thus, these offenders encountered their target while travelling for non-criminal purposes. However, one can hardly assume they knew the region well after having only been there once. Therefore, despite the non-criminal nature of their trip, one cannot say the area where they offended in this case belonged to their awareness space:

¹⁶ I. Verwee, P. Ponsaers, and E. Enhus, *Inbreken Is Mijn Vak: Textuur En Praktijk Van Woninginbraak* (Den Haag: Boom Juridische Uitgevers, 2007).

¹⁷ G. Rengert, and J. Wasilchick, *Suburban Burglary: A Time and a Place for Everything* (Springfield: Thomas, 1985) p.55.

“We saw the house while driving around through several districts and decided to instantly [offend].”

Other offenders did travel with criminal intentions in mind. Several motives played a role here. Two offenders travelled because they planned to offend in wealthy areas, believing that operating outside the city would lead to higher profits. Three other offenders did not consider profits, paying more attention to risk instead. According to them, smaller municipalities have fewer police, which reduces the risk of arrest. Moreover, these areas contain more secluded houses, making it less likely to be seen. Operating in rural areas for them meant more privacy and, hence, a higher success rate:

“Not in [city X] because it’s too crowded, busy, too much police. In smaller districts, when the police comes after you, you can still run into the fields or from garden to garden.”

Thus, five offenders made a deliberate choice either to attempt to maximise profit or reduce risk. However, choosing the actual area to offend was not based on earlier experience, but was mostly inspired by a number of rather abstract perceptions. Six other offenders did not make a clear choice, but drove around until a suitable target was spotted. If it turned out that residents were present or there were technical difficulties to enter, they chose another target. They were highly opportunistic and had difficulties remembering where precisely they had offended. One offender even indicated to be sometimes surprised on his way back, noticing how far he had travelled. These offenders’ crime trips showed no clear patterns. Their spatial awareness of Belgium was also limited. They had little knowledge of where they had previously been or the locations of the various Belgian cities. One offender even mentioned travelling to the northern part of the country especially because he considered it wealthier. However, when we discussed the towns he visited, it turned out they were often located in the south. Thus, the offenders’ spatial awareness often did not exceed a number of vague, abstract assumptions and opinions:

“The houses were a bit apart, we had the impression that residents were not there. When the house is apart, we don’t draw the attention [...] Security measures were also important, so no visible alarms or high gates: houses that were quite accessible”

We also found that offenders paid attention to either positive (expected profits) or negative (reduced risk) issues. Although we asked about other elements as well, there appeared to be no combination among individual offenders. This may refine findings from studies on the aggregate level that found both positive and negative elements to play a role in target location choice.

4. Discussion

Our analysis consisted of a number of interviews with imprisoned Romanian offenders. The respondents had previously lived in their country of origin and often in other countries as

well. Some of them had also made several prior trips to Belgium before coming here to live. Thus, our sample of Romanian offenders is geographically mobile, at least in the sense that they have resided in several countries. Yet, it turned out their residences were fairly static within Belgium. Even offenders who travelled several times to Belgium and between countries had, in general, a place to stay that did not change during the time they resided in each country. Thus, they do not lack a definable anchor point, as described by Rossmo,¹⁸ making it possible to assess their crime trips and respective starting points.

Yet, this does not mean that their offending behaviour was local. In fact we could divide our sample into three main groups. The first group operated within the vicinity of where they stayed, which was often in hotels. These offenders soon got involved in crime, and had no time to develop an awareness space beforehand. They can be compared with the Sheffield persistent offenders as described by Bottoms and Wiles.¹⁹ Due to their relatively short stay, they had no access to leisure activities and their routines were bound to a small area.

A second group operated both nearby and far away from the city where they lived. Their travelling behaviour had more to do with their targets than with their awareness space: they operated in shopping centres, stole from particular shops or targeted people at cash dispensers. Because they did not want to operate in the same locations all the time, they expanded their operation area to other regions.

The third and most remarkable group consisted of offenders who deliberately chose to travel long distances. This was sometimes prompted by non-criminal travelling, for example, in search for work or meeting old friends, which does not allow us to describe it as a routine activity. Other times there were neither non-criminal activities nor an awareness space that could explain these offenders' travelling patterns. They committed crimes over large areas, outside their awareness space, but this cannot be reduced to a lack of an anchor point. Even if they travelled for non-criminal reasons, one can hardly argue that they knew an area well when they had been there only once. For these offenders, awareness space mechanisms seemed to function in another way. They had only been in Belgium for a short period, and had not yet developed a full-scale awareness space here. Their movement patterns look like what Morselli and Royer described as a desperate search: a distant journey that is caused by a lack of resources in an offender's awareness space, thus creating the need to head for unfamiliar areas.²⁰ However, in our case, this had less to do with an absolute lack of resources, but was more closely related to the fact that their awareness was not yet fully developed. As a result, their awareness space was absent, or at least too small to locate potential targets, forcing them to rely on other characteristics of target areas. These were rather abstract and referred to a general perception of affluence or low risk. Using these general features, they managed to

¹⁸ Cited in: J. Kent, M. Leitner, and A. Curtis, 'Evaluating the Usefulness of Functional Distance Measures When Calibrating Journey-to-Crime Distance Decay Functions', 30 *Computers Environment and Urban Systems* (2006), 187.

¹⁹ A. Bottoms, and P. Wiles. 'Environmental Criminology', in M. Maguire, R. Morgan and R. Reiner, ed., *The Oxford Handbook of Criminology* (Oxford: Oxford University Press, 2007), 640.

²⁰ C. Morselli, and M.-N. Royer, 'Criminal Mobility and Criminal Achievement', 45 *Journal of Research in Crime and Delinquency* (2008), 8.

create some sort of mental map. The usage of such a mental map is not new.²¹ However, in our sample this map seemed not to be based on concrete information, but general ideas and perceptions.

Routine activities and awareness space play an important role in criminal behaviour. As awareness space helps shape the criminal range, one might assume that a larger awareness space may result in a larger operation area. Previous research has indeed shown that burglars may become mobile when prompted by an extended awareness space.²² Yet, spatial awareness is not static. Bernasco showed that the location of previous residences may further influence offending patterns for a certain time.²³ As this effect becomes less important over time, it indicates that spatial awareness is dynamic. Our research has shown that the lack of a clear awareness space can increase offenders' mobility. As they have no clear knowledge of target suitability, they consider abstract elements. In doing so, it appears the awareness space of these offenders does not provide opportunities – as it has been insufficiently developed – but it also does not limit offenders in their criminal behaviour. Incentives to leave known territory are not limited to criminal opportunities. Because these offenders have no clear awareness of the neighbourhood, they think otherwise and choose to travel far because they expect this behaviour to result in more profits and lower risks. A 'desperate search'?²⁴ Not really, more a different way of reasoning that is not hampered by a given spatial awareness.

We claim that awareness space is dynamic and, despite the general perceptions of its proportional link between the size of an offender's operation area and his awareness space, the latter may impose restrictions as well. We have found that offenders without a developed awareness space may operate beyond the borders of what would otherwise be expected. However, a number of weaknesses are evident in our paper, providing opportunities for future research.

We chose to perform our offender interviews in prison. While qualitative interviewing gives us the opportunity to obtain more in-depth information on individual patterns and choices, it does not allow us to generalise our conclusions. Our sample consisted of a particular group of offenders whose awareness space in Belgium has been still under development and who were more mobile in their offending patterns. We believe mobile offenders and their awareness spaces are a promising sample for research, as the concept of awareness space for these offenders cannot be reduced to knowledge about their home region. Because of the particularity of our sample, we suggest future work to consider other mobile offenders and

²¹ D. Rosenbaum, and P. Lavrakas. 'Self-Reports About Place: The Application of Survey and Interview Methods to the Study of Small Areas', in J. Eck and D. Weisburd, ed., *Crime and Place* (Monsey: Criminal Justice Press, 1995), 10

W. Nichols. 'Mental Maps, Social Characteristics, and Criminal Mobility', in D. Georges-Abeyie and K. Harries, ed., *Crime: A Spatial Perspective* (New York: Columbia University Press, 1980).

²² A. V. Polisenska, 'A Qualitative Approach to the Criminal Mobility of Burglars: Questioning the 'near Home' Hypothesis', 1 *Crime Patterns and Analysis* (2008).

²³ W. Bernasco, 'A Sentimental Journey to Crime: Effects of Residential History on Crime Location Choice', 48 *Criminology* (2010).

²⁴ C. Morselli, and M.-N. Royer, 'Criminal Mobility and Criminal Achievement', 45 *Journal of Research in Crime and Delinquency* (2008), 8.

their spatial awareness, trying to disentangle awareness space and its influence on mobility from our rather specific sample.

Another future line of research could develop the notion of quantifying awareness space patterns. Our analysis, like that of other scholars²⁵ has empirically explored movement of individual offenders, but quantitative research in this domain is limited. However, in today's world it is imperative to corroborate such findings through measurement and quantification. Bernasco began this through an investigation of residential history and how it helps to shape the operation area.²⁶ He found that the effect of residential history diminishes over time, which pinpoints another relevant issue. The concept of awareness space has rarely been considered a dynamic concept. Yet, it evolves over time, as people's lives take certain turns. Although this paper shows that underdevelopment of awareness can lead offenders to offend further away from their homes, awareness development in itself has not been discussed. Given the notable findings in our sample with regards to limited spatial awareness, future work could emphasize how such awareness evolves over time and what that says about offending patterns and their evolution.

The interviews we conducted showed offenders considered either positive or negative elements in their criminal location choice, not both. Despite asking them about other options, they considered these less relevant. Thus, research into individual offenders suggests that a combination of risk and earnings may play a more limited role for individual offenders than it does on the aggregate level. As our analysis has been explorative, future research could elaborate the importance of both positive and negative elements on the level of the individual offender.

5. Conclusion

In this paper we addressed the question of how the crime patterns of mobile offenders are shaped by their awareness space. We interviewed a sample of 21 Romanian thieves that were convicted and imprisoned in a Belgian prison. The sample does not allow us to make any statements on offending patterns in general. However, our offenders had atypical offending patterns, casting light on aspects of crime travelling that otherwise remain underrepresented in research.

The offenders had been in Belgium for a rather short period, their spatial awareness of the country not yet being fully developed. These offenders were often very mobile, but this mobility could not be explained by particular crime types or targets.

²⁵ T. Bennett, and R. Wright, *Burglars on Burglary* (Aldershot: Gower, 1984).

P. Cromwell, J. Olson, and D. A. W. Avary, *Breaking and Entering: An Ethnographic Analysis of Burglary* (Newbury Park: Sage, 1991).

M. Maguire, *Burglary in a Dwelling: The Offence, the Offender and the Victim* (London: Heinemann, 1982).

²⁶ W. Bernasco, 'A Sentimental Journey to Crime: Effects of Residential History on Crime Location Choice', 48 *Criminology* (2010).

According to the results, their mobility could also not be attributed to changing residences and, therefore, the lack of a clear anchor point. Some offenders travelled because their targets of choice were quite widespread and could not always be found in the immediate neighbourhood. Other offenders travelled to areas for non-criminal purposes or even areas where they had no reason to be. Their lack of an extensive spatial awareness made them consider more abstract elements, either positive or negative, in their criminal location choice, such as 'rich' or 'quiet' areas.

Our findings suggest that our understanding of the role of awareness space should be differentiated. We do not question the existence of the concept or its importance. However, we do suggest that spatial awareness does not only provide opportunities for crime, but can actually limit it at times. Offenders who lack a thorough development of such awareness may act according to different principles than those who do not. If spatial awareness of offenders has not reached a certain critical size, it may be that they operate beyond the borders of their (limited) awareness space. Thus, although the size of a criminal's awareness space may provide opportunities for offending, it may also create limitations in the operation area, since people may look only for possible targets within this area. If they lack such awareness, they are not bound by their perceptions of targets and are likely to consider other elements. In other words, they are less bound to what they know and may choose to travel further in their criminal operations.