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News from the word of the Hungarian and international criminal geography

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Designed by Antal Forró

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LECTORI SALUTEM!

Dear Readers,

Criminal Geographical Journal has now entered its fifth year, and the Hungarian-language journal *Bűnözésföldrajzi Közlemények* has turned its fourth. The "years of life lived" encourage the editorial board to make both journals even more visible in the international scientific space, therefore, according to our plans, negotiations with the international and domestic ranking organizations can begin soon so that our journals can be classified / rated. We hope that the articles appearing in the next issue will already have a DOI number, so that the articles will reach even more people.

Our present issue once again shows how criminal geography offers a wide range of research opportunities. We hope that these studies will also show that criminal geography is a "boundaryless" science, and will encourage others to start research investigating the territoriality of crime.

I am happy to report that a large number of studies has arrived in the mailbox of the journal's editors in recent weeks, so the next issue of the journal will be published soon. We plan to publish a "best of" publication from the best articles of the recent years.

From the point of view of science, it is also considered important that the International Criminal Geographical Association, following its establishment last year, is trying to draw attention to criminal geography with more programs and academic competitions this year. Among the Association's objectives is that these events, going beyond the borders of the Carpathian Basin, and become more and more international. This year, an English-language criminal geography competition will also be announced. The English and the Hungarian essay writing contests I-III. and the editors of the journals offer the possibility of publication to the entrants who have achieved good results.

If you have any comments or suggestions regarding the journal, please write them to the editorial board.

I wish you a pleasant time for reading the journal!

Szabolcs Mátyás

Chair of the editorial board

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**THE RELATIONSHIP BETWEEN THE THEORY AND PRACTICE OF
GEOGRAPHIC PROFILING IN LAW ENFORCEMENT HIGHER EDUCATION IN
HUNGARY. WHERE IS THE PROFILING SPECIALIST TRAINED?**

Abstract

The study's aim is to examine the development of profiling in Hungary in terms of university courses and practical work. We will examine what profile creation directions can be distinguished and which ones the Hungarian model prioritizes during practical work. Furthermore, we are also looking at the effect of education on field work regarding this topic, i.e. whether higher education in law enforcement or professional experience contributes to someone doing a successful job as a profiler.

The article's methods include document analysis, content analysis, and literature processing. The results show that there is educational support for the Hungarian profiling activity, but the expansion of teaching hours and materials could benefit police students who envision their professional advancement in the field of crime. Examining the topic from the side of practice, we can see that it is necessary to educate and familiarize employees with this method of investigative support, especially with regard to geographic profiling.

Keywords: geographic profiling, police students, higher education, practical specialist, theory and practice

1. Introduction

Among the students applying to police higher education in the field of crime, many envision profiling work already known from movies as a police criminal investigation task during the admission interview. However, the reality that appears in practice is that only a narrow part of field work deals with the "classical profiling" of crimes - also known from movies. The first encounter with reality in relation to this method appears during the years of university education, when the law enforcement student or officer candidate can acquire knowledge of this kind to a greater and this can become part of the professional attitude of law enforcement (Baráth 2022). During the training, Hungarian students learn profiling as a system supporting

the investigation of unknown criminals and/or serial crimes (Gampel-Székely 2009), which appears implicitly or explicitly during various subjects (Ürmösné et al. 2021). In practice, among the types of profiling, the use of the statistical/sociological model (Nyitrai 2015, Nagy & Elekesné 2004) is widespread in Hungary, while geographical and clinical profiling is rather relegated to the background (Haller-Petőfi- Mészáros 2021). The latter is also becoming an emerging trend in Hungary (Haller-Bellavics-Baráth 2020, Lohner, Hermann- Haller 2021). This study also wants to draw attention to the possibilities of less-used geographic profiling.

The basis for the applicability of profiling is that by analyzing the special behavior of the unknown perpetrator, the way the crime was committed and the traces left at the scene, a conclusion can be drawn about the perpetrator's physical appearance, psychological characteristics, age, education, and social status. The discovery of these factors makes it possible to narrow down the circle of perpetrators and thus contributes to the success of the investigation.

Brent Turvey (2000) distinguished the functions of profiling. According to him, the functions performed during the investigation can be divided into three parts:

- (1) narrowing the range of offenders,
- (2) help to detect the crime by identifying the traces found at the scene and the characteristics of the offender's behavior,
- (3) creating investigative strategies.

The literature defines several typologies, including inductive and deductive profiling, psychological profiling, psychiatric profiling, sociological profiling (Bánáti 2022) and geographic profiling. We will discuss the latter in more detail below.

2. Geographic Profiling and Geographic Offender Profiling

There is a long tradition of exploring the interaction between geography and crime around the world. Crime geography can be used to help police strategically target increasingly scarce resources to prevent and reduce crime, and to help police detectives track down and arrest serial offenders. According to geographic profiling (GP) or geographic offender profiling (GOP), crime location information can be used and verified to identify the most likely crime scene from which serial offenders originate (Willmott-Hunt & Mojtahedi 2021). It is defined as “*a criminal investigation methodology that analyzes the scene of a series of connected crimes to determine*

the most likely location of the perpetrator" (Rossmo 2012). And GOP can be identified as a research-based investigative technique, in which we gather information about the process of identifying and analyzing crime scenes. Research exploring the spatial behavior of crime has consistently shown that the perpetrators' targets are not random, but consciously or unconsciously pre-determined (Canter & Youngs, 2017), therefore the application of this type of profiling could also receive more emphasis in Hungarian detective work. If we can determine the location of the offender and the investigating authority does not have to search a large area, police can save time and resources (Rossmo & Velarde 2008). Not only the location, but the gender and the social circumstances of the perpetrator can also be determined with the contribution of forensic linguists (Ürmösné 2014, Ürmösné 2019).

The GOP method is associated with the name of Kim Rossmo, but Favid Canter, who operates in the United Kingdom, is also a prominent representative of this profiling "trend". Among the early theorists, Mayhew's (1861) thesis still appears today, according to which most criminals do not travel long distances to commit the crime. The basis of the GP technique is not only the analysis of the crime scene and the connecting of the analysis of the points on the map, it can point out what circumstances played a role in the crime taking place as it did (Canter & Youngs, 2013). In addition to all this, it is also important to understand how familiar and confident the perpetrators are in a given area. Empirical research has come to the conclusion that the crime scene itself is very informative, as it also reveals a lot of information about the perpetrator (Wiles & Costello, 2000).

From the point of view of proximity, one of the basic approaches to understand the significance of the choice of crime scene for the offender's base is the principle of distance reduction (Turner, 1969). This was supported by several studies (Hasisi et al., 2019, Chopin & Caneppele, 2019). Certain characteristics and characteristics of the offender and the victim, and the type of crime, affect the distance travelled by the offender (Emeno & Bennell, 2013). According to Lino et al. (2017), in most cases there is a "buffer zone", using the term of Turner (1969) and this means that the perpetrators usually keep a small distance from their base location, in the interest of minimizing the chance of recognition by witnesses and thus the chance of being caught is also lower. According to a recent research, the commission of crimes is not characterized by a random geographical spread, there were locations where illegal behavior (e.g. squatting) increased and the spatial distance of the police was 500-600 meters or more than 1 km away (Fondevila et al. 2021). The circle hypothesis (Canter & Larkin, 1993) may be known even from crime series, but it is also a method used in reality, in the early stages of geographic profiling and in certain cultural and social contexts (Goodwill et al., 2013).

3. Education and practice

During the development of the profile analysis procedure, it is worth starting the work using the results of basic scientific research, that is, the considered scientific development of the methodology combined with professional knowledge is worth exploring (Alison & Rainbow, 2011). At the University of Public Services at the Ludovika's Faculty of Law Enforcement, the course Criminal Profiling, Criminology, Crime Analysis, and Criminal Geography also teach explicitly about geographic profiling, since profiling is the only one tool for detection (Gárdonyi, 2021) among many other methods.

In general, different views can be found regarding the practice of profiling, regarding who and when this kind of work can be carried out and whether it is necessary at all during the investigation. According to Gárdonyi (2021), the crime scene investigator can also perform this type of work (Petrényi, 2020). However, the investigators were more characterized by reluctance to use the method (Lehóczki, 2014). Government Decree (on the detailed rules of the investigation and the preparatory procedure), the regulation of this activity may be justified, as a consequence of which even an increase in the use of profiling can be expected” (Alföldi, 2012).

In 1994, professionals began to think about professional creation as an investigative method (Bendzsák-Benke, 1994), then Fülöp (1997) and Kemény (1999) dealt with this area in more detail. With his analysis, Hegedűs (2019) draws attention to the fact that the creation of powder could also be used in cases of burglary.

In Hungary, the use of valuable knowledge resulting from the pairing of crime and geography began to be noticed in the 2000s (Erdősi, 2002). The first major research can be attributed to Andrea Pődör (2005). Mátyás (2017 a, b, c) for the popularization and dissemination of GIS knowledge in education. contributes significantly. At the intersection of geospatial information and crime geography, systems based on the Geographical Information System (abbreviated: GIS) have become widespread, with which any social process can be visualized and modeled by performing spatial operations, such as e.g. ArcGIS, CrimeStat, QGIS, AutoCAD Map 3D (Mátyás, 2020, Pődör, 2007). Based on the principle of minimum effort, Dagnet uses a negative exponential algorithm, which is based on the distance-reducing function, with the view that the probability of determining the offender's base location decreases significantly, the further away the crime scenes are (Lino et al., 2017). Once crime location information within a given crime sequence is calculated and entered into the GIS, Dagnet creates mathematically

based models of crime scenes, allowing potential search regions to be determined (Canter & Hammond, 2006). Regarding the effectiveness of such GIS tools, Paulsen (2007) warns that GIS systems are only effective if they are able to fulfil a set of requirements, which include: the crimes are committed by only one offender, there are at least five crime scenes, the offender is the perpetrator of the crimes did not move to another area, the crimes are relatively uniform around the place of residence, and that the perpetrator did not change the anchor point during the crimes (Rossmo, 2000; 2012). There is also a lot of evidence supporting the use of GIS tools in modern cybercrime investigations, such as Butkovic et al. (2019), who in their study demonstrate the usefulness of customized GIS software such as GeoCrime to identify the offline base locations of serial cybercriminals in Europe.

In the following, let's take a look at how criminal mapping and criminal profiling appear in Hungarian law enforcement higher education. We arbitrarily selected a course at the Faculty of Law Enforcement at the University of Public Service. In the curriculum of the master's degree in Criminalistics (UPS,2022), students study the following subjects and complete nineteen subjects during the two-year period, in all specializations.

Theory of crime prevention	Crime statistics	Predictive Policing
Methodology of the Police Science	Criminal psychology	Policing Strategies
Cybersecurity	Handling of special criminal situations	Crime Analysis
Theories of Criminalistics	Offender profiling	Investigation leadership and management
Police evaluating – analytical work	Comparative practical study of criminal investigations	Law enforcement logistics
International Cooperation in Criminal Matters	Alien in the criminal investigation	Criminalistics in the Courtroom
The latest instruments and methods in criminaltechnics	The role of the expert in the law enforcement	Characteristics of Private Investigation from the Aspect of Criminalistics
Forensic Medicine	Forensic ballistics	Deployment of Undercover Agents in Law Enforcement
Tactics of Acts of Proof and Coercive Measures	Alcohol, drugs and criminal aspects of certain poisons.	

1. Table Criminalistics Master's degree main courses (UPS, 2022)

One-fifth of the mandatory subjects include topics related to profiling and/or geographical profiling and the geography of crime in the core material of the Criminalistics Master's course of the University of Public Service's Faculty of Lawenforcement (Table 1), which cannot be considered such a small amount of knowledge that the profession cannot be aware of it during practical work to integrate into practice.

The optional subjects are the following:

Examination of handwriting in criminalistics	The criminalistics of prisons and detention	Criminalistics of traffic accidents	Geography of Crime
Prevention and detection of terrorism	Handling of drug problems by policing	Criminal Psychology Case Studies	

2. Figure Criminalistics Master's degree optional courses (UPS, 2022)

Among the listed subjects, the ones in bold contain educational material on the topic of profiling and geographic profiling covering the topic of the study, and you can read this in detail further on. We can see that in the MA course in Criminology, which can only be completed at the University of Public Service, the examined topic appears explicitly in the case of seven subjects, and tangentially in the other cases (based on the examination of the topics).

3.1. Crime statistics Course

Attaining the subject students will get an overall picture of the statistical system of the Hungarian justice system and certain elements of the police statistics. During the course they will get to know the legal background of the statistical data collection and management, the methods of data collection and process. Within the scope of the subject the students will get to know the essence of the statistical work and will get to know the contents of the most often applied criminal statistics cursors. They will get an inside view of the police analytical – evaluating work, too.

The student:

- has a high-level knowledge of the role of computer technology in criminal investigation, its application potentials and issues of information security.
- is able to keep together larger and diverse work processes, conduct high-level criminal tasks and apply theoretical knowledge, methods and techniques at high professional level in practice.
- has a continuous professional interest, openness to novelties and acceptance through analysis.
- seeks and applies methods, with the help of which problems and questions can be successfully answered.

1. Description of the subject: The definition of crime statistic, the importance of the measurement of criminality
2. Criminal statistical data management, protection, publicity

3. Criminal statistics data analysis, measurement methods.
4. Interpretation of criminal statistics
5. Hungarian and international crime statistics.
6. Recording of criminal data, summary reports preparation
7. Criminalmorphological analysis of crimes, the basis of crime mapping
8. Criminological research methodology

3.2. Criminal psychology Course

The course covers the subject areas of stress physiology, psychiatry, psychology and social psychology that are useful in forensic practice. The knowledge acquired during the course deals with individual and social psychological aspects of the behaviour of both the offender and the police officer. Basic aspects of forensic psychiatry will also be addressed.

The student:

- has a detailed knowledge of methods of information acquisition and problem solution as well as research possibilities in the field of law enforcement
- possesses all the knowledge in order to conduct individual criminal investigative activities while understanding the advantages of cooperation and teamwork
- has criminalistics knowledge deeper than general knowledge.
- is able to review of the system of domains in law enforcement in a complex way, uncovering the relationship between sub-areas and their summarising analysis.
- is able to recognise special professional law enforcement problems and analyse them in an interdisciplinary way, giving detailed theoretical, practical background and suggestions to their solutions.
- Through their professional synthesising activity, the students are able to understand how scientific results and information can be utilized at system level.
- is able to analyse criminal justice specialist views from various fields and follows the most advanced scientific and technological methods applied in law enforcement.
- is capable of high quality analysis in their professional areas and sub-areas.
- is able to convey the knowledge of their field actively and at a high level, be involved in - is able to handle conflicts
- is capable of applying predictive law enforcement knowledge in a complex manner.

Description of the course:

1. Introduction: criminal carriers
2. Social tension and social learning
3. Biological factors
4. Emotional and instrumental crime
5. Criminal psychiatry
6. The psychology and sociology of terrorism
7. Overview: the criminal mind
8. Victimology and crime prevention
9. The psychology of interrogation: psychological typology
10. Criminal profiling for non-profiler
11. Crisis, stress and mental hygiene
12. Overview: the psychology of policing

3.3. Geography of Crime Course

Within this subject the students get acquainted with a scientific field which can be considered new in our country, acquire information about the regional specifications of crime, the geographical aspect possibilities of law enforcement, the main national and international criminal statistics data sources, the spatial spread of crimes and their social projections. The student gets to know the process of making a crime map and the possibilities of its practical usage, the methods of criminal geography research. The students will be presented a guide which can be used in practice, too. During the course of teaching the subject we would like to hand over the knowledge from a practical point of view thus the acquired knowledge can be easily adoptable during the everyday police work.

The student:

- is familiar with the most advanced technical devices applied in law enforcement and their application potentials.
- has a detailed knowledge of methods of information acquisition and problem solution as well as research possibilities in the field law enforcement.
- is able to review of the system of domains in law enforcement in a complex way, uncovering the relationship between sub-areas and their summarising analysis.
- is able to understand, connect and discover tendencies in various criminal and other - is capable of high quality analysis in their professional areas and sub- areas.

Course topics:

1. The most important notions of criminal geography and its place in science. The introduction of the international and national representatives of criminal geography and their results.
2. The territorial units of criminal geography research. The methods used for criminal geography research on a settlement level and the sources used for the examination.)
3. The analysis of the criminal situation of Hungary and its main criminal statistics indicators from 1989 until the present day. The personal side of crime. The known victims and offenders.)

3.4. Crime Analysis Course

„Crime analysis is a methodology that combines elements of several scientific fields (penal law, financial law, procedural law, criminalistics, criminology, statistics, IT, cartography, crime geography) in order to reach its goals in crime prevention and law enforcement. Based on this, students in the MSc course acquire deeper and more thorough (illustrated with legal cases) theoretical knowledge about the possible uses connected to solving specific criminal problems in two fields of crime analysis.

The student:

- is familiar with the most advanced technical devices applied in law enforcement and their application potentials,
- has a detailed knowledge of methods of information acquisition and problem solution as well as research possibilities in the field of law enforcement.
- is able to review of the system of domains in law enforcement in a complex way, uncovering the relationship between sub-areas and their summarising analysis.
- is able to understand, connect and discover tendencies in various criminal and other databases and in the complex social knowledge available.
- is capable of high quality analysis in their professional areas and sub-areas.
- is aware of extra workload and tasks deriving from the features of criminal investigation.
- has a continuous professional interest, openness to novelties and acceptance through analysis.

The curriculum:

1. The legal and territorial background use of crime analysis
2. The review of the toolbox offered by the new crime analysis regulation.
3. Crime analysis possibilities offered by GIS.

4. The question of statistical analysis and the role of prediction in the work of a crime analyst.

3.5. Offender profiling Course

The course introduces students into the international and national methods of offender profiling. Students will acquire knowledge on the applicability and usefulness of this area of policing activity. They will be familiarized with the four main profiling techniques, their advantages and disadvantages, and those aspects of offender profiling that can help the everyday practice of law enforcement.

The main topics of the course:

- Introduction: the types and models of profiling
- Current Hungarian methodologies in profiling
- Profiling and crime analysis in Hungary
- Profiling in the UK
- Profiling in practice: a case study
- The FBI approach to profiling

The student:

- is familiar with the most advanced technical devices applied in law enforcement and their application potentials.
- is familiar with the most recent methods of criminal profiling and the criminal psychological aspects as well as lie detection methods.
- has a high level knowledge of the role of computer technology in criminal investigation, its application potentials and issues of information security. –
- possesses a great deal of independence in raising issues and elaborating special professional questions, based on their practical and theoretical knowledge gained in criminal investigation.
- seeks and applies methods, with the help of which problems and questions can be successfully answered.
- has a detailed knowledge of lie detection methods and their application during detection and evidencing.
- has criminalistics knowledge deeper than general knowledge.

3.6. Prevention and detection of terrorism Course

The student gains knowledge about the evolution of terrorism and its ideological roots. He/she gets information about the prevention of terrorism, the tasks of national law enforcement agencies engaged in the detection of terrorism, as well as the civilian security prevention possibilities of the commission of such acts.

The student:

- is aware of and comprehends criminalistics theories in depth, and its related terminology.
- is familiar with the most recent methods of criminal profiling and the criminal psychological aspects as well as lie detection methods.
- has a high level knowledge of the role of computer technology in criminal investigation, its application potentials and issues of information security.
- has a detailed knowledge of methods of information acquisition and problem solution as well as research possibilities in the field law enforcement.
- possesses all the knowledge in order to conduct individual criminal investigative activities while understanding the advantages of cooperation and teamwork.
- In order to achieve the scientific development of the field, the student can utilize their theoretical and practical knowledge and skills.
- is able to review of the system of domains in law enforcement in a complex way, - is able to keep together larger and diverse work processes, conduct high-level criminal tasks and apply theoretical knowledge, methods and techniques at high professional level in practice.
- Through their professional synthesising activity, the students are able to understand how scientific results and information can be utilized at system level.
- During law enforcement activities, the student is able to make decisions based on multiple pieces of information and elaborate suggestions for decision-making for a higher management.
- is able to conduct criminal investigation in cooperation with associate and international - is able to convey the knowledge of their field actively and at a high level, be involved in research and development projects, using relevant sources and publications.

The course topics:

- 1.The evolution and history of terrorism
- 2.Characteristics, structure, function, ideology of terrorist organizations
3. Organizations fighting against terrorism and their tasks

3.7. Police evaluating – analytical work Course

The students get to know the analytical-evaluating work of the public security area. We introduce the rules relevant to examine the specialties of the operating area as well as the analytical- evaluating methods which are necessary to perform the tasks of the specific service forms. The students get to know the analysis of accident causes and acquire the essential technical knowledge for this.

During the process of the course material we teach the commander analytical-evaluating task which emerge during the performance of team service exercises. The students get to know the work methods of situation evaluation and the possibilities of utilizing the drawn consequences. During the course they contain the operation of the fiscal, security and defensive type of risk analysis as well as the possibilities of evaluating-analytical work offered by GIS. Because of the complex interpretation of police work show the analytical-evaluating tasks and their work methods of the police work in the field of self-government.

The student:

- is familiar with the most advanced technical devices applied in law enforcement and their application potentials.
- has a detailed knowledge of methods of information acquisition and problem solution as well as research possibilities in the field of law enforcement.
- is able to review of the system of domains in law enforcement in a complex way, uncovering the relationship between sub-areas and their summarising analysis.
- is able to understand, connect and discover tendencies in various criminal and other databases and in the complex social knowledge available.
- is capable of high quality analysis in their professional areas and sub- areas.

Description of the subject:

1. Traffic risk analysis.
2. Analysis-assessment as the basis of public domain service
3. The role of situation assesment in the group service activity
4. Police analysis methods offered by GIS and cartography
5. The most important factors examined during the police assesment-analysis work. The policing aspects of assesment-analysis work.
6. The role of prediction in the law enforcement assesment-analysis work
7. Surveillance cameras and law enforcement work.

8. The possibilities to use Robotzsaru NEO during the law enforcement analysis and police performance evaluation

As you can see, during the master's training, police students can meet in connection with many subjects related to geographic profiling. During the -theoretical- education, they can hear tangentially about this area, which can attract the attention of those interested and could further deepen their knowledge, and during their professional work, they can create workflows where they can perform more effective detective work based on the above topics. It would be worthwhile to carry out an empirical research on the specific knowledge of this type of profiling possessed by the investigators, and this could later be transformed into knowledge that can be used during educational development.

4. Closing thoughts

The article provided an overview of the situation in Hungary regarding professional development education in terms of university courses and practical work. We examined which profile creation directions can be distinguished and which the Hungarian model prioritizes during practical work. The results show that there is educational support for the Hungarian profiling activity, but the expansion of teaching hours and materials could benefit police students who envision their professional advancement in the field of crime. Examining the topic from the side of practice, we can see that it is necessary to educate and familiarize the employees of police agencies with this method of investigative support, especially with regard to geographic profiling.

In Hungary, it may be worthwhile to include geographical data in the analysis used during profiling as well, since we can obtain valuable information and thus make law enforcement more efficient (Vári, 2022) and we can also use the data from the point of view of crime prevention. In addition, the use of the method can also help the management of the police to provide a more targeted response in terms of human resources and equipment.

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*felfoldi.peter@uni-nke.hu***SPATIAL DISTRIBUTION OF CYCLING ACCIDENTS IN BUDAPEST AND
THE WEB-BAL APPLICATION****Abstract**

Road traffic and accidents are unfortunately still inseparable concepts. The only real 'benefit' of accidents that do occur is that they can be learned from later, and are therefore less likely to happen in the future. However, in order to analyse accidents and draw the most accurate possible conclusions from them, it is necessary to have accurate input data as well. In this paper, we present an application capable of providing such a large amount of accident data. The data extracted from it can be used to analyse which accident hotspots are likely to occur. It will be illustrated through an example how it can be used as a source of input data to explore accident hotspots in cycling in the city of Budapest.

Keywords: Budapest, accident analysis, bicycle, traffic accident

1. Introduction, literature review

The most important aspect of road transport is the safety of its users. The primary source of danger in transport is kinetic energy, the level of which is one of the main factors influencing the outcome of the accidents. If there are no adequate passive safety devices in place to keep these energy levels within safe limits, the extent of injuries and the outcome of accidents can be more severe. This is particularly true for vulnerable road users. The time lost by the occurrence of accidents, the management of their consequences, and even the time lost by traffic disruption itself, can cause measurable, quantifiable losses. (Irk 1997, Holló – Hermann 2013). For this reason, accident prevention is an important task. Also identifying the causes of accidents and drawing the right conclusions from them in order to work more effectively on accident prevention. (Irk 1978) (Holló 2013) This is not only a public task, but it is necessary for the public authorities, coordinated primarily by the police, to maintain this task and to carry it out to the highest possible standard, thus guaranteeing citizens' rights to health and the right of mobility. On the police side, this task is primarily carried out by the traffic police (Mészáros

2017), but in parallel with this it can be a task for the officers of public order (Papp – Major, 2022), or a riot police task as well (Gál 2021) Traffic enforcement tasks may also be needed in these areas.

In this study, I focus on road accidents involving cyclists. The analysis of the subject area shows that during the resurgence of cycling in the capital over the last 15 years (Felföldi 2021b), the problem has been examined from several angles. However, in our country, cycling has not lost nearly as much of its popularity in recent decades, especially in certain flat areas, as it has in the capital, where the boom in motorisation since the late 1960s has shifted the focus away from both cycling and walking in mity mobility planning, providing facilities for cycling and transport on foot, and transport management itself. (Gáll 2005) After that it was only in the 2010s that it was reintroduced into conscious, strategic-level planning. (Ábel et al. 2014)

In parallel, the accident situation had to be dealt with at the Budapest, rural and Hungarian national level, and no mode of transport can be an exception to this. Although obviously different types of accidents are characteristic of different parts of the country and regions. These differences may also be reflected in the types of vehicles involved. Surveys have been wide-ranging, from the development of cycling traffic in several locations nationwide (Glász – Hóz 2021), to the analysis of accident data for Budapest (Baranyai – Török 2016), with a specific focus on the "safety in numbers" principle (Glász 2016, Felföldi 2015). There has also been analysis that has included age distribution among the aspects examined (Felföldi 2014, Glász et al. 2011).

There is, one aspect of accidents involving cyclists that has received little attention to date, in contrast to motorised transport, and that is location-based analysis. The existence of accident hotspots has long been known and studies have been carried out on them (Holló 1994b, Hóz 2002, Andrejszki et al. 2017), including a study of hotspots from the point of view of road signs (Mocsári 2004), but there are few examples in the Hungarian literature of the targeted investigation of cycling accident hotspots. (Mátyás et al. 2021) Although the data sources are available and can be analysed using geoinformational tools. One such data source is presented in Chapter 2.

In addition, international literature is available on the investigation of cycling accident hotspots. (Mahmoud et al. 2021, Loukaitou-Sideris et al. 2014) However this kind of investigation is not in the centre of international research either.

2. The Web-Bal application

The computer storage and use of road traffic data and information to improve road safety started decades ago. (Nahi 1973, James 1975, Koren et al. 1983, Dove et al. 1986, Holló 1994a) However, in Hungary the most relevant data source is the internal information system used by the police, called Robotzsaru (RZS NEO) (Hajzer 1999). This system contains the most comprehensive information on accidents occurring in the country, but access to it and the management of access rights are limited even within the police force, primarily for the reasons of information protection (Sütő 2016). Since not only information on accidents is stored here, but practically the entire administrative operation of the police is managed through this system, it is obvious that the RZS NEO cannot be searched directly by anyone. However, specific data on many events recorded here, including accidents reported to the police, must be anonymised and transmitted to the Hungarian Central Statistical Office (KSH) within a specified timeframe, as required by the legislation. This process is not fully automated and therefore requires continuous work by both police and KSH staff. Data sent to the KSH must be integrated into the international statistical system and must be anonymous. For this reason, the data stored in the RZS NEO contain more information than the statistical data sheets sent to the KSH, even beyond the personal data. (Hóz et al. 2015) However, the national accident situation recorded by the KSH and available to the general public is less effective from the point of view of accident research. In many cases, insufficient information makes it impossible to draw the right conclusions. It can therefore be stated that, in order to improve road safety, it is necessary to examine sources other than the data from the KSH, especially if these sources actually contain more relevant data.

The source of the data used for this analysis is the Web-Bal application, which is available for research purposes on the website of the Hungarian Public Roads NZrt (MK) and is reserved for the MK to perform its tasks as well as possible. The predecessor of Web-Bal was the Win-Bal software, developed in 2003 (Hóz 2005). Win-Bal software was available on CD, which database was therefore available at the place where the software was installed. Thus changes and updates could not be easily synchronised. This led to the development of a web interface with a cloud-based database, where all authorised users could use the same database. The input data for the Web-Bal are the National Road Data Bank (OKA), the National Cross-sectional Road Traffic Counting Database (OKKF) published annually by the Hungarian Public Roads (MK), the accident data set provided by the statistical module of the Hungarian Statistical Office (KSH), which contains information on the location data provided by the police, as refined by the MK staff. Web-Bal also provides an opensource visualisation based on Open

street map to visualise all this and, after selecting a number of query options and criteria, the results can be downloaded in spreadsheet form for later processing by additional applications (e.g. Google Earth/Maps, MS Excel, QuantumGIS, IBM SPSS).

It is also worth noting that the development of the road network visualisation based on the OKA has been ongoing since the early 2010s. The development of the Transport Information System and Database (KIRA) is also currently being carried out by the MK. This system is open to the public, anyone can register and view the national road network of Hungary, also using Open street map and other base map layers (e.g. Google Maps). The basic idea behind the development of KIRA was also to provide a wide range of possibilities for the registered users to investigate road transport issues. In order to achieve this goal, efforts were made to integrate data sources coming from several directions, and it was intended to include spatial information or Web-Bal data into this system (Stegena – Zubriczky 2015). Unfortunately, this integration has not yet been done.

3. Cycling accidents in Web-Bal

3.1. Query process

The online interface of Web-Bal allows a virtually infinite combination of accident queries. The main focus of this paper was the study of cycling in Budapest. Although the need to investigate accidents involving other means of micromobility is an interesting issue (Felföldi – Harangozó 2021). Unfortunately, this kind of mobility and accidents are increasingly topical, however it is not currently possible to use Web-Bal to investigate this issue. As micromobility devices, including the most common electric scooters, do not have a clear legal status among means of transport, the police cannot register them correctly in the RZS NEO, so this information is not passed on to the KSH and the MK. Although, from an accident point of view, the use of these devices is just as much a factor as pedestrians or cyclists.

Figure 1. –Web-Bal search interface

source: https://webbal.kozut.hu/webbal_kkk/AccidentList.aspx

Figure Figure 1. shows a detailed view of the Web-Bal search interface. Within this, Accident data (Baleset adatai), Involved persons data (Részvevők adatai) and Injured persons data (Sérültek adatai) have dozens of separately selectable attributes for location, time, traffic engineering and technology, traffic situation, accident conditions, severity of injury, who caused the injury, who was involved, etc.

In the following I will illustrate the possibilities offered by Web-Bal through only one possible query. From 1 January 2010 until the end of the last year with complete Web-Bal data (31 January 2021), I have queried road traffic accidents involving personal injury in which a cyclist was the accident causing participant, occurring in the administrative territory of Budapest. The result of the query was an Excel spreadsheet containing thousands of location data, which can be further processed together with the other accident characteristics included in the spreadsheet.

3.2. Geoinformational representation

The accident dataset obtained from the query can be processed by a number of additional software tools for better visualisation. One of these is QuantumGIS (QGIS). Although one of

the primary functions of Web-Bal is to assist the road administrator or any other user in the research of accident black spots, and it offers a map display and a number of parameterisation options, the graphical interface of the map displayed, the software ergonomics of navigating the map cannot be considered as user-friendly. Thus, a more spectacular result can be achieved by using other solutions. For instance, accident heat maps, which show us the road safety risk points of the time interval under consideration, not only on the basis of the density points, but also on the basis of the accident severities. The heat map generated in QGIS from the cyclist accident data is based on roughly 2800 accidents in which a cyclist was the causative participant. Accidents involving cyclists but not caused by their actions are not included in this heat map, but there would be no major differences in the really significant hotspots. Due to space constraints, they will be dealt with in another study.

It can be stated with a high degree of certainty, and this has been a known phenomenon, that cyclist accidents are concentrated on and within the Budapest Grand Boulevard. (Felföldi 2013) These accidents were weighted according to their severity, following the literature. (Holló 2011) 1 for minor injuries, 10 for serious injuries and 100 for fatalities. On the heat map I have marked the locations of minor accidents in blue, severe accidents in red and fatal accidents in black. The lack of representation of fatal accidents where the cyclist was not the causative participant may distort this map the most, as there have been accidents in the suburbs where the cyclist was not the perpetrator but a participant. However, these are isolated incidents and the hotspots are clearly more characteristic of the more densely built-up inner city.

The most prominent of the inner city hotspots are the section of Károly boulevard between Astoria square and Dohány street, the area around Blaha Lujza square, Szent Gellért square and the Gellért quay area, the section of Bajcsy-Zsilinszky street and Andrassy streets within the Grand Boulevard, the on- and off-ramps of Margaret bridge, the intersection of Oktogon square, Baross street and József boulevard. In these locations, interaction with motorised traffic is definitely one of the sources of danger. The heat map even shows congestion around Bem square, which is due to the segregated cycling infrastructure there which has the highest cycling rate in Budapest and, unfortunately, also a fatal tram collision there a few years ago.

The details are shown in the figures below. The specificity of the accident heat map produced by the QGIS geoinformational software is that it dynamically shifts the colouring according to the weighted accident values shown in the image zoomed in on the given areas. Accordingly, for the whole territory of Budapest, almost the entire area within the Grand Boulevard is a fatality hotspot, while zoomed in, different areas of the city appear with different colouring.

This also explains the phenomenon that the danger zone of the same Astoria square (where several fatal accidents have occurred) is black in most of the image crops, but "only" red on the left side of Figure 6., where it is shown together with Blaha Lujza square. In this figure, Astoria square has the same dangerousness as in the other images, only the software shows that Blaha Lujza square has had more accidents than the Astoria area in the eleven years under study, so that the aggregate value is more "blacked out" there.

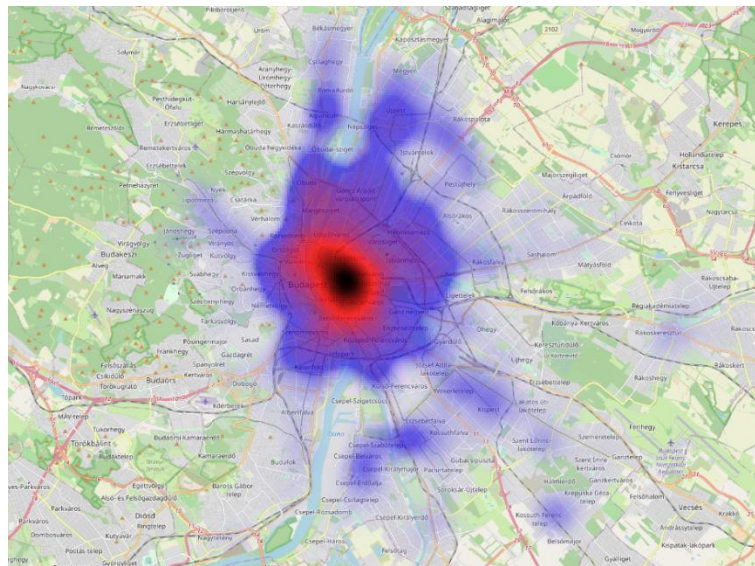


Figure 2. – Accident heat map of the entire Budapest area, cyclist causation 2010-2021
source: author's editing based on Web-Bal, QGIS 3.16.5

Figure 2. shows the heat map of all accidents caused by cyclists in Budapest between 2010 and 2021. It can be seen that in South Pest, e.g. around the Gubacsi bridge, there is a light blue density, but this does not mean that there were only light injuries in that area. There were fatalities there too, but there is a difference in severity of magnitude in the inner area of Budapest. Therefore the relative severity justifies the use of black for the inner districts compared to the outer areas.



Figure 3. – Accident heat map of Budapest city centre, cyclist causation 2010-2021
source: author's editing based on Web-Bal,, QGIS 3.16.5

Figure 3. shows the areas of Budapest city centre within the Grand Boulevard. Although the time period covered is between 2010 and 2021, the accident data are obviously influenced by the infrastructure reconstruction of the Grand Boulevard in 2020 (Felföldi 2021a), but the long-term impact of this cannot yet be evaluated. However, it is immediately apparent that there are two particularly dangerous hotspots with several fatalities, Astoria square, marked by the black spot on the left, and Blaha Lujza square to the east.

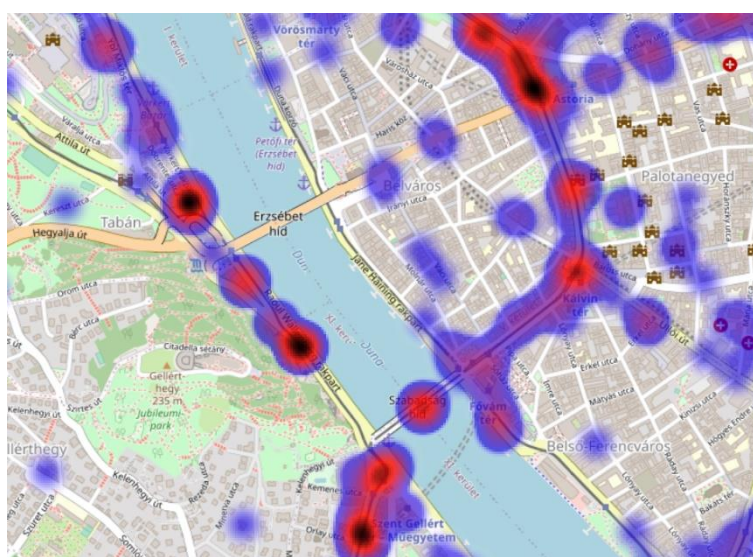


Figure 4. – Accident heat map, Astoria, Döbrentei square, Gellért square and Gellért quay, cyclist causation 2010-2021
source: author's editing based on Web-Bal, QGIS 3.16.5

Figure 4. shows the narrower downtown area of Budapest. Here it can be seen that the most dangerous area of the image is the Astoria area at the top right, but the Döbrentei square near the Tabán city park, the quay in front of Gellért-hill (Gellérthegy) and the area around Gellért square from north to south on the Buda side can also be described as a series of hotspots.

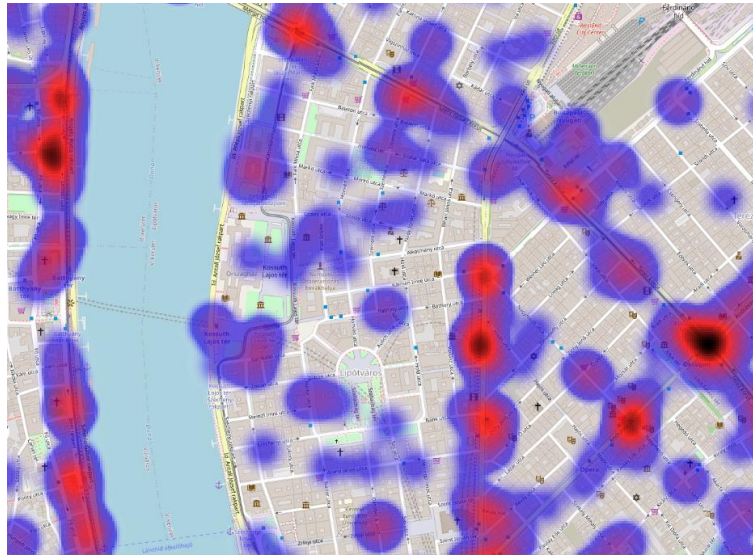


Figure 5. – Accident heat map, Oktogon square, Bajcsy-Zsilinszky street, Bem square, cyclist causation 2010-2021

source: author's editing based on Web-Bal, QGIS 3.16.5

Figure 5. shows the northern part of the Pest city centre, where the upper edge of the image is the St. Stephen's Boulevard section of the Grand Boulevard. In this crop, the most dangerous area is clearly the Oktogon square, in the centre right of the image. However, the whole of Bajcsy-Zsilinszky street can be considered dangerous compared to its surroundings, and unfortunately there has also been a fatal accident in Buda on Bem square, which is shown on the left side of the picture.

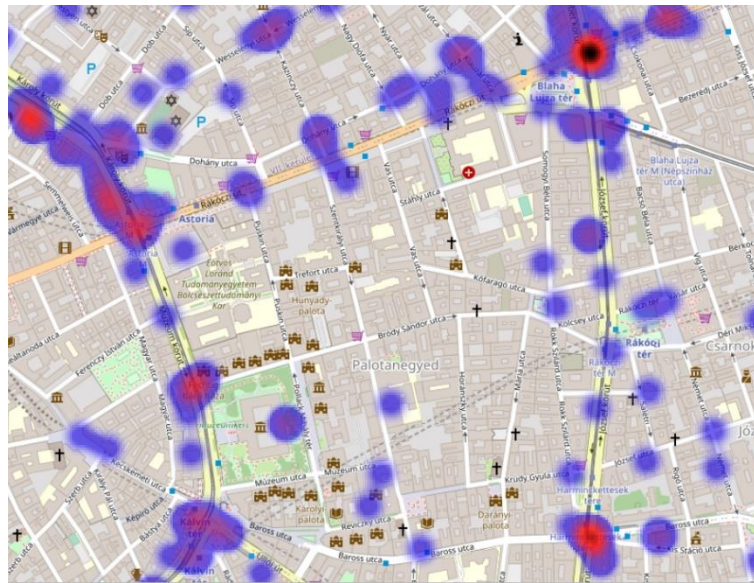


Figure 6. – Accident heat map, Astoria square, Blaha Lujza square, 32nd Infantry Regiment square, cyclist causation 2010-2021

source: author's editing based on Web-Bal, QGIS 3.16.5

Figure 6. shows the Palotanegyed district of Budapest, where only the boundary areas of the Museum Boulevard and József Boulevard are designated as hotspots. It can be seen that in this picture Blaha Lujza square appears to be the most dangerous. As we can talk about aggregated hazards in all cases, we should not only think of fatal accidents in these places, several serious injuries may also reinforce the severity marker of the given location. However it can be stated that the Budapest Grand Boulevard and its junction with Blaha Lujza square have been a risky location for cycling accidents in the last decade.

4. Conclusion

In the paper we reviewed some of the previous researches on accident hotspots in Hungary and the need for research. With the help of the Web-Bal application operated by Magyar Közút, which provides a very wide range of information, it is possible to further analyse the data of accidents occurring in Hungary and reported to the police in tabular form using various aspects. One example of such an examination was the analysis of cycling accidents in Budapest since 2010. In these accidents, cyclists were the causative participants. In the input data table of the accident heat map generated using QuantumGIS geoinformatics software, there were nearly 2800 accidents involving cyclists. While this amount of data is not worth examining in isolation, the large amount of data allowed for a cluster analysis to identify the points in the city where accidents have occurred at higher densities over the last decade. The most dangerous

intersection in the city was found to be around Blaha Lujza square. The full reconstruction of this square was completed at the end of 2022, but this reconstruction did not fundamentally change the traffic flow on the main intersecting roads. A much bigger transformation was brought by the opening of the cycle lane on the Grand Boulevard in spring 2020. The role of this facility in accident prevention will be examined in a few years' time by means of a spatial analysis similar to the one carried out in this study. In this case, a comparative analysis will reveal whether the location has become safer for the micromobility users. The other accident hotspot was the Astoria area, whose traffic environment and engineering have also changed due to bus replacement as a result of the metro renovation in recent years, and will change again in 2023.



Figure 7. – Bottleneck near Astoria square, worn road signs
source: Google Street View <https://goo.gl/maps/kLoUSSGHPnz9CQBN9>

At the same time, the bottleneck (Figure 7) in the cycle lane on Károly boulevard also posed an accident risk in traffic without bus replacement. A problem that could be addressed, if not by rebuilding the road, then by more visible warning signs or other traffic safety devices.

Making cycling safer is in the interest of all road users. If cycling is made safer, it can be a more attractive mobility alternative which also has a congestion-reducing effect. The present paper is only a thought provoking exercise in which I have presented one possibility. But it will be worthwhile to apply the same analysis to other types of transport in the future, even for accident investigations in the same locations but under different environmental conditions.

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Horánszki, Andrea Éva security policy expert*horanszki.andrea.eva@uni-nke.hu***A CRIME GEOGRAPHY ASSESSMENT OF THE COCAINE****Abstract**

The criminal geography as the word shows it, is based on analyzing of crime in a geographical frame. In this study, I would like to present the strategically important role of criminal geography in law enforcement through the cocaine trade. First, the cocaine trade is presented, concentrating on the presentation of the transport routes and the exploration of the connections. Then the strategic priorities of the European Union will be in focus. Subsequently, in the summary, I will try to show why I see the crime geography-based investigation as an important method in the law enforcement treatment of drug crime.

Keywords: cocaine, crime geography, strategy, drug, criminal geography

1. Preamble

Through the spatial characteristics of the cocaine trade, the study presents the importance of the criminal geography in the creation of a law enforcement strategy. As a result of globalization, drug crime, like any other type of criminal activity, can no longer be interpreted strictly within a national framework. Of course, it is still necessary to create a strategy at the national level, however, cross-border cooperation is now necessary. In this case, the development of a global strategy regarding the cocaine trade is extremely important, since we can talk about a series of activities consisting of several segments that are never geographically concentrated at the same point. The study is focusing on the cocaine trade, and the importance of examining territoriality.

2. Cocaine route to Europe

In Europe, after cannabis the most widely used illicit subsections is cocaine, which can be found on the market in two forms. Cannabis is considered legal in the Netherlands, the investigation of trade affecting Europe cannot necessarily be linked to criminality. For all these reasons, the study focuses on the cocaine trade. It is an inevitable fact that cocaine continues to arrive in Europe in large quantities.

First of all, it is necessary to examine which country - which continent is the country of origin of the cocaine arriving in Europe, therefore from which region the cocaine shipment starts its

journey. The majority of cocaine arrives in Europe from South America via various modes of transport, by plane, ship and via various routes. This fact is not surprising, since the coca bush requires a tropical climate, so it is the best grown in the Amazon region. Cocaine is obtained from the leaves of the coca bush. It should be noted that in terms of natural occurrence Bolivia, Colombia and Peru (Ürmösné 2018) are the countries where the coca bush growing in its natural state, without artificial planting. In my opinion, it is a very important and inescapable fact that the leaves of the coca bush play a powerful cultural role in these areas, both in a spiritual, social and health sense. So it can be said that for these countries, the coca bush does not appear as a segment of criminality, but gains social importance and has a culture-building effect. It can therefore be seen that in this case the geographical location already plays a significant role in the investigation of the countries of origin of cocaine. We cannot forget the geographical features that make it possible to grow the plant. Cocaine arrives in Europe from the countries of origin mostly from South America by ship or plane. Shipments usually start from Brazil, Venezuela and Ecuador (EMCDDA, 2016) (Figure 1).



Figure 1: Main cocaine trafficking routes to Europe

Source: https://insightcrime.org/images/2016/June-2016/16-06-01Cocaine_map.png

The attached map also shows that cocaine starts its journey from Latin America, both by ship and by plane. Brazil, Peru and Bolivia are increasingly emerging as the main transporters when looking at cocaine routes to Europe. The role of Brazil is growing, and its growing importance indicates that Bolivia and Peru are expanding their role as suppliers to the European market.

Similarly, the traffic of Colombian cocaine to Venezuela has increased. From Venezuela, criminal groups use both flights and sea routes, trying to take advantage of the high traffic surrounding the Venezuelan coast. Heavy traffic can reduce the risk of falling. Although Brazil's role is growing, it is still true that Colombia will likely remain a key source of cocaine shipments to Europe, as evidenced by increasing production figures and continued seizures. Ecuador and Argentina are also mentioned as the starting point of the drug. Brazil and Venezuela are the key entry points for cocaine bound for Europe, from where the drug is smuggled via ships, private yachts or air. It is also worth checking the transit countries. The Caribbean and West Africa are reported to be the two most common transit zones for cocaine crossing the Atlantic. Central America also appears to be an increasingly important stopover. The West African Gulf of Benin, along with Cape Verde, Madeira and the Canary Islands, form the second major transit zone for cocaine bound for Europe. On the other side of the Atlantic Ocean, cocaine continues its journey by sea, land or air, mainly to Western or Southern Europe, but it shows an increasingly changing trend in which country the cocaine arrives first. Nowadays, Eastern Europe and Turkey also appear as host countries. Given their geographical location, it is not surprising why these countries are the first to arrive in Europe, and the transit countries are not surprising when you look at the map (Mimi Yagoub, 2016).

The amount of cocaine in Europe is high. Based on the European drug report, 213 tons were seized in 2020. This statistic is reinforced by the fact that the purity of cocaine is getting higher, but the prices are not following this, it can be read that there is a lot of substance present on the European markets (Európai kábítószer-jelentés 2022: Tendenciák és fejlemények.).

Among the modes of transport, the most widespread is container transport by sea. It is important to point out that the finished cocaine itself does not arrive in Europe, as it is already processed within Europe (MTI, 2022. <https://www.portfolio.hu/gazdasag/20220506/terjed-europaban-a-kokain-543381>).

Although the main delivery endpoints and the stable market, are still the Western European countries, the trade has clearly started in the eastern direction towards Russia and Asia, and the states located between these routes are also supplied. From a business point of view, cocaine smuggling to Europe can be considered much more attractive than opening to the United States market, since the prices in Europe are significantly higher, and the chances of getting caught, the risks are at a much lower level. In the US a kilogram of cocaine is worth about \$28,000 wholesale, compared to an average of \$40,000 in Europe with prices reaching \$80,000 in different parts of the country. The USA's guard is present in Latin America with a strong involvement of resources in order to suppress the drug trade, while European forces are less

present in the region. This also explains why the cocaine trade flows more towards the European markets. Cocaine is not as a deep problem for Europe as it is for the USA. Furthermore, the high level of violence in Latin America is not a problem for the US, it does not struggle with systemic corruption, which is the characteristic of many countries in the Latin American and Caribbean region. We cannot forget the fight against the coronavirus, or the economic downturn, the migration pressure on Europe, internal political tensions, and the challenges caused by the Islamic terrorism cannot be neglected either. In addition to all this, the cocaine trade is relegated to the background on the list of challenges, a fact that is exploited by the criminal groups involved in the trade. Based on these facts, it is not surprising that almost as much cocaine arrives in Europe as can compete with the amount delivered to the USA. Of course, Europe is not exempt from the challenges caused by the cocaine trade. Such challenges are for example, the distorting effects on the economy caused by the laundering of drug money, deriving from drugs across Europe. The intensification of drug-related violence and the corruption appearing in law enforcement agencies supporting the trade cannot be neglected either. What is perhaps the biggest problem for the future is the continuous strengthening of the European mafias, which the cocaine trade provides with sufficient resources further build and strengthen their organization. It can be proven for example that the cocaine trade brought the Italian mafia group called the Ndrangheta to power. All these facts appear as a serious challenge to national security across Europe. What the cocaine trade has caused in the Latin and the Caribbean regions may cause further concerns for the European states. Following the events in Venezuela, many European countries that are present in the Caribbean today have a neighbor that is seriously involved in the export of cocaine and other crimes related to it. Venezuela is currently considered a failed state and therefore also exerts migration pressure (Jeremy McDermott, 2021).

What makes trade to Europe difficult for the US is that there is no connection by a land bridge, which is why it can be transported by air or water. In the last decade, the trade route has concentrated on the sea route, mainly with container transport. As a result of the pressure between law enforcement and drug dealers, new methods of transportation are constantly appearing. The European authorities are putting more and more emphasis on the containers coming from Peru and Colombia, as a result of which the drug trade tries to choose another state in the region as a starting country. The latest technology is very dangerous, the packages of cocaine hidden in the containers are connected to legally completely clean carriers, in this case the carrier does not even know what his packages are hiding. As far as air transport is concerned, commercial flights are the most common. In Europe, the primary point of arrival is

Spain. This is not surprising, since we can talk about countries connected to Latin America in several ways, if we only think about the existence of a common language and culture. However, nowadays there is a strong control at the Spanish coasts and borders, and other European states have also appeared as arrival points (Jeremy McDermott, 2021).

In Spain the cocaine trade plays a significant role, the law enforcement agencies try to act with adequate forces to deal with the situation, and many drug laboratories have been brought down. An example of this is the case of the drug laboratory successfully busted in Madrid in 2022, where they were able to produce 102 kilograms of cocaine per a week. In this lab, the connection with the South American drug production was clearly visible, since it worked with the same method as it is used in the open air in the jungles of South America. Of course, this has historical and cultural roots. The head of the drug lab busted here was a Dominican citizen. This fact can also be fully integrated with what has been described so far, according to which the Caribbean region is also significantly affected by the arrival of cocaine in Europe (Balizs, 2022).

Based on the above, it can be said that in the case of the cocaine trade, there is a basis for geographically based analysis, and correlations can be found between the geographical location, the geographical features and the role played in the cocaine trade.

3. Europe's action against trade

In connection with the drug and cocaine trade, we can talk about several challenges, which can be dealt with at different levels. It is necessary to respond to crimes induced by the cocaine trade at both the national and global level, in which case, in my opinion, the primary task is to detect the source of the crime, since only treating the symptoms is not enough, because this does not eliminate the problem.

One of the main forces behind cocaine trade and drug trade as a whole is corruption. It can be seen that the international community, and the European Union are aware of the transport routes and methods, yet the cocaine trade continues to operate, constantly reproducing itself. One of the reasons for this is the high level of corruption. Corruption helps criminal groups, smugglers, to get into ports, hide drugs in containers, maintain the legality of companies created to cover illegal activity, smuggling activities, for example in renting transport vehicles or warehouses, and in laundering money. This kind of challenge does not only affect Europe, it appears everywhere globally, just as it is present in transit countries or producing countries. The EU appears to be becoming an increasingly important transshipment point for cocaine shipments destined for markets in the rest of Europe, Africa, the Middle East, and Asia. Although there

are criminal organizations that deliver their shipments to Asia in such a way that Europe is left out, it does not even appear as a transit country. The effects of the COVID-19 epidemic can also be observed in the cocaine trade, with a greater emphasis on online purchases using post and parcel delivery services. What causes a problem is the resistance of criminal organizations involved in the cocaine trade. Here we have to realize that even if someone drops out of a particular organization, a few days later someone else will be put in his place, therefore stopping the entire criminal organization is an impossible task at this level. We can talk about criminal organizations that have a cross-border network (Ürmösné 2018), so global action and international cooperation are necessary if we want to see results against them. In the case of drug trafficking, we can now talk about networking and the creation of hubs (European Monitoring Centre for Drugs and Drug Addiction, 2022).

In addition to the already mentioned challenges related to cocaine, there is also the possibility of gang warfare, related to violent crimes and illegal activities that have given rise to possible ad hoc situations, such as kidnapping, possession of weapons, etc. It is worth looking at what strategy the European Union intends to use. First of all, it should be emphasized that the European Union also deals with drug trafficking and the health risk caused by drug consumption during the creation of its strategy. The member states of the Union have their own drug strategies, and it is the responsibility of the EU to coordinate them. As part of the strategy, it also undertakes collaborations and is in contact with the European Monitoring Center for Drugs and Drug Addiction (EMCDDA) and the Europol as well as other international partners and civil society organizations. The organization coordinating international relations and cooperation is the European Multidisciplinary Platform Against Criminal Threats (EMPACT). The keyword for drug trafficking is enhanced security. As a result, it is logical that the goal is to strengthen security-enhancing devices. The strategy focuses on the following main points: prevention, deterrence, disabling, cooperation, intelligence gathering, asset confiscation. Organized crime is closely related to drug crime, so strategic considerations related to drug crime are also part of the EU strategy (Európai Tanács, Az EU drogpolitikája).

The currently active strategy is the EU's 2021-2025 action plan for drugs, the elements of which emphasize measures to suppress drug trafficking. It can be highlighted that, due to the large-scale development of IT technology and the effects of the COVID-19 epidemic, the suppression of the online trade in drugs was not surprisingly given a special place. The strategy tries to cover all aspects of drug crime, thus also affecting the phenomenon of violence related to the drug trade. In terms of the structure of the document, it consists of seven main points, each of which is assigned separate strategic priorities with measures and names of the responsible parties. The

first point is aimed at reducing the supply of drugs. Overall, the main priorities are the disabling of criminal organizations involved in the drug trade, stronger detection of the drug trade, increasing the number of seizures, greater cooperation with the private sector, and the fight against illegal production. Measures are also associated with these goals, among which the importance of information sharing is highlighted. The measures mostly prescribe tasks for the police and customs authorities. This is where the need to curb the use of logistical and digital channels for the trade of illicit drugs can be found. The measures include the necessity for curb the online drug trade and trade via postal or express parcel delivery. Eradication of drug production, including establishment identification, monitoring and eradication, are the measures named in the strategy. The second main point emphasizes reducing the demand for drugs. Within this point, prevention - treatment - care appear as keywords. This is less related to the drug trade, but still from the point of view that if demand decreases, the trade may also slow down. The remaining strategic points already address the protection of drug users, health preservation issues, cooperation opportunities, research and development, and coordination issues. The strategic document names a total of eleven strategic priorities. Three of them fall under supply reduction, demand reduction includes two priorities (Európai Unió Tanácsa, 2021).

It can be seen that the European Union intends to take strong actions against drug crime in the period from 2021 to 2025, both locally and globally. In my opinion, it is not possible to take effective action without close international cooperation, due to the cross-border nature of drug crime.

4. Summary

The segment of drug crime and drug trafficking cannot be interpreted at the local or national level it can only be viewed globally in a large geographical area. Based on the overview of the cocaine trade, it becomes apparent that it is also necessary to analyze the trade in a geographical sense, since in order to the law enforcement agencies to be able to react effectively and act against the challenges, it is necessary to know exactly from which direction they are coming. As we have seen, the European Union tries to concentrate forces even beyond its borders, and this consideration can be greatly helped by a predefined analysis based on the geography of crime. If the exact route of the cocaine trade can be revealed, it is possible to react in a targeted way at the departure and arrival stations. In my opinion, the strategic approach based on crime and geography is particularly important in the case of drug crimes, it is not possible to act effectively against them or to set up strategic considerations. Thinking based on the geography

of crime helps to build a network of partnerships and to focus law enforcement agencies on the right location.

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THE EFFECT OF WEATHER CONDITIONS ON CRIME TRENDS

Abstract

Weather patterns affect all of our lives. The development of crime, or the fear of it, can accompany us throughout our lives, but if we think about it, we can find a more serious correlation in rainy, gloomy days and in the heat, and the geographical distribution of crimes committed under the influence of weather forces, but of course, the socio-economic context of the country in question can not be neglected. My essay aims to show the interrelationship of these motives.

Keywords: crime geography, weather, police, law enforcement, crime

1. Introduction - Criminal geographical aspects

According to Antal Tóth, "...criminal geography is the study of crime as a social phenomenon of mass, examining its spatial and temporal aspects of crime, and an inter-sub-discipline between criminology and applied social geography. The spatial structure and extent of crime, trends and dynamics, spatial intensity, socio-economic background, the socio-economic processes taking place, and its expected spatial displacement, and contributes to the development of area-specific crime prevention strategies" (Tóth 2007, 10-11).

According to most researchers, crime geography is the interface between criminology and social geography. János Sallai sees the field as a discipline and believes that „Crime, as spatial structure, spatial intensity, tendency and dynamics, territorial intensity, the socio-economic background; that can be expected in the light of the social processes and their shifts in the context of the current social situation, is one of the relatively new but increasingly important geography of crime (criminal geography, crime geography, geography of crime), which is an interdisciplinary science between criminology and social geography." (Kobolka-Sallai 2008, 86.)

According to Szabolcs Mátyás, the cultivation of the area requires the high level of criminological and geographical knowledge. The relation of the geography of crime to law enforcement studies is becoming increasingly close, and its research methods include numerous

research methodologies from a wide range of disciplines, making it necessary to interdisciplinary approach (Mátyás 2020).

2. Impact of the summer heatwave on crimes

Violent crimes and the propensity to commit crime show an upward trend in the warmer months. According to research conducted by Finnish on ambient temperature changes and crime rates over twenty years the prominent factor contributing to crime is the weather. The researchers concluded that the rise in crime is a direct proportional to the rise in temperature, i.e. a 1.7% increase in the number of crimes committed for every one degree increase in temperature.

The study concluded that the increase in crime caused by high temperatures serotonin levels are likely to have contributed significantly to the increase in offenders' increased impulsivity, risk-taking, and the number of crimes committed the higher risk of offending. The research suggests that the nation's crime rate of 10% of the nation's fluctuations may be due to rising temperatures (Mátyás 2020). The relationship between crime and temperature change the research, which was repeated in ten US cities. The study found that where gun crimes occurred, the increase in temperature in ten cities, the number of shooting victims increased in nine cities, including San Francisco. However, studies in the city of Philadelphia found that the number of crimes taking place outdoor increased, while the number of indoor crimes did not show an increase as temperatures rose.

3. Types of crime and the weather

By examining the data from Chicago, this research provides further insights into the weather and temperature changes on crime. The crime reports aggregated by the city's police department, crime data shows that crimes committed during the summer season are also weather dependent in certain crimes. From the seven major crime categories theft, shooting and fighting showed increasing numbers as temperatures rose. For every additional ten degrees rise in temperature, nine more cases of crime increased (<https://data.cityofchicago.org>).

The additional crime categories do not show such a strong correlation with temperature rise. For every additional ten degree increase, the number of recorded for each increase in temperature, the number of offences increased by five for each increase in temperature, three additional incidents with each increase in temperature. The trend in burglary, drug-related crimes and the number of homicides were significantly influenced by the weather conditions, with a correlation between the temperature increase and an increase in violent crime.

4. The effects of different weather conditions

The relationship between the increasing trend in violent crimes and rising temperatures has been confirmed by several studies, but this seems to be the only weather condition that influences crime trends. Data collected in the South African city of Tshwane found significantly higher rates of violent, sexual and property crimes committed in the area and sexual offences on the hottest days, but particularly violent and violent crimes increased by 50% compared to the city's coldest days. The rainy days were much less prominent in crime rates. Violent and sexual crimes decreased, and crimes against property increased by only 2% on these days, according to the research (<https://online.vwu.edu>).

In comparison, cold weather conditions were from normal winter to severe snowstorm conditions, crime rates generally decreases.

5. The relationship between temperature and crime

Two main theories have been put forward by researchers as to how warmer temperatures can encourage more crime: an increase in the opportunity for crime is one, and the other is the changes in temperament due to warmer weather and behavioural differences in the human body. In particular, cold or stormy weather compared to warm summer days can lead to more time away from home and more outdoor activities, thus facilitating criminal activity. With the growing potential for crime against property, there is an increasing in number of contacts and encounters between people. From a statistical point of view, more interaction means a greater chance of violent acts or crime occurring. The Philadelphia study mentioned above clearly demonstrates the link between changes in weather and increased opportunities (<https://online.vwu.edu>).

6. Rising temperatures and changing temperament

The other element often referred to the influence of warming weather on crime is the change in temperament that comes with a change in temperature. In Finland a study linked warm temperatures to changes in brain chemistry that increased the likelihood of impulsivity and aggressive actions but it is not the only study to investigate this link. Craig Anderson, an expert on human aggression, said that rising temperatures exacerbates situations by making people more aggressive in certain actions than they actually are in the situations. In other words, the effect of a hot day under the influence of heat stress is more mentally demanding and more likely to the same event that would occur on a cooler day is more likely to contribute to the

more violent behaviour, more aggressive human reactions in the summer heat (<https://regi.tankonyvtar.hu>).

7. Weather conditions and law enforcement effectiveness

As the propensity to commit crime is influenced by the weather, most notably by rising temperatures, the effectiveness of law enforcement is also affected by weather conditions.

The increase in the frequency of extreme events, especially prolonged extreme summer heat periods of extreme hot weather have a negative impact on police performance, while crime rates are increasing, partly due to rising temperatures. Those sensitive to fronts may also experience migraine-like pains. The natural factors have an impact on people, including human performance. But just as the willingness of criminals to commit crimes is negatively affected, also the police performance can be negatively affected by natural factors.

8. Weather and crime

The finding that hotter temperatures are in fact linked to a higher number of crime is important for several reasons. We can better understand those mental factors that contribute to the commission of crime and the overall impact on individuals. Of course, changes in temperature are not just a matter of important factors in criminal justice and environmental protection, but a really important way to examine the relationship between the two, and to understand the impact of aggression and crime trends can be explained through (<https://online.vwu.edu>).

According to a 2014 publication (Ranson 2014), in which researchers compared crime rates and weather data over a thirty-year period, they found that approximately 22.000 more homicides from 2010 to 2099 are due to climate change, and 18.000 more rapes, 1.2 million more aggravated assaults, 2.3 million more assaults, 260.000 more robberies, 2.2 million more thefts and 580.000 more vehicle thefts will occur in the United States of America compared to recent years, and this situation is becoming worse according to currently available data (Jagannathan 2019). Research is contradicted by a study over a shorter period of time, however, which it found that despite warmer weather, homicide rates have not continued to rise in the U.S. over the higher temperatures, but it does acknowledge that weather has a significant impact on propensity to commit crime and explains the increased number of crimes against property (Ranson 2012).

9. Summary

According to Géza Finszter, "the crime in the classical approach is an infringement based on free will, which, because of its hidden nature, can only be known to a certain extent... Punishment is the retribution that restores the rule of law, which can be humanised, but its revenge-driven essence remains unchanged. The crime is an individual phenomenon, based on individual responsibility, a local behaviour, whose harmful effects beyond the circle directly harmed is no longer a matter of the criminal procedure but to discover the full causal background is itself a hopeless undertaking. The insights outlined above are drawn from two criminal sciences, criminalistics and criminology, which have become part of the human knowledge. Criminalistics has made the crime detectable, while bringing us closer to the realisation of the values of law enforcement. In addition to environmental factors, the relationship between the different authorities is just as important as the quality of the interaction between different authorities and the reconciliation of the different effectiveness missions of these bodies (Vári 2015, 195.).

In an ideal future, there would be less crime, especially violent crime and the perpetrators are caught much sooner so that they can receive their punishment that they deserve. I believe that supporting law enforcement and crime prevention is very important, but it should be supported by individual states in such a way that people's privacy, identity and their rights are still respected. From the law enforcement's point of view, it is important to realise that in warmer weather conditions crime rates may increase, and it is even more important to understand how temperature affects the increase in violent human behaviour.

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Weather and crime: Is there a connection?

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ILLEGAL MIGRATION AS A THREAT TO REGIONAL SECURITY

Abstract

The purpose of the study is to consider the current situation concerning the existing problems in the application of criminal law measures aimed at counteracting the organization of irregular migration in the Russian Federation and to formulate proposals to enhance such measures at the legislative and law enforcement levels on this basis. The issue of the study is social relations connected to the organization of irregular migration and the implementation of criminal law measures to counteract this negative social and legal phenomenon in the Russian Federation. The subject of the study is legislative and theoretical-applied issues of criminal justice response to the organization of irregular migration in Russia. The article analyzes the provisions of criminal and migration legislation, relevant clarifications of the Plenum of the Supreme Court of the Russian Federation, examples from the jurisprudence, as well as official statistics. The methodological basis of the study includes such methods as the general dialectical, general scientific and specific scientific ones, as well as the method of legal modeling. On the basis of the study the authors conclude that it is necessary to improve the legislative framework and practice to counteract illegal migration organization in the Russian Federation. As a follow-up, the article formulates and justifies specific proposals for the further development of criminal law means of countering the illegal migration organization in Russia in their regulations and practical application.

Keywords: Russian State Migration Policy, organizing irregular migration, criminal justice responses

1. Introduction

Illegal migration, as an integral part of the modern world and its migratory and other processes, is a complex socio-legal phenomenon characterized by a ramified set of causes, conditions and adverse consequences (Meško et al. 2018, Caglar 2013, Caglar – Schiller 2018, De Haas 2012,

Taranenko et. al. 2021). These include, inter alia, the recruitment of illegal migrants into criminal groups and criminal acts they committed. In the current context, illegal migration can lead to the spread of various diseases and infections, including the new coronavirus infection 2019-nCoV. In view of these circumstances, constant evolution and enhancement of migration monitoring, migration legislation and criminal liability measures for migration law violation (Sorensen 2012, Vertovec 2006, Reshnyak 2022) are required. The phenomenon of illegal migration, its qualitative and quantitative changes observed in recent years, especially in times of various geopolitical and economic crises are inseparable from organized criminal activity. One of the main national criminal legislation tasks of each State (Truntsevsky et al. 2018) is to counteract these crimes effectively.

2. About the Russian Criminal Code

Accountability for socially dangerous organized crimes concerning irregular migration was limited to Article 322 of the original Russian Federation Criminal Code of 1996 (hereinafter referred to as the RF Criminal Code), that contained the corpus delicti in the form of illegal crossing of the State Border of the Russian Federation. This article, in conjunction with Articles 33 and 35 of the Criminal Code, regulated the institution of complicity in a crime and included the commission of the latter with the involvement of an organizer and (or) in the form of an organized group. In 2012, this article was amended with Part 3, which contains alternative constituent elements of the offence, involving the commission of the offence by an organized criminal group¹.

In 2004, Chapter 32 of the RF Criminal Code on Crime Against Administration Procedure was supplemented by Article 322 (Truntsevsky et al. 2018), which established responsibility for organizing irregular migration (Federal Law of 28 Dec. 2004 № 187-FZ // Sobranie zakonodatel'stva RF. 2005. No. 1 (part I). Art. 13.). In 2013, Articles 322 (Federal Law of 28 Dec. 2004 № 187-FZ // Sobranie zakonodatel'stva RF. 2005. No. 1 (part I). Art. 13.) and 322³ on liability for fictitious registration of Russian citizens, foreign citizens or stateless persons at their place of residence (place of stay) in the Russian Federation were added to the same chapter of the Criminal Code (Federal Law of 21 December 2013 No. 376-FZ // Sobranie zakonodatel'stva RF. 2013. № 51. Art. 6696.). The latter two articles contain no indication of

¹ On Amending Article 322 of the Criminal Code of the Russian Federation and Articles 150 and 151 of the Criminal Procedure Code of the Russian Federation : Federal Law of 30 Dec. 2012 No. 312-FZ // Sobranie zakonodatel'stva RF. 2012. № 53 (part. 1). Art. 7637. (in Russian)

the organized nature in committing crime as constituent element of the corresponding corpus delicti.

Thus, the main criminal law norm directly aimed at countering the illegal migration organization in the Russian Federation legislation is Article 322 (Truntsevsky 2018 of the RF Criminal Code, which will be analyzed below.

Introducing the content of this criminal law provision, there are judicial statistics: 820 persons were convicted under Article 322 (Truntsevsky et al. 2018) of the Criminal Code in 2015, 900 persons were convicted under Article 322 in 2016, 763 persons were convicted in 2017, 635 persons in 2018 and 632 persons in 2019. In the first 6 months of 2020, 320 persons were convicted under this article². From a formal standpoint, these statistics highlight that there is no positive trend in sentencing for organizing illegal migration; however, when assessing the actual prevalence of related criminal acts, high latency, which is permanent for all manifestations of organized crime, should be taken into consideration. Herewith it should be noted that the study of the application practice of Article 322¹ of the RF Criminal Code indicates that a significant part of those convicted under this article are individuals who cannot be found guilty, since the acts committed by them consisted of singular and one-time complicity in illegal migration crimes.

3. Results and discussions

It should be noted that according to the Explanatory Note to the draft law on the introduction of Article 322¹ of the RF Criminal Code on responsibility for organizing illegal migration, this enactment is based on international practice and is consistent with the content of the Article 6(2)(c) of the Protocol against the Smuggling of Migrants by Land, Sea and Air, supplementing the UN Convention against Transnational Organized Crime, which requires the States parties to criminalize organized crime of smuggling of migrants³.

At the same time, when formulating the explanatory note to this draft law and the content of the latter, the provisions of Clause 1 of Article 6 of the Protocol against the Smuggling of Migrants by Land, Sea and Air⁴, referred to in the above-mentioned Article 6, paragraph 2 (c),

² Hereinafter, statistics from the Russian Federation Supreme Court Judicial Department website are reviewed. URL: <http://www.cdep.ru> (in Russian)

³ To the Draft Federal Law "On Amendments and Additions to the Criminal Code of the Russian Federation, the Criminal Procedure Code of the Russian Federation and the Code of the Russian Federation on Administrative Offences". Explanatory note // Bill Passport 323021-3, website of the State Duma of the Federal Assembly of the Russian Federation: URL: <http://duma.gov.ru> (access date: 7.09.2022). (in Russian)

⁴ Protocol Against the Smuggling of Migrants by Land, Sea and Air, Supplementing the United Nations Convention Against Transnational Organized Crime. adopted by the UN General Assembly on 15 November.

of the Protocol, were unreasonably not taken into consideration. In this connection, the draft federal law does not address the need to establish criminal liability for organizing or directing other persons to commit specific intentional crimes in order to obtain, directly or indirectly, a financial or other material benefit. They include following alternative actions: 1) smuggling of migrants; 2) creating conditions for smuggling of migrants; 3) producing fraudulent travel or identity documents; 4) procuring, providing or possessing this document 5) enabling of illegal stay of a person who is not a national or a permanent resident to remain without complying with the necessary requirements, committed for the purpose of enabling smuggling of migrants.

As follows from the disposition of Part 1 of Article 322¹ of the RF Criminal Code the organizing irregular migration consists of organizing the illegal entry into the Russian Federation of foreign citizens or stateless persons, as well as the illegal stay of these persons in Russia or transit them through its territory. Comparison of the given legislative formulation with the content of the above paragraphs 1 and 2 (c) of Article 6 of the Protocol against the Smuggling of Migrants by Land, Sea and Air allows us to conclude that the Russian criminal law significantly deviates from the relevant international legal provisions determining the organization of irregular migration. Criminal legislation should implement countermeasures against it.

The purpose of the organizational actions as a perpetrator's intention to gain direct or indirect financial or any other pecuniary benefit is not specified in the disposition of Part 1 of Article 322¹ of the RF Criminal Code. Moreover, Art. 322¹ of the RF Criminal Code does not reflect the above international legal provision, under which the offence in question must constitute an organizing by others of solely criminal offences violating migration legislation but not any violations of the latter. The Article 322¹ of the RF Criminal Code does not also specify what the actus reus of irregular migration is, first of all, the actions on organizing the illegal residence of foreign citizens and stateless persons in the Russian Federation.

Essentially, actions organizing commission of a misdemeanor breach of migration legislation by the others are in practice mostly recognized as a crime under the Art. 322 of the RF Criminal Code that challenges social and legal validity of the given criminal prohibition enshrined in Art. 322¹ of the RF Criminal Code in the current version.

For example, the Moscow City Court found no grounds for reconsidering a judgment against H. convicted under Part 1 of the Article 322 of the RF Criminal Code since it considered the court's conclusions on H's guilt in organizing foreign citizens' illegal residence in Russia reasonable. It was established in the case that H., who had been aware of residence and

2000 in New York (General Assembly resolution 55/25) // Bulletin of International Treaties. 2005, № 2, pp. 34-46.

employment regulations concerning foreign citizens in Russia, hired foreign citizens without residence registration and work patent in Moscow and also created all the necessary living and other conditions for them to live at their jobs in Moscow. The foreign citizens themselves were imposed administrative penalties and expelled from Russia⁵. In this and similar cases it means that the organizer of the misdemeanor committed by a foreigner or a stateless person is criminally liable for his actions, which cannot but raise doubts about the validity of such legislative approach to criminalizing the organization of illegal migration.

Since Art. 322¹ of the RF Criminal Code does not take into account all the international legal provisions discussed above, the content of the Article does not fully meet the requirement of legal certainty, that complicates the formation of a uniform practice of its application, including the implementation of differentiation from related crimes and similar administrative offenses in the field of migration relations.

For example, according to Part 3 of Article 18.9 of the Administrative Code of the Russian Federation actions related to providing accommodation or a vehicle or any other services to a foreign citizen or a stateless person who is in the Russian Federation in violation of the established procedure or rules of transit through the territory of this state are subject to qualification. As can be seen, these actions fully fall under the wording of "intentional creating of conditions" for irregular migration, which prevents a clear distinction between this administrative offense and the crime of organizing illegal migration.

Moreover, in practice, there is no uniformity in resolving the issue of the need to qualify the act as a single criminal offense or a set of crimes in situations where the guilty person contributed to the commission of specific violations of migration legislation that form independent corpus delicti, for example, organized the illegal crossing of the Russia State border. At the same time, there are several approaches to the legal assessment of the relevant crimes.

The first approach consists of a legal assessment of what was done only under Art. 322 of the RF Criminal Code without additional qualification under Art. 322 of the Criminal Code of the Russian Federation.

Thus, according to the verdict of the Poltava District Court of the Omsk region dated July 13, 2016, was established that during a telephone conversation with an unidentified person acting from Kazakhstan K. agreed to organize the illegal entry of eight citizens of Uzbekistan into the territory of Russia. Afterwards, K., while in the Omsk region, crossed into the territory of

⁵ Decision of the Moscow City Court of 12 November 2018 No. 4u-6049/2018 on the refusal to transfer the cassational appeal against judicial decisions to be trialed by the court of cassation // URL: <https://internet.garant.ru/#/document/305727436/> (in Russian) (access date: 13.09.2022)

Kazakhstan, where he met eight citizens of Uzbekistan, and bypassing the established checkpoints, illegally escorted these citizens across the State border of the Russian Federation into Russia and further to the place of their temporary harbouring. K.'s actions were qualified under Part 1 of Art. 322 of the RF Criminal Code as organizing the illegal entry of foreign citizens into the Russian Federation⁶.

The second approach is to qualify such actions on the aggregate of crimes stipulated by Articles 322 and 322¹ of the RF Criminal Code.

Thus, according to the sentence of the Kazan District Court of the Tyumen Region dated July 13, 2017, P. was convicted of organizing the illegal entry of foreign citizens into Russia committed by a group of persons by prior agreement (paragraph "a" of Part 2 of Art. 322 of the RF Criminal Code), as well as illegally crossing the State border of the Russian Federation (Part 1 of Article 322 of the RF Criminal Code). P., acting in collusion with other persons and without valid documents for the right to enter the Russian Federation, was established to have performed the assigned to him a smuggler role, and bypassing the established checkpoints, smuggle foreign citizens S., M., I. Kh. and I. N. who were not allowed to enter the Russian Federation territory from the territory of Kazakhstan.

It should be noted that the latter approach to the legal assessment of the actions under consideration is based on the position of the Supreme Court of the Russian Federation, as reflected in the cassation ruling dated July 15, 2009, which upheld the conviction of T. under Part 3 of Art. 33, Part 2 of Art. 322, and Part 1 of Art. 322¹ of the RF Criminal Code. The convict carried out the following organizational actions that ensured the illegal crossing of the State border of the Russian Federation with the Republic of Belarus by foreign citizens: he planned the route and the procedure for crossing the border, provided a vehicle and himself as a driver, prepared secrecy measures, brought together all illegal migrants into one group, and provided them with lodging along the route⁷.

In addition, the study of law enforcement practice has shown that in some cases the perpetrator's role in the crime set in the case is used as one of the main criteria for distinguishing the illegal crossing of the State border of the Russian Federation (Art. 322 of the RF Criminal Code) from the organization of irregular migration (Article 322¹ of the RF Criminal Code). In case his

⁶ Hereinafter, unless otherwise specified, the examples given in the Reference on the results of generalization of judicial practice in criminal cases on illegal crossing of the State border of the Russian Federation are used // Archive of the Department for Systematization of Legislation and Analysis of Judicial Practice of the Supreme Court of the Russian Federation for 2018. (in Russian)

⁷ Cassation ruling of the Judicial Board for Criminal Cases of the Supreme Court of the Russian Federation dated July 15, 2009 No. 36-O09-14 // URL: <https://internet.garant.ru/#/document/55700705/> (in Russian) (access date: 3.09.2022).

assistance was considered as an organizer, then the crime was qualified under Part 1 or 2 of Article 322¹ of the Russian Federation Criminal Code, but if the assistance of this person was regarded as accessory in illegal border crossing, then it was qualified under part 5 of Art. 33 and the corresponding part of Art. 322 of the RF Criminal Code.

For instance, according to the verdict of the Sortavala City Court dated August 7, 2017, citizens of the Republic of Yemen A. A., A. G. and A. M., acting together, made a failed attempt to illegally cross the State border between Russia and Finland, while Russian citizen R. assisted them with advice, instructions, information, smuggling to the area in the immediate proximity to the border, gaining a reward. R.'s actions were qualified under Part 5 of Art. 33, Part 3 of Art. 30, and Part 3 of Art. 322 of the RF Criminal Code as accessory in and abetting an attempt to cross the Russian State border illegally, which was committed by a group of persons by prior agreement.

In paragraph 7 of Resolution No.18⁸ dated July 9, 2020 the Plenum of the Supreme Court of the Russian Federation determined the organizing of an illegal organization as intentional actions that create conditions for one or more foreign citizens or stateless persons to commit any of the violations of the law specified in the disposition of Part 1 of Art. 322¹ of the Russian Federation Criminal Code. And paragraph 8 of the Resolution clarifies that the qualification of the deed under the aggregate of crimes under Art. 322¹ and Art. 322² or Art. 322³ of the Russian Federation Criminal Code is necessary only in cases where along with fictitious registration at the place of residence (place of stay) the perpetrator has also committed other actions of an organizational nature punishable under Art. 322 of the RF Criminal Code. Based on the above explanations, one can conclude that the irregular migration organization as an act is a separate crime under Art. 322¹ of the RF Criminal Code should not be identified with complicity in the crime in the form of its organization, which qualification depends on the legal assessment of the perpetrator's actions (Borisov 2020).

Consequently, the organization of irregular migration may consist of a wide range of different actions, while Art. 322 of the current version of the Russian Federation Criminal Code is subject to application only when such actions are not covered by complicity in a specific crime provided for in Article 322, Article 322, Article 322 or another article of the Criminal Code of the Russian Federation, including the organization of a corresponding criminal offense. Therefore, organizing the illegal crossing of the Russian State border by foreign citizens or stateless

⁸ On judicial practice in cases of illegal crossing of the State border of the Russian Federation and crimes related to illegal migration: resolution of the Plenum of the Supreme Court. The Supreme Court of the Russian Federation dated July 9, 2020 No. 18 // Bulletin of the Supreme Court of the Russian Federation. 2020. № 9.

persons, not accompanied by other organizational actions that create conditions for irregular migration, is fully covered by Part 3 of Art. 33 and the corresponding part of Art. 322 of the Russian Federation Criminal Code and does not require additional qualifications under Art. 322¹ of the RF Criminal Code. We consider that this rule of qualification of the considered crimes is advisable to be fixed as an additional explanation of the Plenum of the Supreme Court of the Russian Federation, which will allow us to promptly influence the relevant law enforcement practice (Reshnyak 2016).

However, we consider that the solution to the existing problems of applying criminal law measures to counter irregular migration is possible only by means of legislation that takes into account the need to comply with the requirements of legal certainty and systematic criminal law regulation of public relations.

4. Conclusions

Taking into account the above-mentioned problematic issues of the application of Article 322 of the RF Criminal Code, including those related to the practical difficulties of determining this criminal law norm correlation with Articles 322, 322 and 322 of the Russian Federation Criminal Code, as well as with the articles of the RF Administrative Code on liability for similar violations of migration legislation, we believe that the following ways to improve criminal legislation in the area under study can be suggested at present.

Firstly, it would be advisable to exclude criminal liability for a single violation of migration legislation, including for organizing a foreign citizen or a stateless person's irregular migration committed by a person who is not subject to an administrative penalty for a misdemeanor in the migration field.

Secondly, we consider it important to disclose directly in the disposition of Art. 322 of the Russian Federation Criminal Code what exactly the actions that organize illegal migration are, and to indicate which specific types of migration legislation violations constitute the crime, as well as to explicitly indicate that this criminal law norm shall be applied, if the act is not covered by Art. 322, Art. 322 or Art. 322 of the RF Criminal Code.

Thirdly and finally, it seems necessary to complement the mental element of the corpus delicti of the irregular migration organization with an indication of the mandatory aim in the form of the perpetrator's desire directly or indirectly to obtain financial or other material benefit, due to which this criminal law prohibition will be aligned with the provisions of paragraph 1 and Article 6 (2)(c) of the Protocol against the Smuggling of Migrants by Land, Sea and Air.

In the authors' opinion, the implementation of the proposals will contribute to improving the effectiveness of criminal legal measures to counter the organization of irregular migration in the Russian Federation, including the establishment of a uniform practice in the application Article 322 of the RF Criminal Code, which includes a precise definition of the correlation between the offence described therein and related crimes and similar administrative offenses.

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The organisers,

Dr. Szabolcs Mátyás Ph.D.
Dr. Vince Vári Ph.D.
Dr. Máté Sivadó Ph.D.
Dr. Miklós Tihanyi Ph.D.
Dr. Velibor Lalic Ph.D.



HUNGARIAN ASSOCIATION OF POLICE SCIENCE

Call for papers II. International Criminal Geographical Conference

*Let's create a safe world together –
criminal geography in police practice*

Dear Colleagues,

The Hungarian Association of Police Science and International Criminal Geographical Association are organizing an international criminal geography conference for the third time. We welcome the presentations of the university lecturers, law enforcement researchers, and students in the field of criminal geography!

The aim of the conference is to give an opportunity for the researchers of criminal geography to present their research, and for the university teachers, law enforcement students and the practitioner experts to get to know the latest domestic and international research results and methods of the criminal geography.

Deadlines:

Conference registration deadline: 30th April 2023

Deadline of the abstracts: 30th April 2023. (Between 1000-2000 characters)

Date of the conference: 2nd June 2023

Deadline of the paper: 10th June 2023.

Venue: online (via Microsoft Teams)

The language of the conference: English and Hungarian

Presentation: 15 minutes + 5 minutes for the discussion

The participation is free!

We provide a facility to publish your presentation in English or in Hungarian in the *Criminal Geographical Journal* or in the *Bűnözésföldrajzi Közlemények* peer reviewed journals.

If you would like to participate in the conference, please send us an e-mail to the following e-mail address till 30th April 2023 (criminalgeography@gmail.com).

We look forward to welcoming you



International Criminal Geographical Association

Call for competition

the International Criminal Geographical Association

I. Horst Herold international criminal geographical competition

Dear Colleagues!

The International Criminal Geographical Association is organizing an online international criminal geographical competition for the first time. We welcome applications from the university students who would like to compare their knowledge of criminal geography with other students.

The purpose of the competition is to popularize criminal geography and give all students, who wish to compete, an opportunity to give an account of their current level of knowledge.

Deadlines:

Competition registration deadline: 15th April 2023

Date of the competition: 21st April 2023, 14.00-15.00 pm

Venue: online (via Microsoft Teams)

Participation is free!

Recommended literature:

Erdei, Gábor (2013): **The place of crime geography in the science of geography**. In: *Hadtudományi Szemle*, 6 : 2 pp. 121-126

([https://tudasportal.uni-](https://tudasportal.uni-nke.hu/xmlui/static/pdfjs/web/viewer.html?file=https://tudasportal.uni-nke.hu/xmlui/bitstream/handle/20.500.12944/13813/2013_2_tt_erdei_gabor4.pdf?sequence=1&isAllowed=y)

[nke.hu/xmlui/static/pdfjs/web/viewer.html?file=https://tudasportal.uni-](https://tudasportal.uni-nke.hu/xmlui/bitstream/handle/20.500.12944/13813/2013_2_tt_erdei_gabor4.pdf?sequence=1&isAllowed=y)

[nke.hu/xmlui/bitstream/handle/20.500.12944/13813/2013_2_tt_erdei_gabor4.pdf?sequence=1&isAllowed=y](https://tudasportal.uni-nke.hu/xmlui/bitstream/handle/20.500.12944/13813/2013_2_tt_erdei_gabor4.pdf?sequence=1&isAllowed=y))

CMRC (1999): **Mapping crime**. pp. 1-31 (only the first chapter)

<https://www.ojp.gov/pdffiles1/nij/178919.pdf>

Mátyás, Szabolcs – Sallai, János (2019): **Horst Herold, the father of modern criminal geography**. *CRIMINAL GEOGRAPHICAL JOURNAL* 1 : 1 pp. 53-55.

(<https://dduvs.in.ua/wp-content/uploads/files/ENG/2019/cgj.pdf>)

Mátyás, Szabolcs – Sallai, János (2019): **Criminal geography as a new subject in the Hungarian higher education.** Magyar Rendészet 16 : 2 pp. 139-146.
(file:///C:/Users/Asus/Downloads/marczikaz,+12_sallai_matyas.pdf)

Mátyás, Szabolcs (2018): **The role of hot spot analysis in crime analysis.** MAGYAR RENDESZET 18 : 1 pp. 177-183.
(file:///C:/Users/Asus/Downloads/bozsotimea,+14_matyas.pdf)

The first three winners of the competition will receive a certificate.

If you would like to participate in the competition, please send us an e-mail to the following e-mail address till 15th April 2023 (criminalgeography@gmail.com).

Organising committee:

Szabolcs Mátyás police major Ph.D (head of the organising committee), associate professor (University of Public Service)

Gabriella Ürmösné Simon Ph.D. associate professor (University of Public Service)

Máté Sivadó police major Ph.D., assistant professor (University of Public Service)

Miklós Tihanyi police major Ph.D., associate professor (University of Public Service)

János Sallai police colonel Ph.D., professor (University of Public Service)

Vince Vári police lieutenant-colonel Ph.D., associate professor (University of Public Service)

Zoltán Bujdosó Ph.D. professor (Hungarian University of Agriculture and Life Sciences)

Csaba Patkós Ph.D. associate professor (Eszterházy Károly Catholic University)

Kornél Németh Ph.D. associate professor (Pannon University)

Velibor Lalic Ph.D. associate professor (University of Banja Luka, Bosnia-Herzegovina)

Conditions of publishing

Length of paper: max. 40 000 characters with spaces

CGR is an English-language journal. Either US or British/Commonwealth English usage is appropriate for manuscripts, but not a mixture of these.

Word processing formats: MS Word (docx, doc)

Page layout size: A4

Font type: Times New Roman, font size: 12 pt.

Abstract: 200-300 words

Keywords: 4-6 maximum

References style in text: 10 pt, footnotes

References: at the end of the paper in alphabetical order (TAYLOR, Tom (2018))

Picture format: JPG

Authors name: main author must be underlined

Citation: APA format

Potential topics might include:

- Crime and GIS
- Crime and analytical work
- Predictive policing
- Geographical features and crime
- Spatial criminalistic methods
- Criminology in spatial aspect

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Tom Taylor Ph.D. assistant professor

University of London (England)

tom.taylor@gmail.com

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