



Article

# Spatial Nature and Geographical Characteristics of Drug Crime in Hungary

Szabolcs Mátyás <sup>1</sup> and Endre Nyitrai <sup>2,\*</sup>

- Department of Investigation Theory, University of Public Service Faculty of Law Enforcement, 1083 Budapest, Hungary
- Department of Forensic Science, University of Public Service Faculty of Law Enforcement, 1083 Budapest, Hungary
- \* Correspondence: nyitrai.endre@uni-nke.hu

**Abstract:** Relatively few people in Hungary deal with the investigation of the spatial nature of crime. In connection with drug crime, we rarely find research dealing with this topic. The study shows why it is difficult to examine the spatiality of various drug-related crimes. It describes the main spatial trends of crime and the presence of criminal organizations in the field of drug trafficking by analyzing the criminal statistics data of the past decades. Political and drug policy changes, as well as the activities of criminal organizations at the international level, are usually hidden behind the spatial changes. In all cases, these also have a significant impact on the spatial distribution of drug use. The present research is primarily looking to answer whether there is a connection between the main focal points of organized crime and the centers of drug crime.

Keywords: drug; crime; organized crime; spatiality; criminal geography; Hungary



Citation: Mátyás, Szabolcs, and Endre Nyitrai. 2022. Spatial Nature and Geographical Characteristics of Drug Crime in Hungary. *Laws* 11: 90. https://doi.org/10.3390/laws 11060090

Academic Editors: James C. Simeon and Patricia Easteal

Received: 4 August 2022 Accepted: 14 December 2022 Published: 19 December 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

## 1. Introduction

It sounds like a cliché, but unfortunately, we have to accept it as a fact that nowadays, almost all countries of the world are affected by drug crime. Bertrand Russell (1872–1970) said decades ago that "Sin is geographical". In the case of drug crime, we can, therefore, rightly assume that geographical laws prevail. To reveal and decipher geographical regularities, coordinated research from several disciplines is necessary (e.g., criminology, law enforcement, psychology, medicine). According to the authors' point of view, among the major disciplines mentioned above, smaller disciplines can also play a role in helping to map the problem. Such a field is, among others, the geography of crime, known to few which, as a cross-section of several scientific fields, "examines the spatiality and spatial distribution of crime (crimes, perpetrators, victims) social and economic factors. Aims to provide an answer to possible future spatial changes in crime, thus helping effective law enforcement" (Boda 2019, p. 84).

It is important to uncover the cause of a given problem, as this is the only way to provide a successful answer later on. In this case, it is not enough to uncover only the cause of a drug crime, but also to map the geographical location of the problem. Without it, it is not possible to solve the problem. Based on Horst Herold's<sup>1</sup>, it is also necessary to find out what the descriptive indicators are in the case of drug crime in Hungary, which generates crime in each spatial structural unit, as the effectiveness of crime control can also be measured based on them (Vári 2020).

This study presents the main territorial characteristics of Hungarian drug crime from the beginning of the last century to the present. It describes the major milestones that

Horst Herold (1923–2018) was a German police officer, head of the Federal Criminal Office (BKA), and a prominent representative of criminal geography.

Laws 2022, 11, 90 2 of 15

had the greatest impact on domestic drug crime and, in this context, on their geographic distribution.

In the case of drug crime, it is, of course, not possible to focus only on Hungary, since most of the drugs found in the country come from abroad. Moreover, Hungary is a transit country, so the international drug routes that transport various drugs to Western Europe pass through its territory (Tihanyi et al. 2020a, 2020b). For this reason, the authors try to present not only Hungarian specificities, but also to provide an overview of international drug crime.

Several studies have already highlighted that the commission of drug-related crimes can largely be linked to organized criminal groups (Le 2012). Investigating organized crime is extremely problematic, partly because most of the case files are handled secretly, and partly because the investigation of a single case drags on for many years (Paolo and Federico 2020; Le 2012). As a result of the above, researchers have relatively few opportunities to study cases related to organized crime.

This study examines the territorial feature of drug crime in Hungary. It can be regarded as a gap-filler in this sense since no one has previously investigated the spatial characteristics of Hungarian drug crime in such depth. The authors wish to fill this gap and present the main territorial differences in drug crime.

A study, funded by the Internal Security Fund (in Hungarian: Belső Biztonsági Alap) enabled some researchers (including the two authors of this study) to look into case files, indictments and judgments for a year, and to conduct interviews with the National Investigation Bureau, the county police headquarters and prosecutors' staff.

The results of the research related to drug crime are published by the authors in this study. During the research, the authors asked the following two research questions:

Q1: Do the centers of organized crime and drug crime in Hungary coincide?

**Q2:** Is Budapest and its surroundings really the most infected with organized crime and drug crime?

# 2. Literature Review

There is little literature on the spatial nature of crime in Hungary (Mátyás 2020). This is partly because before 1989 (during the communist period), crime statistics were treated as secret, so it was not possible to access them (Mátyás 2020). Even after the change in the regime (1989), relatively few Hungarian geographers and criminologists were dealing with examining the territoriality of crime (Tóth-Patkós, Vári).

The investigation of drug crime in Hungary is wider (Sivadó 2020, 2021; Erdős 2019; Tihanyi et al. 2020b). Several journals deal with this topic specifically (e.g., Interdiszciplináris Drogszemle, Magyar Drogfigyelő), and many specialized books on law enforcement, medicine, chemistry, etc., have been published.

Few people have examined the spatial dimensions of drug crime in Hungary until now. The primary reason for this is that the majority of drug-related criminal cases are related to organized crime. Criminal cases are therefore secret and cannot be investigated. In addition to the author's research in this direction (Mátyás 2018, 2020, 2021), it was mainly criminologists who touched on the spatiality of drug crime in their studies (Lévai 1991; Ritter 2010; Sivadó 2020).

International drug crime has been widely researched, and its literature is extremely extensive (Jay et al. 2019; Demant et al. 2018; Bright and Delaney 2013). However, the investigation with a geographical aspect usually covers the mentioning of the main drug routes (Hignett 2010), more thorough crime geography analyses have not been prepared at the international level either.

Organized crime is also widely investigated both in Hungary and internationally. The specialist literature is wide, but the examination of it from a geographical aspect is not significant. The present research can, therefore, be considered unique, as it examines areas that have previously only been investigated isolatedly.

Laws 2022. 11. 90 3 of 15

At the international level, the literature is, of course, wider. The spatiality of crime was first investigated by Guerry (1833), and after that there were thousands of researchers who investigated the issue from different aspects. Let us mention a few names. The geography of drug crime was examined by Thomas et al. (2008), Freisthler et al. (2012), while the spatiality of organized crime was examined by, among others, Hall (2010) and Hall and Hudson (2021).

# 3. Research Methods

The theoretical foundations of the study are based on the previous Hungarian criminal geographical and law enforcement literature. However, due to the nature of the topic, the proportion of data obtained from international journals and databases is also significant.

The crime data come from the Crime Statistics System, which is available to everyone, and the Unified Investigation and Prosecution Crime Statistics (ENyÜBS) systems. The authors analyzed the data qualitatively.

The data on organized crime in Hungary come from the National Investigation Bureau. The authors were allowed to research criminal cases between 2012 and 2017, from which the spatiality of organized crime in Hungary can be mapped, including drug crime. Previously, it was not possible to examine the spatial nature of organized crime in Hungary. Citing the interests of the investigation, it was only possible to look into criminal cases until 2017. The case files and indictments come from the entire territory of the country, which means that none of the territorial units of the country is overrepresented, and the distribution of cases can be considered proportional.

There are police data on drug use in Hungary from the 1960s, so the time interval examined falls between 1960 and 2020.

On the surface, it seems simple to examine the geographical distribution of individual crimes, since all you have to do is use the available crime statistics and then plot the absolute and frequency values on a map. In the case of most delicts, researchers have a really simple task, since they only have to display one type of crime, and the latency is close to zero (e.g., homicide, car theft, burglary). In the case of serious crimes, the public's willingness to report them is high, and it is hard to imagine that, for example, a homicide or a car theft would not come to the attention of the authorities. In many cases, the facts have not changed for decades, that is, even twenty and thirty years ago, we understood the same thing by theft or murder.

In the case of drug crime, however, we are faced with many difficulties, of which the following are the most important:

- Under drug crime, we mean not only one fact, but also several, which obviously
  makes the course of research more complicated;
- The facts related to drug crime have changed significantly over the past decades;
- Among the individual crimes, in the case of drug-related delicts, latency is one of the biggest;
- The available criminal statistics data do not necessarily show the real crime incidence data, since the number of detected cases depends to a large extent on the investigative activity of the given police agency;
- Crimes that have become known are almost exclusively the result of police investigations, reports from the public are extremely rare
- In connection with drug crime, consumers come into contact not only with substances whose consumption and distribution are punishable but also with drugs that are not yet on any prohibition list. Their consumption is just as harmful as that of drugs (in many cases even more harmful), and protection against them is also in the interest of society. However, these drugs are not included in the criminal statistics, which means that it is difficult to know and research the real spatial nature of the problem (Mátyás 2020).

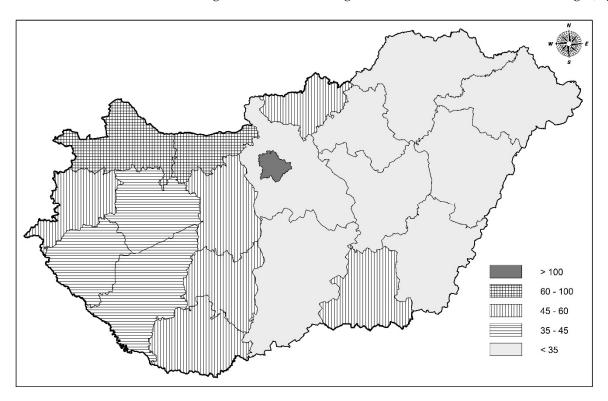
By the term "drug crime" that is used in this study, the authors mean illegal activities related to drugs. Acts that are also punishable by the Hungarian Penal Code. By this, the authors understand distribution, consumption and smuggling.

Laws 2022, 11, 90 4 of 15

#### 4. Results

Territorial Characteristics of Drug Crime in Hungary

For the sake of meaningful comparability, it is also necessary to calculate frequency indicators proportional to the number of inhabitants from the absolute indicators, because this makes it possible to compare the individual territorial units. Based on the values between 2016 and 2020, the capital, Komárom-Esztergom, and Győr-Moson-Sopron counties can be considered the most infected, where the rate of crimes committed with drugs is one and a half to two times higher than the national average (45.75). The crime rate in Fejér, Baranya, Csongrád-Csanád, Tolna, Nógrád and Vas counties is also higher than the national average. Vas, Zala, Veszprém and Somogy counties have values around the national average, while the remaining counties have values below the average (Figure 1).



**Figure 1.** County values of drug-related crimes per 100,000 people (2016–2020) (average: 45.75). Source: Crime Statistics System.

In the case of the capital, the metropolitan environment, as an anonymous space, is particularly conducive to the commission of a lot of different types of crimes. The "conditions" for crime in big cities were most significantly created in the capital, and of course, not only in the case of drug-related crimes, but also in the case of other crimes, the frequency of crime is above the national average. On the other hand, it is remarkable that in the case of some counties, almost three-fold differences in frequency can be observed, even though the drug problem today is hardly an urban phenomenon, but is present practically in all types of settlements (from big cities to villages). Moreover, designer drugs are even bigger problems in some cumulatively disadvantaged small settlements than in larger settlements.

However, the crime values calculated in proportion to the population in the county rankings do not reflect the fact that drug use would appear as a bigger problem in counties with weaker socioeconomic indicators (see: Jász-Nagykun-Szolnok, Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg values of counties). The above counties have specific indicators corresponding to the national average or rather to drug-related crimes.

In the above three Hungarian counties, the number of unemployed is above average and the income is below average. In the case of the unemployed, the number of the longLaws 2022, 11, 90 5 of 15

term unemployed is high (Hajdú 2020). Several studies have established that the number of designer drugs users is high in the small settlements of these counties (Vári 2022). However, according to Hungarian law, if designer drugs are not on the banned list, they can be used freely. Users will only be punished if a new type of drug is added to the banned list. In disadvantaged small settlements, there is usually no police, and if no crime is committed, drugs can be used with impunity in the long term.

If we want to map the relationship between total crime and drug crime, we can state that a significant difference can be observed. In some cases, of course, similarities can be observed—for example, in the case of the capital and Pest County, where certain segments of organized crime and drug crime are both well above the national averagebut in the case of most counties, a different order can be observed, which indicates the territorial differences of each type of crime. It is worth mentioning Somogy county, which has been the most infected county after the capital for decades in terms of total crime. However, it is less affected by drug crime than one might think. However, this requires two comments. In county-level analyses, regional differences within the county are often masked. Somogy county is a striking example of this, where practically only the settlements on the southern shore of Lake Balaton are infected, which also results in the county's infection rate being above the national average. As for Somogy county's infection with drug crime, we can assume drug consumption, distribution, etc., in the case of young tourists vacationing at Lake Balaton. In their case, the police are less active, since the police do not have preliminary information about them. The connection between tourism security and crime must be mentioned here; however, this study does not deal with this topic in detail (Bujdosó and Remenyik 2008). During their short stay here, if a tourist does not commit any violation of the law, no police proceedings will be initiated against him, i.e., the fact of drug consumption will not come to light.

A study dealing with spatiality should include the task of not only providing information about past data, but also trying to make predictions about the future from spatial data. According to the authors' point of view, there is no need to fear major territorial reorganization in Hungary, since with the appearance of designer drugs practically anyone can easily access various drugs (illegally, of course). Internet is widespread in Hungary; consequently, according to the government's intention, the number of people who do not have Internet access will decrease, and, therefore, the number of people who can order drugs via the Internet will increase. The percentage of Internet users among the urban population is much higher than among the rural population, so the new Internet users will mainly come from the rural population. According to the authors, disadvantaged, economically and socially deprived areas are where the number of drug users will increase in the coming years. They will primarily—thanks to their more modest financial circumstances—buy cheap designer drugs.

## 5. Discussion

## 5.1. Territorial Characteristics of Drug Crime before the Change in the Regime

Based on contemporary literature and later historical data, we can state that drug crime in Hungary practically did not pose any significant social, health or criminal problems until the end of the Second World War, although there was a small number, who abused opium and its derivatives and were primarily doctors (Lévai 1991; Erdős 2018). Based on the data of this period, no regional analyses were conducted in connection with drug crime, although a regional analysis would not have led to any results due to the small number of cases and the contingency of the places of occurrence.

We have very little information from the 1960s, scientific research was not conducted (could not be conducted), so mainly police documents are available. Based on the limited number of sources, we can conclude that drug crime affected relatively few people, and those affected were almost exclusively from the capital. During this period, drug crime in Hungary was characterized by a strong concentration. The first drug-related death can also be linked to the capital (1969).

Laws 2022, 11, 90 6 of 15

We already have several sources from the period of the second phase starting in the 1970s. The number of drug users increased compared to the previous stage, but drug use was still considered a problem only in the capital. Large rural cities and county seats can be considered practically drug-free at this time (Lévai 1991).

When it comes to drug consumption, we can consider the third phase, from 1974 to the beginning of the 1980s, as the period of deconcentration. By that time, drug use had ceased to be a problem exclusively in the capital, and drugs had also appeared in the big cities in the countryside. It was then that drug use became widespread, but it mainly affected the larger cities and the county seat. Rural areas are not yet considered infected (Nemzeti Drog Fókuszpont 2004).

From the beginning of the 1980s to the change in the regime (1989), one of the most significant changes was the significant increase in the number of available substances and the appearance of classic drugs. The range of consumers continued to expand, but drug use was still primarily a problem for urban (mainly metropolitan) young people. At that time, drug cultivation in Hungary also appeared (marijuana, the "tapping" of poppy plantations) (Lévai 1991).

In the 1980s, two crimes were related to drugs, drug abuse, and pathological addiction. Of these, the larger number of drug abuse crimes is worth highlighting, since the other crime occurred only in a very small number.

Figure 2 shows that the vast majority of registered crimes occurred in the capital (more than two-thirds), and the crime values registered in the counties are of lower magnitude. In other words, drug crime appeared primarily as a problem in the capital in the 1980s. In addition to Budapest, we find outliers in the counties of Pest and Veszprém. The Veszprém County data are primarily due to the outliers of 1984 and 1985 (1984: 18, 1985: 11); the other years' data were only slightly above the national average. In any case, the low values in Somogy County (1985: two cases) are thought-provoking. Somogy county would not be among the infected counties, however, the settlements on the southern shore of Lake Balaton have made Somogy the most infected county after the capital for decades (Patkós and Tóth 2012). During this period, the main meeting place for East and West German tourists was the "Hungarian sea" which means that a large number of foreign tourists visited Hungary. In Western-type democracies, however, people came into contact with drugs much earlier, so we can assume that drug use was much more widespread among West German citizens vacationing in Hungary. To attract the convertible German money to Hungary, we can, therefore, think that the police did not want to harass the German tourists (searching for drugs), as this would have had negative economic effects (Mátyás 2020).

# 5.2. The Period from the Change in the Regime to 2010 (1989–2010)

With the opening of the borders, the number of drugs flowing into the country increased significantly. This was partly because Hungarian citizens smuggled various drugs from abroad, and on the other hand, foreign citizens also brought illegal drugs into the country in larger quantities (Csaba 2019). With the opening of the borders, more and more Hungarian citizens chose this seemingly easy way of making money, which further increased the number of drugs in the country (Nyitrai 2018). In addition to this, domestically produced drugs also became increasingly important, in which foreigners living in Hungary also played a role (e.g., Vietnamese citizens) (Sivadó 2020). Together, all of these resulted in drug consumption in Hungary becoming even more diffuse. Practically, since the 2000s, drugs were available to anyone in most entertainment venues. As Figure 3 shows, the number of drug abuse crimes has been steadily increasing since the end of the 1990s, culminating in 2005, after which the number of delicts has decreased somewhat.

The citizens of Germany, which was divided after 1945, could not meet each other for a long time. In the 1970s and 1980s, the citizens of FRG and GDR could regularly meet each other every summer next to Lake Balaton.

Laws 2022, 11, 90 7 of 15

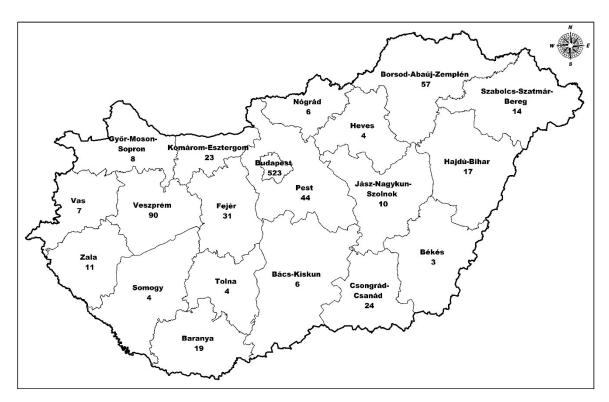
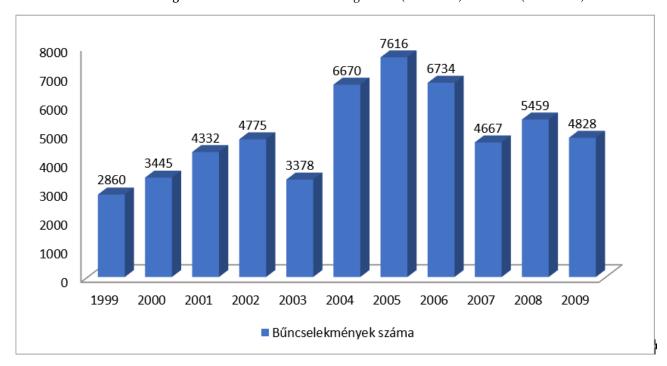


Figure 2. The number of known drug crimes (1980–1989) Database: (Lévai 1991).



**Figure 3.** Development of the number of known drug abuse crimes Between 1999 and 2009 (piece). Source: Based on the annual reports of the Nemzeti Drog Fókuszpont (2004, 2016).

Figure 3 shows the process from 1999, when 2860 crimes became known. From then on, the number of crimes gradually increased, culminating in 2005 ( $2860 \rightarrow 7616$ ); the value increased more than two and a half times. We need to explain the value for the year 2003. In this year, the legal institution of "diversion" was introduced, meaning that anyone who agreed to see a psychologist twice a month for one semester was exempted from punishment. This is also visible in the statistical data. After that, the number of crimes

Laws 2022, 11, 90 8 of 15

started to rise again, and reached its peak in 2005. It then decreased somewhat and was around 5000 between 2007 and 2009.

From the time of the change in the regime, Hungarian organized crime took an increasing role in the importation and distribution of drugs, which presented new challenges to law enforcement agencies as well (Balassa and Bezsenyi 2018).

Regarding Hungarian drug regulation, we can say that it is also considered strict in European terms. All types of drug use are prohibited and will result in criminal proceedings. It is clear, however, that the Hungarian police is primarily trying to hold the distributors responsible, the number of known consumers may be much higher than the statistical data show. In many European countries, the regulation is lighter than in Hungary. Among others, the Dutch, German and Danish regulations are much more permissive towards consumers (Moeler 2021). The question is discussed in detail by Thomas F. Babor et al. under He presents it in his book *Drug Policy and Public Good*.

The Impact of International Events following the Change in the Regime on Hungarian Drug Crime

Among the international events affecting Hungarian drug crime, let us highlight three events that significantly influenced the drug market: 1. The South Slavic crisis, 2. Events in Afghanistan, 3. Hungary's accession to the European Union.

Let us first examine the South Slavic crisis<sup>3</sup> and its direct effects on Hungarian drug crime. The war conflict, which lasted for almost a decade, radically shifted the main transport routes of drugs, and from then on, a significant part of the routes led through Hungary. The country's transit role became unquestionable, which put it permanently on the international map of drug trafficking. The consequence of this was that not only did the role of transit become stronger, but it also had a significant impact on consumer habits and the operation of criminal groups because the new geopolitical situation activated the Hungarian criminal groups. All of this is supported by the exponentially growing seizure data, criminal intelligence information, and data obtained during international law enforcement cooperation. After the end of the South Slavic war, the former Balkan route was restored in terms of drug smuggling (Kobets and Krasnova 2018); however, Hungary remained as a "branch" of the Balkan route, where the flow of drugs has been continuous ever since (on the Bulgaria–Romania–Hungary–Austria route). Almost all heroin enters Europe via these two routes (and, of course, heroin is intended for domestic consumption as well) (Bebesi 2009).

Afghanistan is extremely far from Hungary, but the drug production situation there also affects the country. The extremist Taliban occupied more than 90% of the country by 2000 and began growing opium in larger volumes than ever before, which brought huge benefits to the state (Johnson and Chris 2007). A significant part of the produced opium reached the country via the Balkan route, and through Hungary to Western Europe (Gehring et al. 2017).

Accession to the European Union also had a negative impact on Hungarian drug crime. The borders, which, in many cases, seemed to be symbolic even before 2004, were abolished in a physical sense with the country's accession to the European Union (2004) and in a legal sense with the accession to the Schengen Convention (2007) so that the road to a united Europe became practically free for domestic drug couriers as well.

## 5.3. The Period from 2010 to the Present

The year 2010 marked a turning point in the Hungarian and international drug markets. This was the year when designer drugs appeared in larger quantities (Institóris et al. 2017).

<sup>&</sup>lt;sup>3</sup> The South Slavic War was an armed conflict that broke out between the successor states of the former Yugoslavia, which took place between Serbia-Montenegro (then still Yugoslavia) and Slovenia, Croatia and Bosnia-Herzegovina between 1991 and 1995 (in each country there were combat actions for different periods). In 1996, the conflict between the rest of Yugoslavia and the Kosovo Albanians began, and in 1999, NATO also bombed the Serbian territories. The war ended in 2001.

Laws 2022, 11, 90 9 of 15

New types of drugs entering the country in large quantities have restructured the areas of use. As a result, we can say that drugs appeared everywhere in Hungary, regardless of settlement size (Institóris et al. 2017). The spatial examination of the question is further complicated by the fact that some of the designer drugs entering the country are not classified as drugs, as they are not on any prohibited list, and, therefore, their use and trading are not considered a crime. The consumption of designer drugs is especially a problem in disadvantaged settlements, where a large number of people living in extreme poverty reach for the drug, which they can afford due to its cheap price (Tihanyi et al. 2020b). The problem is exacerbated by the fact that practically anyone can order designer drugs using the Internet, which has presented a significant challenge to law enforcement agencies (see more: Kiss 2020, 2021).

# 6. The International Routes of Drug Crime Affecting Hungary

Let us first examine the main international routes of drug crime that also affect Hungary. Due to its geographical location, the country is an important stop for international drug crime. Heroin from Afghanistan enters Western Europe via the Balkan route. Hungary is a transit country in this regard, only a small amount of it reaches the Hungarian market. Drugs arriving via the Balkan route are smuggled into the country by road on the Romanian and/or Serbian border, mainly hidden in trucks and passenger cars.

In the case of cocaine from South America, Hungary cannot be considered a transit country, but clearly a destination country. The drug enters the country by road from Spain and the Netherlands, and by air directly from South America.

Amphetamine and ecstasy originate in Belgium and the Netherlands and are transported by road to Hungary. In the case of new psychoactive drugs, China and India are the two countries from which the drugs originate (mainly China). Here, the above-mentioned form of online procurement is gaining more and more space, during which parcel delivery services deliver the drug. The internationality of the drug market is indicated by the research conducted by Ildikó Ritter (2010), during which it was established that although the amphetamine entering the country comes largely from the Netherlands; the precursors necessary for its products reach the Netherlands via Hungary (Nemzeti Drog Fókuszpont 2016).

It is well known that Hungary plays a geographical role as a bridge between Western and Eastern, and Northern and Southern Europe, so the country can be seen as a transit country in many respects. Even before the change in the regime, a decades-long process began, as a result of which the domestic transport infrastructure forms an organic unity with the main European primary spatial structure lines (motorways, railway lines). Nowadays, many important road and railway routes pass through the country. The Danube is also an important river route for European freight transport, and the Ferenc Liszt International Airport is an important air hub. From the point of view of the economy and social mobility, the above is extremely welcome, but from the point of view of criminality, it has negative consequences. What is good for law-abiding citizens is also good for criminals. Criminals use these achievements and results in their everyday life in the same way as any citizen (Nemzeti Drog Fókuszpont 2016).

At the beginning of the 1990s, large quantities of drugs came to the country almost exclusively from the Balkans, but this changed in the mid-1990s with the appearance of "modern drugs" (amphetamine, methamphetamine, and their derivatives). In the meantime, the country has changed from a transit country to a destination country, although due to its geographical location, the role of transit has remained and is expected to remain so in the coming decades.

Based on the data from recent years, we can conclude that significant spatial changes have occurred in the drug market in both Europe and Hungary. Even in the early 2010s, the news often reported that people of Vietnamese origin were growing Indian hemp mainly in the capital city and settlements close to the capital city. Nowadays, this has changed significantly, as the Vietnamese have largely abandoned this activity (primarily due to

Laws 2022, 11, 90 10 of 15

pressure from the Albanian mafia) and mainly brought marijuana by car from the Czech Republic. Hungarian criminals continue to smuggle cannabis mainly from the Netherlands.

Albania and Kosovo can be considered relatively new areas, where a significant amount of cannabis has been produced in the last few years, most of which goes to the Western European market. There is quite a bit of literature available on this topic; however, most sources mention that cannabis (250–400 kg) enters the country from Albania mainly on trucks (Nemzeti Drog Fókuszpont 2016).

If we have mapped and become familiar with the main transport routes (motorways and other low-level roads), the most typical time interval of the transports, the type of vehicles involved in the transport, etc., then it is possible to carry out targeted inspections and carry out more effective reconnaissance work, and with this relevant information, it is possible to make the right strategic decisions.

# 7. Geographical Characteristics of Organized Crime and Drug Crime

To the best of the authors' knowledge, no one has examined the characteristics of organized crime from a geographical perspective either in Hungary or internationally. In the present study, in connection with the investigation of organized crime in Hungary, the authors highlight the geographical characteristics of drug crime.

There is no generally accepted definition of organized crime (Broadhurst et al. 2014). Klaus von Lampe has collected more than 150 definitions of organized crime in recent years (von Lampe 2016). The reason for the many definitions is that, on the one hand, organized crime takes a different form in each country, and on the other hand, the operation of organizations is characterized by the commission of various crimes (Gellér 2004).

The concept of organized crime in colloquial language generally refers to mafia-type organizations, while from the point of view of Hungarian criminal law, the concept of a criminal organization is: a long-term, hierarchically organized, conspiratorial group of at least three persons, the purpose of which is to commit intentional crimes punishable by imprisonment of five years or more (Civil Code 459. §/1/1).

Organized crime appeared in Hungary as early as the 1960s (Hignett 2010); however, due to the communist system, it was much less organized than it is today. During this period, the borders were closed, and citizens could not travel abroad, so organized criminal groups could not build relationships with organized criminal groups of other nationalities (Hignett 2010). After the change in the regime, the borders were opened and Hungarian citizens—and citizens of other ex-communist countries—were then able to travel freely. Hungarian organized crime groups were then able to contact international criminal organizations. The number of drugs entering the country increased sharply from then on. Organized crime groups, partly Hungarian and partly foreign, smuggled large quantities of drugs into Hungary (Hignett 2010).

## 7.1. Linear Infrastructure

The largest proportion of Hungarian organized crime groups use highways, and inferior roads were only rarely included in the examined case files, presumably for safety reasons. It is an extremely interesting fact that the M1 highway appeared most of the time in the examined files, but it was not mentioned once in connection with drugs. Nevertheless, we can assume that drug smugglers from Western Europe to Hungary use this route. The fourth most infected road section was the M0 highway, which can be considered legal due to its geographical location, as it is the road section that surrounds the capital. Half of the crimes that became known here were some kind of drug-related crimes.

# 7.2. Crime Scenes

Concerning drug crime, Budapest's suburbanization zone and the southern border section appeared as places of crime outside the capital. In every case, they wanted to smuggle drugs into the country on the southern border section, which was discovered during the border control.

Laws 2022, 11, 90 11 of 15

Based on the number of cases, the second most infected city was Debrecen, and its rate of infection per 100,000 people was almost the same as that of the capital. Unfortunately, the appearance of an organized drug crime can be considered legitimate, because Debrecen is the second largest Hungarian settlement based on population, where there is a significant demand for drugs due to this fact. This is only enhanced by the fact that the University of Debrecen is the largest in the country, where 4000 foreign students from about a hundred countries study. In the investigated cases, it was observed that foreign students were the primary customers, and in many cases, the network was built on them. Moreover, it also happened that drug dealers came from among foreign students with a more modest financial background.

# 7.3. Structural Characteristics of Organized Crime

Below, the authors wish to demonstrate that drug crime plays a significant role in organized crime in Hungary. As can be seen in Table 1, the 2nd and 3rd most common drug-related crime among men were involved in organized crime, and the 3rd most common among women. This clearly shows how significant a role drug crime plays in Hungary, which is why its investigation is extremely important.

<b>Table 1.</b> The most common of	crimes for men and	women (%).
------------------------------------	--------------------	------------

	Men	Women	Altogether
1.	human trafficking (75.8%)	human trafficking (54.8%)	human trafficking (73.8%)
2.	drug crime (11.1%)	counterfeiting (16.1%)	drug crime (11.3%)
3.	counterfeiting (8.3%)	drug crime (12.9%)	counterfeiting (9.1)
4.	bank card fraud (2.4%)	pimping (9.7%)	bank card fraud (2.5%)
5.	robbery (1.4%)	stealing and fraud (3.2%)	pimping (1.6%)

Source: National Bureau of Investigation.

About  $\frac{3}{4}$  of those involved in organized crime committed the crime of human trafficking, and 10%–10% of them committed some kind of drug-related crime or counterfeiting money. However, it must be noted that the examined period was the period between 2012 and 2017 when the crime of human trafficking was highly overrepresented, i.e., the proportion of participants in drug-related organized crime is much higher than 10% in "peacetime".

Examining the offenders by gender, it was found that the proportion of men among the offenders is much higher than in the case of "traditional crimes". Thirteen percent of female offenders were convicted of the crime of drug trafficking or drug possession (in this case, too, it is true that the proportion of women involved in drug crimes would be much higher today due to the overrepresentation of human trafficking). In the case of men, 11% of the perpetrators were convicted of the same crimes (Table 1).

# 7.4. Examining the Time Factor

In the course of the research, the operating time of each organized crime group was mapped, i.e., how much time passed from the time it was founded to its termination (the police investigation). Of course, this cannot be given exactly to a given day, only with an accuracy of months; nevertheless, it definitely provides important information for the investigative authorities regarding the organization and conspiracy of the given type of crime, even though in reality the operating time is certainly a few months longer than time

Laws 2022, 11, 90 12 of 15

interval established by the current research. Organized crime groups dealing with drug trafficking operated for an average of 18.8 months (Mátyás 2018) (Table 2).

**Table 2.** Operating time of criminal groups.

Crime	Average Operating Time of Criminal Groups (Month)	Shortest Operating Time of Criminal Groups (Month)	Longest Operating Time of Criminal Groups (Month)
human trafficking	5	1	13
drug crime	18.8	1	97
bank card crimes	4.3	2	7
counterfeiting	8.7	4	19

Source: National Bureau of Investigation.

# 7.5. Means of Transport

Concerning the individual branches of transport, we can state that the defendants in the investigated cases practically used land transport (road and rail transport) 100% of the time, and only travelled by plane twice. The question may arise as to what could be the reason for this. According to the authors, the price difference between land and air transport cannot be cited as a reason, because in some cases it is cheaper and faster to travel by plane than to travel by car, sometimes more than a thousand kilometers. In addition, the organized criminal groups involved in the cases have accumulated very significant assets even during their few months of operation, which would certainly have enabled them to pay any additional costs. The use of terrestrial infrastructure is primarily for security reasons. During a flight, luggage is thoroughly checked and passengers are registered, the traces of which remain for years. Some airline companies conduct a "raster investigation" and perform a risk analysis, which should be avoided for a person living with a crime. In the case of certain types of crime, it is practically impossible to use air transport, as either package of a special size/material must be moved (e.g., drugs) or people who do not have the necessary documents to fly must be transported (e.g., people smuggling).

Land transport is, therefore, the form of transport that has primary relevance in the case of domestic organized crime groups. Breaking down land transport further, we can make the following findings: The dominance of road transport can be observed, and the weight of rail transport is practically negligible (98.5%).

The use of a bicycle arose in connection with a case where the perpetrators were held accountable for the crime of drug trafficking committed by trading in a criminal organization. Although the bicycle was included in only one case, it can be assumed that the means of transport plays a significant role in the distribution of drugs within larger cities, since the risk of police control is relatively low (less than in the case of driving or walking).

#### 8. Conclusions

The study presented the main regional characteristics of Hungarian drug crime from the 1960s onwards. It found that in the period before the change in the regime, compared to today's values, only a small number of cases could be registered, which in many cases are not suitable for drawing a map of drug use in Hungary at the time. The small number of cases is partly to be found in the lower level of consumption and partly in the police activity and the fact that statistical data provision is different from today.

Since the system change, the number of drug users has increased significantly, and in connection with this, the number of registered cases. However, due to the fact that police activity differs in each county, and the appearance of designer drugs (from 2010, many drugs appeared in the country that is not classified as narcotics), their use or any kind of criminal behavior with them does not appear in the criminal statistics. The study also found that designer drugs significantly distort ENyÜBS data.

Laws 2022, 11, 90 13 of 15

The research questions were partially confirmed. The first question (Q1) related to the fact that the centers of organized crime in Hungary and the hotspots of drug crime mostly do not coincide. The question was not confirmed, because the centers of organized crime mostly coincide. Most of the hot spots for organized crime and drug crime are located in and around Budapest, in the southern border zone, and the big cities.

The second question (Q2) was confirmed. Budapest and its surroundings are also the most infected in terms of drug crime. This is where most crimes are committed. This is clearly due to the central role of the capital. It has the highest population density in the country and is the economic, transport and cultural center of the country. This is where the drugs are in the greatest demand, and distribution is relatively easy due to the anonymity of the big city.

The authors consider the main result of the research to be the fact that they analyzed and examined the spatiality of Hungarian drug crime and the main geographical characteristics. As mentioned above, there was no scientific work of this kind before, so this research can be considered unique.

**Author Contributions:** Conceptualization, S.M. and E.N.; methodology, S.M. and E.N.; software, S.M. and E.N.; validation, S.M. and E.N.; formal analysis, S.M. and E.N.; investigation, S.M. and E.N.; resources, S.M. and E.N.; data curation, S.M. and E.N.; writing—original draft preparation, S.M. and E.N.; writing—review and editing, S.M. and E.N.; visualization, S.M. and E.N.; supervision, S.M. and E.N.; project administration, S.M. and E.N.; funding acquisition, no one All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

**Conflicts of Interest:** The funders had no role in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

# References

Balassa, Bence, and Tamás Bezsenyi. 2018. A rendszerváltás időszakában gyorsuló gazdasági bűnözés szerveződése. In *Belügyi Szemle* 2018/9. Budapest: Belügyminisztérium, pp. 7–28.

Bebesi, Zoltán. 2009. Kábítószer-bűnözés és terrorizmus. Ph.D. dissertation, Zrínyi Miklós Nemzetvédelmi Egyetem, Budapest, Hungary.

Boda, József, ed. 2019. Rendészettudományi Szaklexikon. Budapest: Campus Dialóg.

Bright, A. David, and J. Jordan Delaney. 2013. Evolution of a drug trafficking network: Mapping changes in network structure and function across time. *Global Crime* 14: 238–60. [CrossRef]

Broadhurst, Roderic Grabosky, Alazab Peter, Brigitte Mamoun Bouhours, and Steve Chon. 2014. An Analysis of the Nature of Groups engaged in Cyber Crime. *International Journal of Cyber Criminology* 8: 1–20.

Bujdosó, Zoltán, and Bulcsú Remenyik. 2008. Turizmusmenedzsment az Észak-Magyarország Régióban. In *A turizmus szerepe az Észak-Magyarország Régióban I–II*. Edited by L. Dávid. Gyöngyös: Károly Róbert Főiskola, pp. 85–101.

Csaba, Zágon. 2019. Analyse des globalen illegalen Zigarettenversorgungsnetzes. Mitteleuropaische Polizeiakademie Fachjournal, 2019/1. pp. 40–46. Available online: http://real.mtak.hu/94743/ (accessed on 7 June 2022).

Demant, Jakob, Munksgaard Rasmus, Décary-Hétu David, and Aldridge Judith. 2018. Going Local on a Global Platform: A Critical Analysis of the Transformative Potential of Cryptomarkets for Organized Illicit Drug Crime. In Interantional Crime Justice Review. Available online: https://journals.sagepub.com/doi/full/10.1177/1057567718769719?casa\_token=vF2zP8qAR3gAAAAA%3A6 wgAsXJVzLhkXBhGSz5DegACe-mgq8348CzyZr1J13fbl-IgzRBHVJy7MBvyYW-IUDFbNIfqPTs (accessed on 7 May 2022).

Erdős, Ákos. 2018. Kábítószer-élvezet és–függőség Magyarországon a 19. század végétől a második világháború kirobbanásáig. Magyar Rendészet 18: 75–91. [CrossRef]

Erdős, Ákos. 2019. Territorial rearrangement in drug trafficking after the border closing. Criminal Geographical Journal 1: 25–38.

Freisthler, Bridget, J. Nancy Kepple, and R. Megan Holmes. 2012. The Geography of Drug Market Activities and Child Maltreatment. *Sage Journals* 17: 144–52. Available online: https://journals.sagepub.com/doi/full/10.1177/1077559512443124 (accessed on 19 September 2022). [CrossRef] [PubMed]

Laws **2022**, 11, 90 14 of 15

Gehring, Kai, Sarah Langlotz, and Stefan Kienberger. 2017. The (illegal) resource curse? Opium and conflict in Afghanistan. Regional Resources and Democratic Secessionism. Available online: http://kai-gehring.net/files/Afghanistan.pdf (accessed on 8 June 2022).

- Gellér, Balázs József. 2004. Gondolatok a büntetőjog jelentőségéről a szervezett bűnözés elleni fellépéssel kapcsolatban. In *A szervezett bűnözés arcai (Fiatal büntetőjogászok tanulmányai a szervezett bűnözésről)*. Edited by Gellér Balázs and Hollán Miklós. Budapest: Rejtjel Kiadó.
- Hajdú, Dávid. 2020. A munkanélküliség és felnőttképzés területi eloszlása az Észak-magyarországi régióban. *Észak-magyarországi Stratégiai Füzetek* 17: 62–69. Available online: https://bsr.bm.hu/ (accessed on 22 February 2022).
- Hall, Tim. 2010. Where the money is: The geographies of organised crime. Geography 95: 4-13. [CrossRef]
- Hall, Tim, and Ray Hudson. 2021. The economic geographies of transnational organised crime. In *The Routledge Handbook of Transnational Organized Crime*. London: Routledge.
- Hignett, Kelly. 2010. Organised Crime in East Central Europe: The Czech Republic, Hungary and Poland. *Global Crime* 6: 70–83. [CrossRef]
- Institóris, László, Előd Hidvégi, Adrienn Sija Éva Dobos, László Kereszty, Balázs Tajti, Gábor Pál Somogyi, and Tibor Varga. 2017. The role of illicit, licit, and designer drugs in the traffic in Hungary. Forensic Science International 275: 234–41. [CrossRef] [PubMed]
- Jay, Jonathan, Luke W. Miratrix, Charles C. Branas, Marc A. Zimmerman, and David Hemenway. 2019. Urban building demolitions, firearm violence and drug crime. *Journal of Behavioral Medicine* 42: 626–34. [CrossRef] [PubMed]
- Johnson, Thomas H., and Mason M. Chris. 2007. Understanding the Taliban and Insurgency in Afghanistan. *Orbis* 51: 71–89. [CrossRef] Kiss, Tibor. 2020. Az eBizalom szerepe az illegális szerek online kereskedelmében: Az eBizalom szerepe az illegális szerek online kereskedelmében. In *Sic itur ad astra: Ünnepi kötet a 70 éves Blaskó Béla tiszteletére*. Edited by Madai Sándor, Pallagi Anikó and Polt Péter. Budapest: Ludovika Egyetemi Kiadó, pp. 275–83.
- Kiss, Tibor. 2021. Miért népszerű a darknetes kábítószer-kereskedelem? In *Ünnepi tanulmányok a 75 éves Németh Zsolt tiszteletére: Navigare necesse est.* Edited by Barabás Andrea Tünde and Christian László. Budapest: Ludovika Egyetem kiadó, pp. 269–76.
- Kobets, Petr Nikolaevich, and Kristina Aleksandrovna Krasnova. 2018. Social partnership and countering illegal circulation of drugs: Experience of the Republic of Turkey. *Legal Education and Science* 7: 37–40. [CrossRef]
- Le, Vy. 2012. Organised Crime Typologies: Structure, Activities and Conditions. *International Journal of Criminology and Sociology* 1: 121–31. [CrossRef]
- Lévai, Miklós. 1991. A kábítószer-probléma és a bűnözés összefüggései. Kandidátusi disszertáció, Miskolc. 168p. Available online: http://real-d.mtak.hu/49/1/Le1.pdf (accessed on 2 June 2022).
- Mátyás, Szabolcs. 2018. A szervezett bűnözés kriminálgeográfiai vizsgálata. In *Nemzetközi jellegű szervezett bűnözés nyomozásának kutatása információáramlási szempontból. I.* Edited by Frigyer László. Budapest: Nemzeti közszolgálati Egyetem, pp. 134–68.
- Mátyás, Szabolcs. 2020. A kábítószer-bűnözés elleni küzdelem mint stratégiai kihívás a magyar bűnüldözésben. Budapest: NKE.
- Moeler, Kim. 2021. Enforcement intensity in Danish drug control, 1996–2017. European Journal on Criminal Policy and Research 27: 571–86. [CrossRef]
- Nemzeti Drog Fókuszpont. 2004. 2004-es ÉVES JELENTÉS az EMCDDA számára készítette: Nemzeti Drog Fókuszpont: "MAG-YARORSZÁG" Új fejlemények, trendek és részletes információk a kiemelt témákról. Available online: http://drogfokuszpont. hu/wp-content/uploads/nr\_hu\_2004.pdf (accessed on 19 April 2018).
- Nemzeti Drog Fókuszpont. 2016. 2015-ös ÉVES JELENTÉS az EMCDDA számára készítette: Nemzeti Drog Fókuszpont: "MAG-YARORSZÁG" Új fejlemények, trendek és részletes információk a kiemelt témákról. Available online: http://drogfokuszpont. hu/wp-content/uploads/nr\_hu\_2015.pdf (accessed on 15 June 2022).
- Nyitrai, Endre. 2018. A szervezet bűnözés elleni küzdelem büntetőjogi és kriminalisztikai eszközei. Ph.D. dissertation, Pécs, Budapest. Paolo, Campana, and Varese Federico. 2020. Studying organized crime networks: Data sources, boundaries and the limits of structural measures. *Social Networks* 69: 149–59.
- Patkós, Csaba, and Antal Tóth. 2012. A bűnözés néhány térbeli jellemzője a rendszerváltás utáni Magyarországon. *Területi Statisztika* 15: 259.
- Ritter, Ildikó. 2010. A hazai amfetamin-kínálati piac. Kutatási beszámoló [Actual problems of the development of statehood and public law: Materials of the IV International Scientific and Practical Conference]. Research Report. Budapest: OKRI.
- Sivadó, Máté. 2020. Vietnamese drug mafia in Hungary. In *Az első bűnügy-történeti konferencia előadásai*. Edited by Hunor Kádár. Cluj-Napoca: Forum Iuris, pp. 117–23.
- Sivadó, Máté. 2021. The basic patterns of drug use are in some parts of the world and the possible causes of differences. *Criminal Geographical Journal* 3: 41–48.
- Thomas, Yonette, Douglas Richardson, and Ivan Cheung. 2008. *Geography And Drug Addiction*. Berlin and Heidelberg: Springer Science & Business Media.
- Tihanyi, Miklós, Szabolcs Mátyás, and Vince Vári. 2020a. Drug policy in Hungary: Genesis of legal regulation. In Актуальные проблемы развития государственности и публичного права: материалы IV международной научно-практической конференции. [Actual problems of the development of statehood and public law: Materials of the IV International Scientific and Practical Conference]. Research Report. Edited by Д. В. Рыбин and Е. В. Трофимов. Sankt-Petersburg: North-Western Branch of the Russian State University of Justice, pp. 18–22.

Laws **2022**, 11, 90 15 of 15

Tihanyi, Miklós, Szabolcs Mátyás, Vince Vári, and Kristina Krasnova. 2020b. Drug Policy in Hungary: Current Trends and Future Prospects. *Siberian Law Review* 4: 485–94. [CrossRef]

- Vári, Vince. 2020. A rendőrség teljesítmény- és hatékonyságmérésének keretei és a mérés indikátorai. Budapest: Nemzeti Közszolgálati Egyetem Közigazgatási Továbbképzési Intézet.
- Vári, Vince. 2022. Új pszichoaktív anyagokkal (ÚPA) kapcsolatos bűnözés Miskolc szegregátumaiban. *Magyar Rendészet* 1: 173–93. [CrossRef]
- von Lampe, Klaus. 2016. Organized Crime: Analyzing Illegal Activities, Criminal Structures, and Extra-Legal Governance. New York: John Jay College of Criminal Justice, City University of New York, pp. 34–35.