

Crime in Gozo: A Spatio-temporal Analysis

SAVIOUR FORMOSA

Introduction

Few states can boast of zero crime rates, with the Maltese Islands posing no exception. This said, an urban ecology study of crime in the period 1998-2003 shows that the islands experienced a relatively low rate of offences, which, however, is tending to increase. Gozo, being a doubly insular region, exhibits its own peculiarities, both in its offender residential locations and in its offence targeting opportunities.

Offenders by District

A regional perspective based on a NUTS 4 spatial construct of the 7,353 offenders in Maltese prisons from 1950 to 1999 shows that the Northern and Southern Harbour regions account for nearly 75 per cent of all offenders, the other NUTS 4 regions take up the rest of the load, with Gozo as a region registering the least number of offenders.

A deeper spatio-temporal analysis shows that Gozo's offender component fluctuated from the 1950s to the early 1970s with a gradual decrease from the 1970s to the end of the 1990s from 4.3 per cent to 2.3 per cent. Table 1 gives a spatial depiction of the districts in question, clearly outlining the low Gozitan offender component.

District	1950-59	1960-69	1970-79	1980-89	1990-99	Total
Gozo and Comino	4.4	3.0	4.3	3.2	2.3	3.5
Northern	5.5	4.5	2.6	4.9	8.9	5.6
Northern Harbour	34.8	28.8	28.3	31.3	29.9	31.3
South Eastern	11.3	12.5	10.8	11.8	6.5	10.3
Southern Harbour	36.8	43.0	49.4	41.6	48.9	43.4
Western	7.3	8.3	4.5	7.3	3.6	6.1

Table 1: Percentage Offenders by Region sorted by 1950-99 data

At the other end of the crime-scenario, an in-depth analysis of crimes reported to the police shows that Gozo experiences a very low rate of crime that exhibit highly particular specializations. In discussing reported crime, one must keep in mind

the phenomenon known as the dark figure of crime. At least 50 per cent of crimes are not reported to the police, for a variety of reasons ranging from lack of trust in the police to fear of reprisals from convicted offenders.

A district (at NUTS 5 level) analysis of offence locations in the Maltese islands shows that once again there is a clear distinction between the offences registered in Malta and those in Gozo. Whilst the Northern Harbour district registered the highest number of offences, Gozo registered the least at 4 per cent (Figure 1).

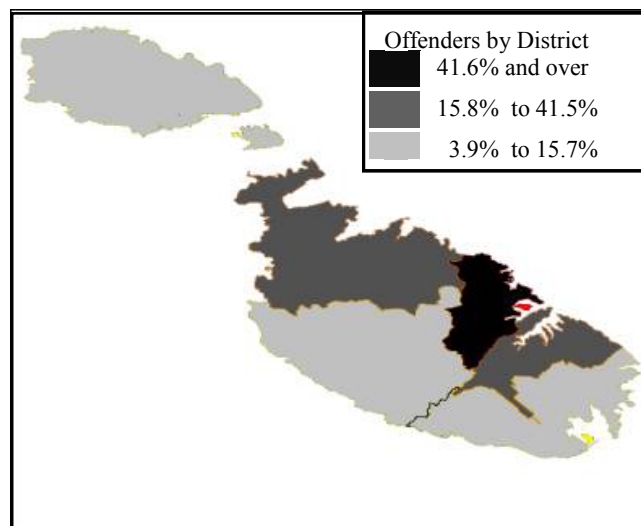


Figure 1: Offences by district

Journey to Crime

One other area of investigation concentrates on the issue of who commits offences in Gozo. Whilst most offences in the Maltese islands are no longer restricted to an offender-known area, owing to access to transport, Gozo's insularity directly impacts its crime scenario. Offenders who live in Gozo normally offend in the same island, which also hosts offences from Maltese offenders.

Further studies carried out by the present author show that the Gozitan towns that are mostly targeted by Gozitan offenders are Nadur, Sannat, and Xaghra, which fall within the lowest range of the journey-to-crime matrix. On the other hand, apart from the local offenders, Zebbug (Marsalforn) and

Rabat experience offences committed by Maltese offenders.

Commercial and Recreational Aspects

Gozo is a relatively small district with only 14 local councils. A local council analysis immediately indicates that there are very few local councils that exhibit crime hotspots throughout their area. In fact the main areas exhibiting offences are highly selective sub-localities. These include the Rabat (Victoria) retail area and the areas designated as recreational and leisure zones. An in-depth analysis shows that there is a relationship between offences occurring in these areas by distance from the same areas.

In brief, crimes rates are high in the retail footprint areas, increase by buffer distance for the first 400m then start declining up to 1000m. The analysis of offence categories by retail vicinity shows that 15 per cent of all crimes occur within the footprint retail area. This analysis indicates that most offences occurring in this initial zone are made up of theft from retail areas, criminal damage and vehicle crime. This trend can be found up to 400m from the retail units, which finding signifies that the offences categories are linked to the retail activity. For example, theft from retail outlets is

naturally high in the immediate footprint area and decreases with distance.

In the case of vehicle crime and criminal damage, which includes damage to vehicles and property, offences increase by distance from the commercial centre within the footprint zones. Though high in the first zone at 19 per cent in both cases, they increase to 30 per cent of all offences for vehicles and 26 per cent for criminal damage at 400 meters. This type of change is understandable since the offences fall within the zones that people tend to park in, principally the immediate roads that intersect with or are on the periphery of the recreational area. With few official and secure car parks near the retail areas, visitors to the area park anywhere in the vicinity, flowing out to the neighbouring streets and main roads. This results in high vehicle crime in these buffer zones, both in term of theft from cars and theft of cars, as well as damages to property in the vicinity. The latter, is also evidenced from the slight increase in dwelling burglaries in the distant buffer zones.

Three-dimensional point density maps of vehicle crimes show that the highest rate of offences in the whole Maltese islands territory occurs in the Local council area of San Giljan specifically the recreational area of Paceville. In Gozo, the highest



In Gozo the highest rates of vehicle crime also occur in the recreational and commercial areas of Rabat

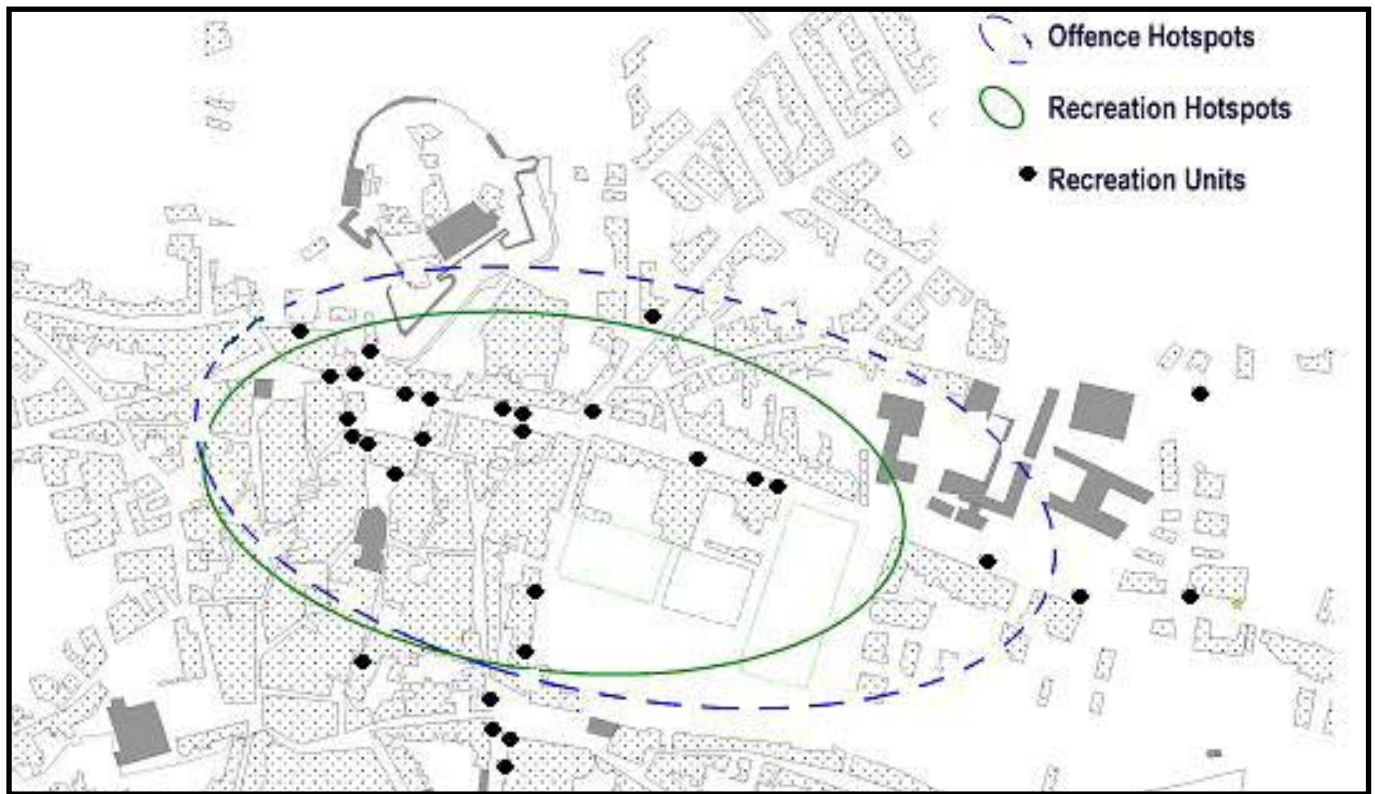


Figure 2: NNH geopol hotspots overlaid over recreational hotspots in Rabat – Gozo (Victoria)

rates of vehicle crime also occur in the recreational and commercial areas of Rabat, Marsalforn, Xlendi and Mġarr, albeit at relatively lower rates when compared to Malta Island. Interestingly one other area related to another type of commercial activity related to parking facilities exhibits itself quite explicitly in Mġarr.

Such annual data is best illustrated through the use of high-end Geographical Information Systems that analyse the changes through raster-stamping methodology. The results of such a study carried out by the present author show that during the two year 2002-03 period, Gozo experienced a decrease in Xlendi. On the other hand, Marsalforn, whilst decreasing in the periphery, experienced an increase in offences in the leisure zones. However, the major increase in offences in Gozo was experienced in Mġarr. Other areas such as Dwejra also experienced a slight increase, a situation related to the presence of parking facilities. In the case of Rabat, a general decrease occurred over the two year period.

With regard to Rabat – Gozo (Victoria), Figure 2 shows that in this locality offences and recreation/commercial hotspots intersect quite closely. The

Victoria recreational hotspot is in fact almost totally within the offence hotspots.

Conclusion

In conclusion, such studies help to understand the dynamics of the Gozitan crime scenario, build upon the available information and could help inform policy-makers in their attempt to develop, monitor and organize operational and tactical activities to combat crime.

Further Reading:

Hirschfield, A., and Bowers, K. (eds.) (2001) *Mapping and Analysing Crime Data: Lessons from Research and Practice*, London, Taylor & Francis.

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