
CHAPTER 19

A Contextual Analysis on the Socio-Spatial Relationships of Unauthorised Graffiti and Street Art

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Introduction

In today's day and age, it has become quite common to encounter some form of wall-writing that categorises itself as either graffiti or street art, becoming for many "an object of their travelling gaze" (Pennycook, 2010: p. 137). The phenomenon of graffiti and street art has throughout the years attracted a multitude of academics, stemming from different backgrounds, to systematically scrutinise its nature and the existing relationships it holds with other domains. Different perspectives exist on the topic, however one may notice that the phenomena are often renowned for their illicit nature. Halsey & Young (2006) posed the fact that the phenomena have been mentioned in many writings for their subculture, delinquent nature, and historically, as a regulatory problem.

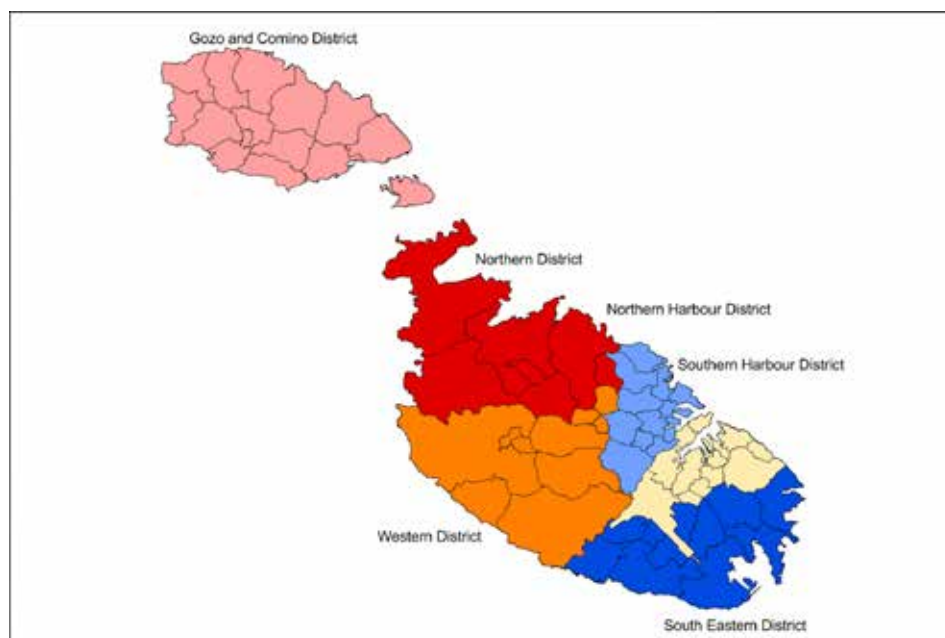
The following research investigates the phenomena that was carried out illicitly in certain localities within the Northern Harbour District, in Malta (Figure 1). Due to the phenomena's inexhaustible nature, the study focused on forms of art carried out using only two particular mediums which were spray-aerosol paints and inks, on immobile platforms. The aim of this article, and the study behind it, is threefold. Firstly, the study served as a window of opportunity to create the first data set that unravelled the incidence of unauthorised graffiti and street art on a local context. Secondly it helped unravel the social, spatial and other relationships related to the phenomena. Finally, it aimed to better scrutinise the topic, understand its intricate nature, and point out the criminological aspects that are relevant to the subject matter.

The Phenomena

Although graffiti and street art are not the same, authors such as Hughes (2009) pointed out that these phenomena share a lot in common, and as concepts they have many overlapping properties such as the medium used or the fact that they are mostly associated with public forms of art. Furthermore, many seem to debate on the nature of the phenomena as either being art or vandalism. The derivation for such conclusion has

been questioned and under discussion by many (Abel & Buckley, 1977; Bandaranaike, 2003; Ferrell, 1993; 1995; Hagen et al., 1999; Raymond, 1989), however, it should be made clear that an object, or an act, can bear coexisting properties, being both artistic and criminal. This statement has been supported in previous literature by authors such as Barbaro, Chayes & D'Orsonga (2013), Bou, (2005), Halsey & Young (2006), Marter (2011) and Thompson et al. (2012) who acknowledged the phenomena's criminal nature and artistic properties.

Figure 1: The six districts on a NUTS 4 level



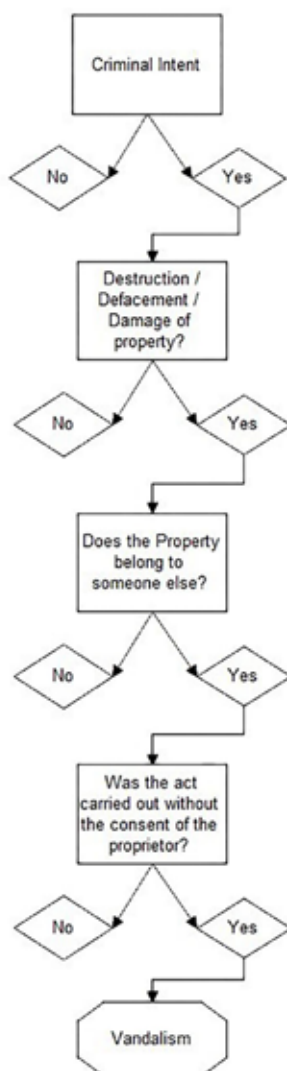
Source: (MEPA)

The author identifies that although art is subjective, according to the views pertaining to the individual, the criminal factor that coexists is objective, and thus is always present when the act goes against the rule of law. For this particular reason, the subjective concepts of graffiti and street art were defined, as well as the more objective concept of vandalism, to understand more the relevant themes prior to further discussion. Starting with the most objective concept of the three, based on different laws stemming from different countries, vandalism can be defined as:

The intentional and wilful destruction, defacement or damage, to any private or public property without the proprietor's consent to carry out such an act.

Cohen (1972) also added that vandalism can be put in different categories based on the cause of why the act was committed. However, no matter the reason behind the act, based on the author's definition which was formulated on existing laws, all types of vandalism comprise of four properties as shown in Figure 2.

Figure 2: The four elements that make a vandal act



Graffiti is not just an Italian import, but is also a derivative of Latin and Greek (Clarkson, 2014; Marter, 2011; Miller, 2005; Pereira, 2005). It has been documented to exist for thousands of years (Bates, 2014; Bingham, 2010) being a phenomenon that had many purposes and evolved throughout the years from simple scribbles to more distinctive themes (Rogers, 2009). Graffiti, although usually associated with hip-hop graffiti, is a concept that holds many different sub-categories and ranges from simple wall etchings to elaborate murals. Needless to say, as a concept, it has always been subject to interpretation and different authors such as Alonso (1998), Marter (2011), and Weisel (2004) have categorised the phenomena differently making it hard to establish an objective understanding within the scientific community.

Waclawek (2011) mentioned how graffiti is unique in three particular ways. Primarily the graffiti subculture is sustained by the young and predominantly by males (Macdonald, 2001; Waclawek, 2011) who practice this illicit pictorial tradition that kept developing through the years (Waclawek, 2011). Secondly, the graffiti art movement has flourished in other artistic movements such as post-graffiti art practices. Lastly, graffiti and street art "... take their place within the matrix of visual culture" (Waclawek, 2011: p. 12).

Therefore, based on the work of previous authors such as Bingham (2010) and Marter (2011), graffiti can be defined as:

The name given to the wall writings and designs on walls and surfaces (whether they are scribbled, scratched or sprayed), on public and private property which are most of the time done without consent.

Much like graffiti, street art "takes much of its meaning from its location in public space, on private property" (Young, 2014: p. 3) and most of it tends to be delinquent (Bou, 2005). Although it seems like a subset of graffiti as many of its properties are derived from this form of art, street art has elements that are not present in graffiti making it a concept of its own (Bates, 2014). Street art's application is wider than graffiti and can adopt techniques of all sorts ranging from the traditional use of paint to more modern techniques such as the use of digital graphic designs, departing the artist from the transient and illegal aspect of graffiti (Bou, 2010). Street art can be both legal and illegal, yet it seems that within the street art culture, more credit is given to the art which is done without permission, and the artists who do take this path are considered to be more authentic (Young, 2014).

Based on works of authors such as Waclawek (2011) and Bou (2005), street art was defined as:

An art movement which is a derivative of graffiti with a broader spectrum of motives incorporating "all artistic incursions into the urban landscape" (Bou, 2005: p. 6).

Existing Research

As already mentioned, the phenomena have already been scrutinised elsewhere in order to unravel the relationship it shares with other variables. Starting off with the overall area, McDonough (1992: p. 325) stated that there is some form of statistical consistency with the “inverse relationships of disorder with neighbourhood solidarity, satisfaction with and attachment to the residential area, and the positive association between disorder and crime”. However, it was added that the overall geographical size does not really infer the overall number of crimes or vandalism, thus the two variables do not share a relationship. This statement was contradicted to a certain extent by Voncannon (2000) who noticed that the bigger the area, the more one would expect for a population to increase resulting in more crimes. Voncannon’s claims on populations were seconded by Teng et al. (2012) who found out that in Utah, District 2 of Florida, and Arizona the amount of expenditure on graffiti control was increasing.

This was proportionate to the increase in population both States were experiencing. Anderson (2014) also agreed with the affects population has on vandalism rates, but contrary to what previous authors have said, Anderson stated that the existing relationship is inverse, meaning that with an increase in population there would be a lower incidence of vandalism. With regards to age, ample research supports the claim that acts of vandalism are associated with the younger aged cohorts. As already mentioned, these forms of art are sustained by the young (Macdonald, 2001; Waclawek, 2011). Snyder (2009) said that as one gets older, people tend to moderate their behaviour. A recent study by Megler et al. (2014) showed that graffiti is created in areas with a high density of young males and the phenomenon correlates with areas where young males live or hang out in. Halpern (2014) also posited the fact that the incidence of vandalism is closely related to child densities.

On a different front, McVie (n.d.) presented her statistics showing how in Scotland property vandalism takes place mostly in remote rural areas, whilst also showing that the percentage of crimes reported to the police, with regards to property vandalism, happen more often in rural zones than in urban areas. This was further supported by Anderson (2014) who claimed that vandalism occurs in areas which are sparsely populated. However, according to Ceccato et al. (2002) most acts of vandalism and violence occur in public entertainment areas; a claim similar to Megler et al.’s (2014) who stated that commercial zones have a higher rate of graffiti reports and are considered as a migratory push factor from the inner cities in the UK (Bowen & Pallister, 2006). Also, statistics from Higgins et al. (2010) have shown the total opposite of what McVie (n.d.) stated, reporting that in England and Wales, 7.2% of urban areas were victimised by vandalism whilst 4.7% were targeted in rural areas.

The last themes that are going to be mentioned in relation to the phenomena are poverty and crime rates. Adisusanto et al. (2009) mentioned the existence of a correlation between graffiti incidents and unemployment rates, as well as income levels. However, not all authors seem to agree. Megler et al. (2014) said that there is no relationship between income and graffiti, but also added that high income areas are more likely to have a lower density of graffiti and also a low tolerance towards it. The States of Guernsey Scrutiny Committee (2009) said that poverty and vandalism may not have a direct link, but poverty is surely a factor of social exclusion which can provoke vandalism. As with regards to crime, Snyder (2009: p. 52) stated that the “relationship between vandalism and violent crime is not nearly as casual as we are made to believe”, whilst Wilson & Healy (1987) and Thompson et al. (2012) discussed that there is no existing relationship, based on statistics, that shows a link between violent crimes and graffiti. This being said, there still exist claims stating that graffiti bring forth the degradation of the social status, diminishes property value and triggers other forms of crime in the community (Teng et al., 2012).

For most of the variables listed above, little can be said about their relationship with graffiti and street art, as data which focuses on such specific queries may not be readily accessible. Therefore, during particular instances, surrogate themes were used. For example, the data provided by Formosa (2007) pertaining to the mapping of all reported crime categories did include graffiti under damages, however due to the police information reporting system (P.I.R.S) data structure, the graffiti-related reports couldn't be extracted for direct comparisons.

Methodology

The Methodology carried out was of a quantitative nature, aiming to visualise the incidence of the phenomena and to seek for any social, spatial and other relationships that currently exist. Prior to any field work, the study zone was outlined. It constituted of 7 localities within the Northern Harbour Region on a NUTS 4 level (Figure 3). According to Formosa (2007), NUTS 4 refers to the apportionment across the Maltese islands into six districts. He also added that “no real administrative powers exist at this level” (Formosa, 2007: p. 146). The localities were; Pembroke, St. Julians, Msida, San Ġwann, Ta' Xbiex, Pieta and Gżira.

The process required for data to be gathered manually throughout the rural and urban areas of each locality using a handheld GIS device, to spatially map down the target points on a digital base map. Once the data was captured, the points were transferred as a whole unified layer. The points gathered from the field were presented as a vector data set which is the translation of physical elements using basic units of spatial information

in point, line or polygon features; to display, manipulate and analyse the data at hand (Santos, 2013). Using only points, the data was presented on a planar (WGS84 and UTM ED 50) projection. In order to find any underlying relationships, the gathered data layer was analysed. A cross thematic analysis was carried out with other data sets provided by Formosa (2007; 2015) which included layers representing:

- Enumeration areas (EAS)
- Population within EAS
- Age group cohorts within EAS
- Crime and damage related data within the EAS
- EAS Land Use cover
- NNH1 Poverty Layer

Figure 3: The Northern Harbour Region



The process of visualising the data points consisted of the following steps:

- The Shape file (shp) was converted to MapInfo tab format to run queries on 'Mind Mapper' and 'Map info' after data points were extracted using 'Arc ESRI Map 10.1'. Data was exported and saved as a database file from the input layer points attribute table to be accessible on Microsoft Excel.
- The file was uploaded into MapInfo. Input points had different data attributed to them including object ID, surveyor, locality, different categories, date, and medium used.
- A base layer was added to the input points to give context to the gathered data.
- The layers were edited showing the study zone in different formats as shown in Figure 4, and the study zone was divided in its seven localities visualising each area using the input data layer on top of a polygon base map.
- SQL was used to transfer different data sets from GIS software to Microsoft Excel. The cross comparative analysis between the chosen variables and the data points gathered was worked out to find out the:

1. Input points per total area
2. Input points per capita
3. Input points per age group cohort within an area
4. Land use query (Input points in urban and rural environments)
5. EAS offence query (Input points per offence and input points per damage related offence)
6. Nearest Neighbour Hierarchical (NNH) Poverty Clustering Query

vi) The tables presented later on in the findings will amongst others contain three particular fields entitled estimated zone rate, observed rate and rate. Estimated zone rate consists of the total count of the phenomena divided by the total count of the variable being scrutinised, such as the total area of all locations or the total population. The observed rate includes the count of the phenomena divided by the total sum of the variable within a particular locality or belonging to a particular age group cohort. Finally, the rate is the result of the observed rate divided by the estimated zone rate.

These queries were carried out using the EAS data set, which in this case consisted of the study zone divided into 132 EAS each representing 130 dwellings as shown in Figure 5.

Figure 4: Different representations of the study zone

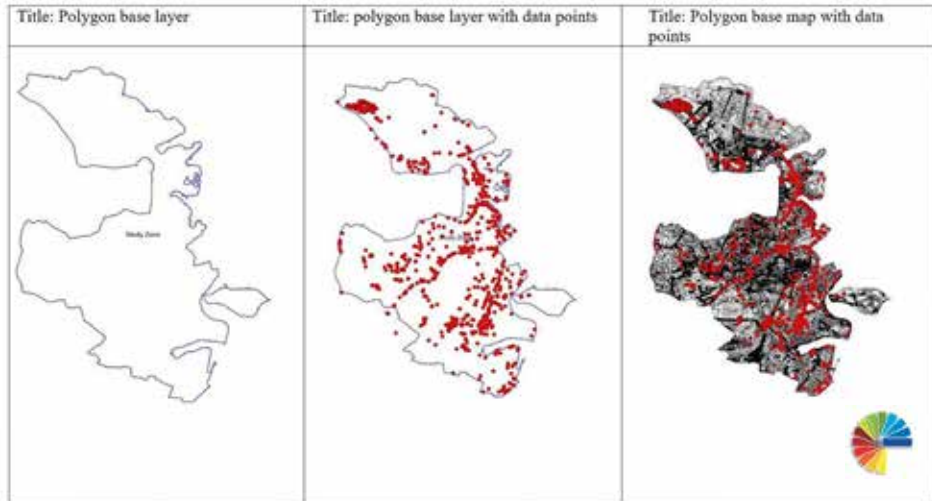


Figure 5: 132 EAS each holding 130 dwellings



Source: Formosa, 2007

Discussing the Research Findings

Incidence of crime and spatial hotspots

The following will overview the results on a local context, visualise the outcome and compare research findings to existing data. Queries were carried out using GIS related software, Microsoft Excel and Structured Query Language (SQL) which is “the language for generating, manipulating and retrieving data from a relational database” (Beaulieu, 2005: p. ix). The *crème de la crème* of all queries was the generation of the hotspots within the study zone. This particular research generated density maps of input points within 10m, 50m and 100m proximity of each other. All outputs yielded the same results. Using Figure 6, which is a 3D illustration of points with 100m proximity, it can be argued that the only existent hotspots within the study zone were in Pembroke and Msida. Pembroke peaked much higher due to the high number of dilapidated buildings within its rural zone, away from the urban areas.

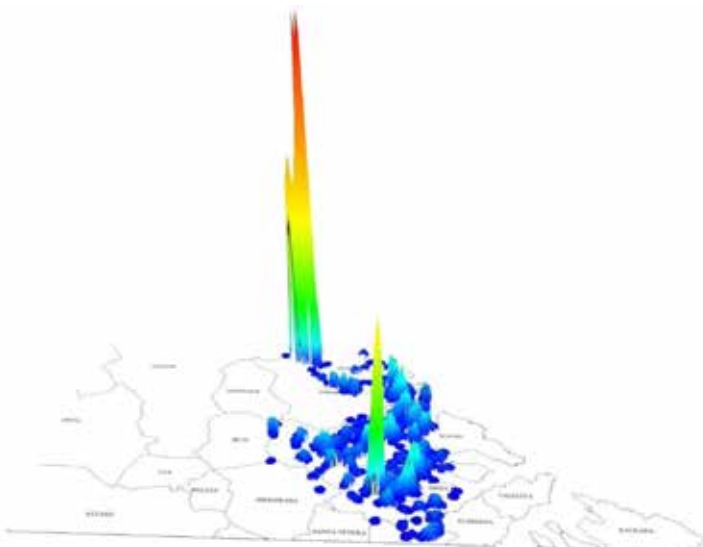
This reinforces the broken window theory that views crime with relation to the surrounding environment. The premise of this theory states that social or physical disorders lead to a reduction in social control which in turn adds the probability for crime to flourish (Greene, 2007; Eck, 2010). To even further hit the nail on its head, Eck (2010) mentioned how ‘vandalism or graffiti’ attribute as physical disorders leading to this chain reaction. Greene (2007) stated that this metaphor implies that if one window goes unrepaired, then it is taken as an invitation for the breaking of more windows. The same thing happens with community standards; as soon as they start to break, the community becomes ever more vulnerable to crime. Furthermore, Formosa (2007) mentioned a study conducted by Sherman et al. (1989) where the ‘places cause crime’ statement was posited as a possible explanation towards the origination of crime itself.

The second hotspot was found in Msida’s skatepark. This area contains legal murals which were consented by the authorities, however the author took into account all the scribbles, tags and others forms of illicit art that were conducted without authorisation. For this occurrence, as well as for the previous hotspot, one can adopt the crime pattern theory. Although crime’s geographical placing seems to be disorderly, there is some rationality behind its occurrence in both space and time (Rossmo, 1999). According to Rossmo (1999), this theory states that whilst the victim may be chosen randomly, the place in where the criminal act is about to be committed is not, and thus the process is spatially structured. Rengert & Wasilchick (1985 as cited in Greene, 2007) and Brantingham & Brantingham (1981) also posited the fact that the place evinces certain cues which trigger specific responses from offenders.

The offender's choice of a target depends on the particular travel path and awareness/activity spaces in which the cues are located (Greene, 2007). Brantingham & Brantingham (1991 as cited in Greene, 2007) and Chainey & Ratcliffe (2005) mentioned that between travels from home to work to recreational areas (nodes of activity), offenders tend to develop their awareness space which is the area they are most likely to target their victims. Brantingham & Brantingham (1993: p. 259) remarked that "each criminal event is an opportune cross product of law, offender motivation, and target characteristics arrayed on an environmental backcloth at a particular point in space-time". Therefore, by applying Santos' (2013) shortened explanation, one might say that criminal activities are likely to occur if there is an overlap between the activity space of potential offenders and the activity space of potential victims (in this case being the areas that are about to be vandalised). It is also worth mentioning that this theory incorporated elements of the routine activity theory (RAT). In a nutshell, the theory implies that crimes occur when certain elements are accessible in both space and time (Chainey & Ratcliffe, 2005; Lersch & Hart, 2011; Santos, 2013). The elements applied within the context of this study include:

- motivated offenders (the artists and writers);
- suitable targets (the platform the offender chooses to work on); and
- the lack of capable guardians (lack of police patrols, no surveillance cameras in the vicinity or even the lack of a neighbourhood watch).

Figure 6: Hotspot 3D representation (100m proximity)



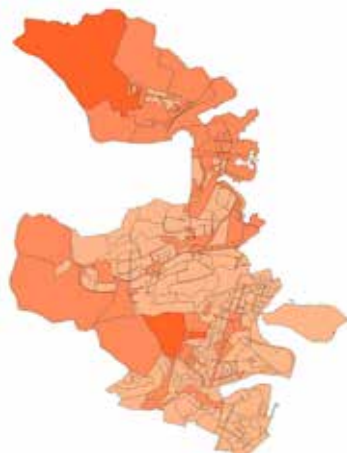
Input points per area

The findings show that there is a relationship between the area and the phenomena. Out of seven localities only San Ġwann did not follow suit, having the largest surface area but placed fourth when comparing input counts. Only Pembroke and St. Julians were above zone rate, meaning they were above the average count per km sq. (Table 1). Figure 7 shows the degree of points per surface area across the EAS (the bright orange indicates a high number of points in relation to the theme it is being compared to). This might affirm Voncannon's (2000) views when he stated that criminal opportunity is more present when the area gets bigger and might suggest that area and criminal opportunity may share a relationship. However, this query only proved that within the context of the study zone, the relationship between the phenomena and the surface area, of a locality, exists.

Table 1. Input points per km sq. - Rate Comparison Query (Zone Rate = 1.0)

<i>Locality</i>	<i>Estimated Zone Rate</i>	<i>Observed</i>	<i>Rate</i>	<i>Zone rate</i>
Pembroke	142	250.44	1.8	Above
St. Julians	142	168.37	1.2	Above
Msida	142	138.77	1.0	Zone rate
Gżira	142	115.14	0.8	Below
Pieta	142	86.30	0.6	Below
San Ġwann	142	65.68	0.5	Below
Ta' Xbiex	142	30.81	0.2	Below

Figure 7: Input points per area (EAS)



Input points per capita

This query had to be carried out twice after finding out that Pembroke was an outlier when scoring much higher than the zone rate. Having discarded Pembroke and worked out the rate again using only the remaining six localities, the findings revealed that with an increase in population there would also be an increase in unauthorised graffiti and street art; however, for the second time San Ġwann placed fourth out of six localities even if it had the largest population count. Only St. Julians and Msida were above the zone rate (Figure 8 - Table 2). This finding not only strengthens Voncannon’s (2000) views but also complies with the study carried out by Teng et al. (2012), where they noticed the proportionate relationship shared between an increase in graffiti and population. Therefore, the findings show the existence of a relationship between population and the studied phenomena.

Figure 8: EAS population (Left), EAS input points per capita (Right)

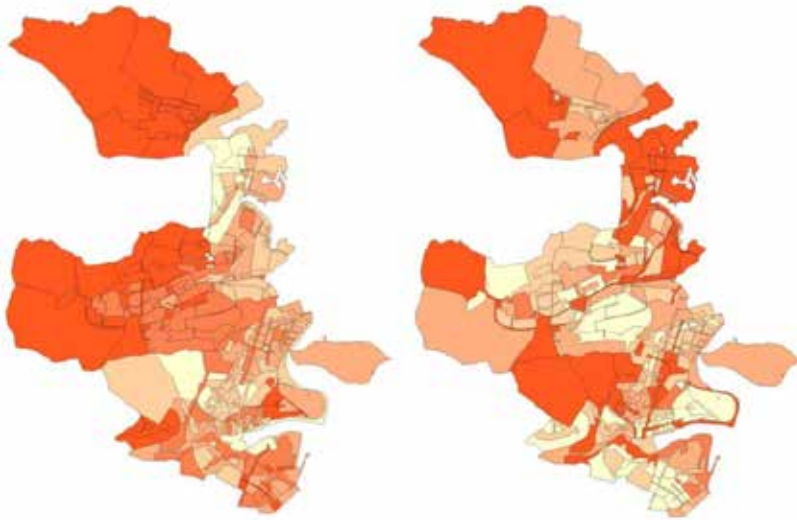


Table 2. Input points per capita excluding Pembroke

<i>Locality</i>	<i>Estimated Zone Rate</i>	<i>Observed</i>	<i>Rate</i>	<i>Zone rate</i>
St. Julians	0.02	0.03	1.46	Above
Msida	0.02	0.03	1.46	Above
Gżira	0.02	0.02	0.97	Below
San Ġwann	0.02	0.01	0.49	Below
Pieta	0.02	0.01	0.49	Below
Ta' Xbiex	0.02	0.01	0.49	Below

Input points per age group cohort

When working out the mean percentage of input points of different age group cohorts, there seemed to be a pattern between the age group cohort variable and the studied phenomena, showing an increase in the mean input count as the group cohort aged. This result suggests that such figures may be shadowed by the fact that the country is facing an ageing population (Agius Decelis, 2013; Dalli, 2014; Formosa; 2014a; 2014b). Despite it all, when working out the rate of input points per capita of different age group cohorts residing in these areas, the query established that there is a pattern (Table 3). The highest rate belonged to the 15-25 age group cohort followed by the 0-14 age group cohort, thus proving that graffiti can be related to young age. This shed light on the literature found and the studies carried out by certain researchers, suggesting that these forms of art are predominantly sustained by the young (Macdonald, 2001; Waclawek, 2011).

On a final note, this result does indeed comply with what Megler et al. (2014) stated when they found that graffiti correlates with areas in which the young live or hang out in. It also supports Halpern's (2014) findings, who added that the incidence of vandalism is closely related to child densities. Therefore, young age and the studied phenomena were shown to bear a relationship in this study.

Table 3. Input points per age group cohort - Rate Comparison Query (Cohort Rate = 1.0)

<i>Age Groups</i>	<i>Estimated Zone Rate</i>	<i>Observed</i>	<i>Rate</i>	<i>Cohort rate</i>
15-24	0.03	0.04	1.24	Above
0-14	0.03	0.03	1.05	Above
46-64	0.03	0.03	1.04	Above
25-44	0.03	0.03	0.95	Below
65+	0.02	0.02	0.77	Below

Land use query

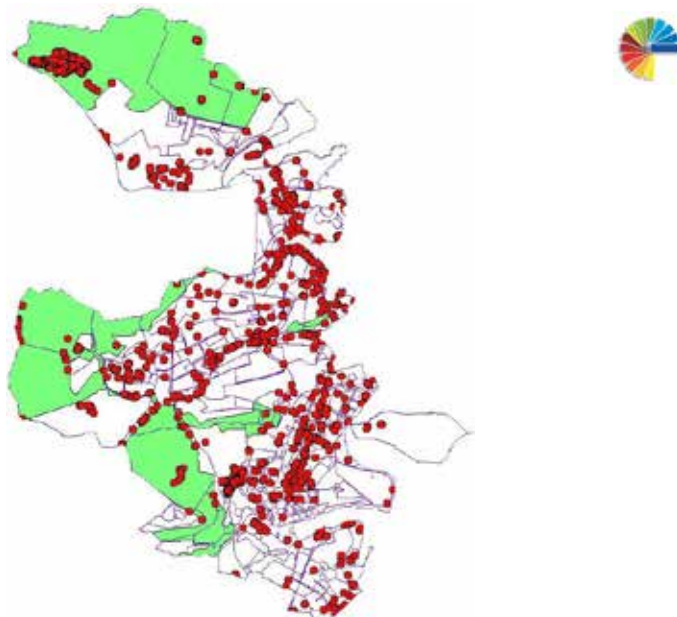
The following map (Figure 9) shows the land use characteristics of the EAS and the spatial whereabouts of the input points to give a visual idea of their occurrences. The EAS with a green shade signify a rural land cover, whilst EAS with a white shade signify an urban land cover. Findings have evidently shown that there is no relationship between land use cover and unauthorised street art and graffiti within the study zone as indicated in Table 4. When working out the rate of input points per km sq. in rural and urban environments, the results were almost identical.

These findings do not harmonise with what McVie (n.d.) stated, saying that vandalism in general is higher in remote rural areas rather than in urban zones and in areas which are sparsely populated (Anderson, 2014). These findings also do not concur with the English and Welsh context, where urban areas were found out to be more vandalised than rural areas (Higgins et al., 2010). This shows that there is no relationship between the input points and land use cover. However, it would be ideal for future research to be carried out and see whether this lack of relationship persists throughout the years, especially when one takes into consideration the amount of work and investment currently being made in Pembroke’s rural area.

Table 4: Table showing the percentage of the input points within the land use coverage and the total percentage of the areas (both rural and urban zones)

<i>Land Use</i>	<i>Counts</i>	<i>Percentage %</i>	<i>Area</i>	<i>Percentage %</i>
Rural	411	29	2.976	30
Urban	1007	71	6.962	70
Total	1418	100	9.938	100

Figure 9: EAS input points in urban and rural zones



Nearest Neighbour Hierarchical (NNH) Poverty Clustering Query

NNH is an aggregation method where points that are close to each other are analysed for their relationship in terms of the space they occur in, thus rendering a hotspot where high concentrations of incidents are present (Formosa, 2007). The NNH clustering technique involves the aggregation of incidents into groups by a series of merging steps on the basis of their geographical proximity. This would imply that the first order clusters would contain the individual input points within its ellipsoids, whilst second order clusters would include within its ellipsoids the first order clusters which would then be treated as individual input points. This follows the same pattern up the hierarchical clustering order (Clarke et al., 2009; Formosa, 2007; Hirschfield, 2011; Hizir, 2003).

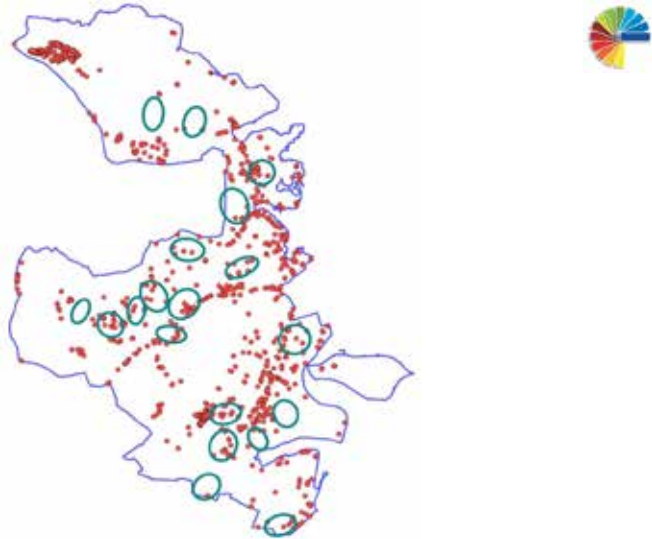
Figures show that San Ġwann has the highest input count within its NNH1 poverty clusters followed by Msida and St. Julians, however the percentages in Table 5 indicate that there is no relationship between poverty areas and the studied phenomena. This query did not find any relationship between the total counts within the NNH1 poverty ellipsoids, taken from Formosa (2007), and the total count of graffiti in each locality. The highest percentage of NNH1 counts against total count was in San Ġwann scoring 32.18%. However, the other localities scored low not exceeding 15.25 %.

The findings do necessarily posit the fact that such a relationship is lacking in certain areas on the Maltese islands or around the world, but objectively shows the absence of a relationship between the variable of poverty and the phenomena within the context of the study zone. McDonough (1992) said that there is an association between poverty and disorder which did comply with Adisusanto et al.'s (2009) statement, who found a correlation between graffiti incidents and the rate of unemployment. Yet again, the findings are more in favour with Megler's et al.'s (2014) assertion that there is no relationship between graffiti and income levels.

Table 5. Percentage of NNH1 counts against total counts

<i>Locality</i>	<i>Counts</i>	<i>Counts within (NNH1) poverty ellipsoids</i>	<i>% of NNH1 counts against total counts</i>
Pembroke	577	1	0.17
San Ġwann	174	56	32.18
Msida	236	36	15.25
St. Julians	277	39	14.08
Gżira	112	14	12.50
Pieta	39	4	10.26
Ta' Xbiex	9	0	0.00

Figure 10: EAS input points in urban and rural zones



EAS offence query

Queries were carried out to find any relationships within the study zone between input points and offences in general and input points and damage related offences. In both queries, Pembroke was accounted as an outlier thus it had to be withheld from such queries. The reason behind it was that Pembroke had the lowest total offence count and the second lowest damage related offence count, while having the highest count of input points. When the queries were carried out, no relationships were found between the rate of input points per offence and input points per damage related offence as shown in Table 6 and 7 respectively. For instance, St. Julians had the highest number of total offence counts, damage related offences and input counts of the phenomena, however it was below the zone rate and ranked low when compared to other localities.

If there was a relationship in input points per offence and input points per damage related offence, the following order would have been expected: [1] St. Julians, [2] Msida, [3] Gżira, [4] San Ġwann, [5] Pietà' and [6] Ta' Xbiex. Although some localities followed the pattern, it was not enough to establish a relationship between the phenomena and the variables. Also this research conducted interviews with some artists, who practice graffiti and street art, and uncovered that the act is usually carried out for aesthetic, political, cultural and other various reasons that are not related to the direct commission or presence of crime. This result affirms Snyder's (2009: p. 52) statement that the "relationship between vandalism and violent crime is not nearly as casual as we are made to believe". Wilson & Healy (1987) also mentioned that the relationship between violent crime and graffiti isn't statistically significant. The idea that graffiti triggers crime, as mentioned by Teng et al.

(2012), was not the case in this scenario using the quantitative findings from this research as scientific proof. Pembroke's high rate could have been the result of the dark figure of crime and the crime report paradox. Fenech (2015) posited the possibility of the crime report paradox, a theoretical notion that underlies the subjective nature of reporting. He implied the possibility of having a scenario where a single report may cover one act or a multitude of acts.

This type of subjective reporting may cause inefficiencies in the data gathered by the police force when analysing a particular type of crime. There is also the existence of the dark figure of crime, a renowned theory that explains how certain crimes may go unreported or unrecorded as stated by certain authors such as Formosa (2007), Rosenfield (2006) and Wilson (2009). Reports on damage related offences, and therefore on total offences, could have also been shadowed by the fact that reports can be inaccurate due to "differential acceptability of graffiti by location" (Megler et al., 2014). In brief, the findings substantiate what Wilson & Healy (1987) stated; the artists and writers are not after the person, but they are after property for self-expression.

Table 6. Input points per offence excluding Pembroke - Rate Comparison Query (Zone Rate = 1.0)

<i>Locality</i>	<i>Estimated Zone Rate</i>	<i>Observed</i>	<i>Rate</i>	<i>Zone rate</i>
San Ġwann	0.01	0.03	2.71	Above
Msida	0.01	0.03	2.04	Above
Gżira	0.01	0.02	1.21	Above
Pieta	0.01	0.01	0.65	Below
St. Julians	0.01	0.01	0.57	Below
Ta' Xbiex	0.01	0.00	0.39	Below

Table 7. Input points per damage related offence excluding Pembroke - Rate Comparison Query (Zone Rate = 1.0)

<i>Locality</i>	<i>Estimated Zone Rate</i>	<i>Observed</i>	<i>Rate</i>	<i>Zone Rate</i>
San Ġwann	0.09	0.16	1.82	Above
Msida	0.09	0.13	1.53	Above
Gżira	0.09	0.09	1.05	Above
St. Julians	0.09	0.06	0.70	Below
Pieta	0.09	0.05	0.60	Below

Conclusion

The study was subject to many limitations such as human error during the process of data gathering, and lack of resources. Also, the direct links to the phenomena studied can never be objectively scrutinised beyond reasonable doubt if data sets are shadowed and incomplete due to the dark figure of crime and subjective crime reporting. The fact that the phenomena is subject to opportunity, over space and time, also makes it very hard to study and control at the same time. However, this should not hinder research and therefore assumptions should be taken in order to grasp the spatial aspect of graffiti and street art in order to better understand its incidence and find out any relationships which might trigger its existence. This research serves as window of opportunity for many stakeholders, such as policy makers, who can provide more legal opportunities for the artists to express themselves. It may also instigate further research on other aspects of the phenomena, and may as well assist other disciplines or authors who wish to understand the subject, especially within the local context.

On a final note, it may also provide a window of opportunity to those who wish to establish a universal definition or create an ontology that shows the relationship that exist between the sub-concepts of graffiti and street art.

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