

The city-island-state, wounding cascade and multi-level vulnerability explored through the lens of Malta.

Abstract

In this paper, we introduce the concept of “city-island-state” into a discussion of small highly urbanised islands. We place the “city” at the forefront of our analysis by bringing together the geographies of the “city” and “state”, together with a wider discussion of factors that may cause both the wounding of the city and increase the precariousness of the “island”. We apply this concept to the advanced city-island-state of Malta (Central Mediterranean), which is a densely populated, urbanised small island archipelago with ca. 500,000 inhabitants and operates as a single city with: an urban core; suburbs and a rural hinterland which is rapidly decreasing in size. This city-island-state is frequently considered as being “safe” from external geophysical, climatic and anthropogenic wounding, but, in reality, Malta, as a city, an island, and an independent nation-state, is faced with multiple internal and external pressures that increase its precariousness and vulnerability to such externalities. Some of these are socio/economic, but others are environmental. We argue that the potential for wounding is particularly marked in Malta, is exacerbated by the contemporary globalised neoliberal world of flows and interconnectivities and that this represents a multi-level wounding cascade: wounding the city, wounds the island and, by extension, the state.

Keywords:

Malta; city-island-state; wounding cascade; urban islands; COVID-19; precariousness

1. Introduction

Cities and islands often coincide with, for instance, Tokyo, Copenhagen, and New York City all being located on islands (Grydehøj, 2015). Following the so-called “spatial turn” within urban geography and island studies (Amin and Thrift, 2002; Pugh, 2013; Sassen, 2001), islands have been considered within the context of the processes of urbanisation. These works make reference to: island cities; cities on islands; the “islandness” of cities and urban islands (Baldacchino, 2014; Grydehøj, 2014; Hong, 2017; Johnson, 2020; Khoo et al., 2015; Swaminathan, 2015). These authors, however, rarely regard islands as *cities per se* (Grydehøj, 2015, our emphasis). Some cities are sovereign and are considered to be city-states, but for others the concept of islandness is infrequently employed in contemporary discussions of city-states/microstates. Baldacchino (2014, p. 148) takes this discussion further by considering the “city as island”, “city island”, and considers such urban islands as “island city states”. By framing such discussions around the “island” and “islandness”, the focus is grounded on the characteristics of the island form, but not on the “city” and “state” and their complex, multi-scalar interconnectedness.

In this paper, we draw on our collective research interests in the geographies of Malta¹ to conceptually explore precariousness and wounding within the city-island-state over the past four decades. Building upon the International Monetary Fund (IMF, 2020) and United Nations (UNDP, 2014) reports, we focus our discussion on three domains: (1) population density; (2) economic uncertainty; and (3), risky connectivity. Through these domains, we argue that: (i) they reveal different kinds of precariousness, vulnerability and potential wounds that they inflict upon this city-island-state; (ii) they are collectively becoming increasingly sensitive to multiple externalities, largely driven by global forces of neoliberal capital, finance and active re-imagining which makes the city-island-state precarious and vulnerable; and (iii), they are key domains in defining “city-island-state” as a more suitable and applicable concept than

island city, city island or island city state for advanced, independent and heavily-urbanised island-states. Consequently, we seek to demonstrate that wounding of a city-island-state constitutes a multi-level cascade: wounding the city, wounds the island and, by extension, the state. The concept of the city-island-state is introduced as it relates to Malta, before we discuss in detail themes of precariousness and wounding of the city-island-state through our three domains.

2. Malta: a city-island-state

Located centrally in the Mediterranean Sea, Malta is a small, European Union (EU) archipelagic island-state comprising three principal islands (Fig. 1). Urban island scholars suggest the nation-state comprises an “island city” that “cannot be regarded as a single urban zone but [...] is nonetheless densely urbanised” (Grydehøj et al., 2015, p. 6) and a “city-state”, comparable with other heavily-urbanised island-states (Attard, 2020; Table 1). In discussions of other heavily-urbanised island-states and city-states such as Singapore, focus is often projected on individual scalar components, i.e. “the island”, “the state”, or “the city”. Like Malta, Singapore operates, however, as an integrated urban system *within* its island and state contexts.

Today, the capital of Valletta and towns and cities to the north and east, constitute the urban core of the islands (Figs. 1-3). These serve as the multifaceted and multifunctional political, economic and social hub with functional linkages of administration and transportation operating as interconnected urban functions centred on Valletta. We have developed the concept of *city-island-state*, utilising Malta as the research lens through which we present this framing. We propose that Malta represents a city-island-state in which its urban area is so significant relative to the size of the islands as a whole, its concentration of economic activities

is so profound and its population is both large and of high density, that it functions not just as a city and city-state, but as a city-state with the characteristics of an island-state.

In our formulation of this concept, we have drawn on works by Grydehøj and others in their discussions and categorisations of island cities (Baldacchino, 2014; Baldacchino and Tsai, 2014; Grydehøj, 2014, 2015; Grydehøj et al., 2015; Pigou-Dennis and Grydehøj, 2014). Rather than maintaining “island(ness)” as the focus of our discussion, we recognise the critical importance of an interconnected approach, incorporating and embedding “city” and “state” with “island(ness)” in considering themes of precariousness and wounding with respect to heavily-urbanised small islands. We recognise Malta as a single urban agglomeration with: an urban core; suburbs and rapidly shrinking rural hinterland (Figs. 1-3), further arguing that there is nowhere within the island-state that operates beyond the city, with its distinctive structures, hegemonies and interconnectivities, which together heighten the potential for various types of wounding.

3. A wounded city-island-state: conceptual discussion

Literature on the processes of wounding is limited, but the concept refers not only to human injury, but also to the emotional pain and suffering associated with a damaged place and the need to respond to wounds (Susser and Schneider, 2003). Such wounds reflect a range of internal and external processes that may inflict damage on the urban environment and its population (Susser and Schneider, 2003; Till, 2012). For cities, it is the concentrations of people, financial and administrative activities that make them particularly susceptible and precarious in the event of wounding events (De Sherbinin et al., 2007; Harvey, 2003; Pelling, 2012). Island studies scholars maintain that it is islands that exemplify the precariousness of the contemporary world (Baldacchino, 2019; Kelman, 2018; Pelling and Uitto, 2001; Ratter, 2018). In considering heavily-urbanised small island states, we assert that it is the complex,

scalar interconnectivity between cities, island(ness) and states that work together in producing vulnerability and proclivity to wounding. For example, the island city(-region) of Venice is a notable example of a situation in which the geographies and vulnerabilities of the island(ness) characterise everyday life (Grydehøj and Casagrande, 2020), and the city's wounding (Henley and Giuffrida, 2019). In our concept of the city-island-state, we argue that the city form, first and foremost, characterises both life and wounding, and results in what we conceptualise as a “wounding cascade”, recognising the interlinked scalar components of the city, the island, and the state (Fig. 4).

Traditionally viewed as a “low hazard” island-state that is not considered disaster prone, and which has even been described as the “safest place on Earth” (Camilleri, 2011), Malta is known to be exposed to, and at risk from, multiple endogenous and exogenous processes that may be considered acute and/or chronic in nature (Main et al., 2018; Main, 2019; Table 2). Two of the most well-known historic wounding events were the bombing raids between June 1940-November 1942 when around 30,000 buildings were damaged or destroyed and almost 1,300 civilians were killed (Spooner, 1996), and the earthquake of 11th January 1693 that resulted in damage across the island-state (Main et al., 2018).

Like all cities, city-states, island cities and island-states in the contemporary neoliberal globalised era, the small city-island-state of Malta forms part of the complex, interconnected global system dominated by relational flows, connections, and arguably, dependencies, with external political, social and economic groups. This has been the case throughout Malta's history but it is within the contemporary neoliberal world economy that such flows, connections and dependencies on others have resulted in an increase in precariousness and the “internationalisation of risk” (Main et al., 2018; UNDP, 2014). We argue that these flows, peculiarities and specificities serve to exacerbate the precariousness and vulnerability of first the city, secondly the island, and thirdly the city-island-state to extreme natural and

anthropogenic wounding. In the following sub-sections we build upon the IMF (2020) and UNDP (2014) reports in exploring the three most significant of these flows, connections and dependencies for the city-island-state of Malta: flows of people; flows of and dependencies on capital; and flows, connections and dependencies with other nation-states, which underpin our three domains identified in the context of Malta.

3.1. Population density

The greatest vulnerability in Malta arises from its large population and population density which is increasing on a yearly basis driven largely by net in-migration. When the island-state achieved independence from the UK in 1964, its total population was 314,216; by the end of 2019 it was ca. 514,564, an increase of over 63% (NSO, 2012, 2020a). Whilst population density has been marked by significant fluctuations over the last six decades, today the city-island-state is one of the most crowded countries in the world with a total population density of 1,628 persons per km² (Baldacchino, 2014). This high population density, especially witnessed in walled “city islands” such as Valletta and Senglea since ca. 1900, has resulted in pressures on environmental, economic and social resources, a situation exacerbated by Malta’s limited land area. For example, in 2019 ca. 17,600 people lived in overcrowded accommodation, the majority in rented apartments in the urban core. Many people are at-risk-of-poverty and experience significant environmental health inequalities which have repercussions for their vulnerability (Main, 2019; NSO, 2020b). In the late-1950s, as jobs were lost due to the rundown of the British military services, pressures and wounding resulting from an increase in unemployment and poverty were alleviated by policies of subsidised emigration (Camilleri, 1993). Whilst such policies were initially successful, the resultant brain- and skill-drains caused by the loss of often qualified and skilled working-age cohorts increased long-term wounding and paved the way for policies encouraging foreign labour and in-migration (Schembri and Attard, 2013).

Since ca. 2004, economic repositioning of Malta has resulted in net in-migration, reaching ca. 20,343 persons in 2019 (NSO, 2020b). Attracted by State-sponsored policies of (re)development and re-imagining of the city-island-state as a commodity and site for capital accumulation and investment, this figure comprises both wealthy and poor migrants (Speake, 2017; Speake and Kennedy, 2019). For example, in recent years Malta has become home for 35 of the world's ultra-high net-worth individuals (with a combined net-worth of ca. €135 billion), and has experienced an influx of foreign labour, reaching ca. 68,000 people at the end of 2019 (Anon, 2020; Borg, 2019; Saunders, 2019). A further group of "in-migrants" comprises the growing seasonal population, including residential tourists, whose combined numbers reached 2.7 million in 2019 (MTA, 2020). Consequently, there have been renewed calls for carrying capacity assessments of the total and tourist populations, with concerns being expressed regarding sustainability and over-tourism (Briguglio and Avellino, 2019; Grech, 2018). Of further concern is that affluent migrant groups inflate levels of external capital, the flows of which could diminish, stop or even be reversed following a wounding event (Sect. 3.2).

With an increasing population and driven by the State's involvement with and encouragement of neoliberal capital, physical development of the city-island-state's fabric has been rapid, leading to Malta becoming the most built-up nation-state within the EU (Anon, 2013). Increasingly, hazard-prone landscapes on Malta, many of which are simultaneously aesthetically pleasing, are becoming increasingly commodified and commercialised to the extent that locations including Bugibba, Paceville, San Ġiljan, Sliema and Marsalforn are witnessing the conspicuous consumption of this hazardous aesthetic and other environmental amenities (Speake, 2017). For example, prestige developments at Tigné Point with expansive blue-space views are evidence of this commodification and consumption with apartments priced €850,000-€4.5 million (2019), yet are located in an area exposed to marine-related

wounding including storms and the impacts of tsunamis. In the event of an extreme marine wounding event, the heavily-urbanised coastal areas may have to be evacuated. Research by Main (2019) has posited that the heavily-urbanised coastal area, combined with the densely packed, largely car-driving population, may make a timely evacuation problematic.

3.2. Economic uncertainty

Cities, and by extension city-island-states, are capitalistic creations that thrive by bringing together new urban and economic forms of expanding capital accumulation (Harvey, 2003). This process is driven by neoliberal and globalised forces that are a feature of the twenty-first century precarious global economy over which individual nation-states have little or no control (Jessop, 2013; Moisisio, 2018). The economies of islands, island regions and island-states are recognised as being particularly vulnerable to such forces because of the interplay of multiple factors (Briguglio, 1995). Whilst cities and nation-states are vulnerable to the precarious forces and flows of global capital, it is through our proposed inter-linkage of the city-island-state that this becomes particularly apparent. This has been revealed in the context of COVID-19 as the boundedness of island-states negatively impacts on connectivities within and beyond their borders. For example, as economic and political uncertainty wounds the attractiveness of a city-island-state as an anchor for transnational mobile capital centred on the city, the wider island and state may take an economic “hit” as investors look elsewhere (EY, 2020; Hines, 2010).

In common with other small, densely populated territories, the service sector has been and continues to be, a significant area of growth within the city-island-state’s economy (Baldacchino, 2010, p. 67). In recent years, there has been heavy investment in attracting high value-added service industries, including e-Gaming, financial services and “high-end” tourism, all of which contribute significantly to the national economy in terms of Gross Value Added

(Grech, 2015, 2016). For example, tourism-related capital benefits both the industry and wider community, supporting the employment of ca. 10% of the economically active population in 2019 (ca. 23,000 people; MTA, 2020). The potential for wounding from a withdrawal and/or a decline in any of the large tourism companies and/or commercial enterprises following a shock or stressor could be hugely significant (Table 2; Kennedy et al., 2020; Main, 2019). This has been the case during the COVID-19 pandemic in which the economy of Malta has experienced a considerable hit from a loss of tourists with January-August arrivals being depressed by 71% (total arrivals: 533,417 people) and expenditure by 76.4% (total expenditure: €353 million) compared to 2019 (Anon, 2020b; EY, 2020; UN, 2020).

As cities, islands and nation-states actively compete under capitalist globalisation they have become increasingly reliant on external sources of mobile capital (Hines, 2010; Read, 2007; Speake and Kennedy, 2019). We argue that an economic focus on the external may be termed “informal colonialism”, because providers of capital and, hence, holders of power, are often foreigners and foreign-owned companies/corporations (Burke, 2018). Reliance on the external is a feature of Malta’s history representing, not only investment in commerce, industry and infrastructure, but also recovery assistance following episodes of wounding (Main et al., 2018; Spooner, 1996). Encouraged by State-led policies of (re)development and re-imagining, the city-island-state is witnessing increasing patterns of urban financialisation, by which poorer residents both local and foreign may be exploited as policies of capital-driven urban development become increasingly focused on attracting and marketing property to the capital-rich (Weber, 2010). For example, whilst the majority of the population own their own homes, with private rents rising by 40% between 2006 and 2016 as a consequence of Eurozone inflation and the increasing foreign-born population (Grech, 2015; Sansone, 2017), poorer residents are increasingly marginalised and rendered more vulnerable and precarious should any situation cause wounding (Harvey, 2003; Main, 2019; Susser and Schneider, 2003).

Finally, Malta, like other small (island) states has a relatively high GDP per capita when compared to other developed, developing and newly emerging economies, this despite their high relative exposure to shocks and stressors (Briguglio et al., 2009). Figures from the World Bank (2018) indicate that Malta's GDP per capita was ranked 34th (out of 190) in the world at US\$30,098, placing it ahead of nation-states including Russia, China and Portugal. Owing to its comparable small population and resource base, the aggregate GDP of the city-island-state is tiny when compared with other nation-states; ranked 119th (out of 185) in the world at US\$14.542 billion, closely followed by Mauritius (Table 1). Thus any act of wounding may represent a relatively high percentage of GDP, proving economically and socially disastrous. For example, Main (2019, p. 272-273) considers the economic implications of a L'Aquila (Italy) "2009 regional-type" earthquake impacting the city-island-state with a similar damage profile. Inflating damage costs to 2017, he identifies that the economic impact would cost the equivalent of 99.8% of Malta's national GDP.

3.3. Risky connectivity

Within the current financialisation phase of neoliberalism, city-island-states have been dominated by external inter-connectivities of socio-economic flows, connections and dependencies. Island resilience scholars have emphasised the positivity of interconnectivity, but it has also had a role in producing a "widespread sense of precariousness in the world" (UNDP, 2014, p. 1). For Malta such precarious interconnectivity, not only concerns the population and economy, but also the critical connectivity with other countries for foodstuffs, water, electricity and essential commodities.

The urban agglomeration of Malta and its suburbs are the focus of critical transport and connectivity hubs, transporting people, foodstuffs and other goods vital for the population and economy. The international airport, located just outside the city, had an average of 142 flights

per day in 2019 carrying 10.5 million kilos of imports, 5.9 million kilos of exports and ca. 2.7 million tourists, whilst the Grand Harbour cruise ship terminal received 359 cruise ships with an average of ca. 2,130 visitors per vessel (MIA, 2020; MTA, 2020). To the south, the Freeport received five container ships a day in 2019, each carrying ca. 1,548 20ft containers (Malta Freeport, 2020). The wounding potential of these sites is highly significant. For example, a fall in cruise ship visits is likely to result in a significant impact economically to the city, island, and state, a situation that would be exacerbated should the airport be closed simultaneously. This point is also relevant to islandness and boundedness, a situation particularly apparent during the COVID-19 pandemic (Grydehøj et al., 2020). Whilst these factors of isolation are advantageous for containment, for islands so reliant on precarious connectivity these factors exacerbate the wounding as islands and island-states attempt to contain one form of wounding (i.e. pandemic) at the expense of others (i.e. economic recession), a situation resulting in a conjuncture of crises and the likely initiation of a wounding cascade.

Finally the large population and lateral expansion of the urban footprint has contributed to a declining rural hinterland and over-use of resources, which has resulted in the city-island-state becoming heavily reliant on imported goods (Briguglio, 1995). Data from the Observatory of Economic Complexity (OEC, 2018) indicate a negative trade balance in 2017 of ca. €7.8 billion, with imports, including foodstuffs and water amongst other goods and materials, standing at €11.09 billion. For example, in order to supplement the population's reliance on reverse osmosis and an historical over-extraction from groundwater aquifers, Malta's imports of water in 2017 were valued at ca. €28.4 million (OEC, 2018). Although the government has stated that the island-state has sufficient water to cope for a month in the event of an emergency (Anon, 2018), the physical, social, economic and public health impact of any longer period of wounding would be serious.

4. Conclusion

Island cities, urban islands, and island city states are terms used to refer to islands within the context of the processes of urbanisation. Rarely, however, are islands regarded as cities *per se*, susceptible and precarious in the event of wounding. In this conceptual paper, we recognise the criticality of an interconnected approach, embedding “city” and “state” within “island(ness)” in our concept of the city-island-state, arguing that it is the complex interconnectivity between the scalar dimensions that work together in producing vulnerability and a proclivity to wounding. We recognise that, whilst all small island-states, cities, and city-states are vulnerable to wounding, this becomes particularly acute when considering the three together within the complex, interconnected and precarious global system of flows, connections and dependencies underpinning our three domains. In which first, Malta has a large and expanding concentrated population, contributing to overcrowding and resulting from a State-encouraged influx of affluent mobile capital and the consumption of the hazardous aesthetic. Secondly, economic uncertainty associated with the forces and flows of global capital attracted by factors of its island(ness) and State policies. Finally, risky connectivity associated with the movements of people, capital, other goods and services.

Whilst these global flows are precarious and vulnerable, it is their corresponding domains that contribute to and exacerbate precariousness and vulnerability when considered within our conceptual framing of the city-island-state. For example, flows of people are a global phenomenon, but when considered within the context of advanced, independent and heavily-urbanised island-states, the large and concentrated population results in significant population density issues with concomitant precariousness and wounding pressures for the “city”, “island” and “state”. Through the lens of Malta, we conceptualise this as a multi-level “wounding cascade” through which it is apparent that if the “city” is wounded, then the island and state are both wounded. This is exemplified by COVID-19 in which disruptions in the flows of people, their capital, and good and services are resulting in not only a conjuncture of

crises, but in significant simultaneous wounding as people stop investing in the “city”, with concomitant cascades affecting both the island and the state.

In introducing our conceptual and interlinking notions of the city-island-state and wounding cascade into discussions of urban city-state precariousness, vulnerability and wounding, we contend that these may have applicability for other heavily-urbanised island-states. We maintain that it is timely for further exploration of our two principal concepts framed within the precariousness, vulnerability and wounding of advanced, independent and heavily-urbanised island-states. For example, as competent authorities focus on managing the three interlinking domains and their underpinning flows in separate and autonomous ways, we call for increased recognition of synergistic work between the authorities and academia to identify, manage, and limit the wounding cascade phenomenon particularly for advanced, independent and heavily-urbanised island-states. It is a misnomer to think that advanced and urbanised island-states have simpler issues to address on the basis of their scale. In reality, it is their complex, multi-scalar interconnectedness of “city”, “island”, and “state”, that serve to amplify the complexities of the issues discussed in this paper.

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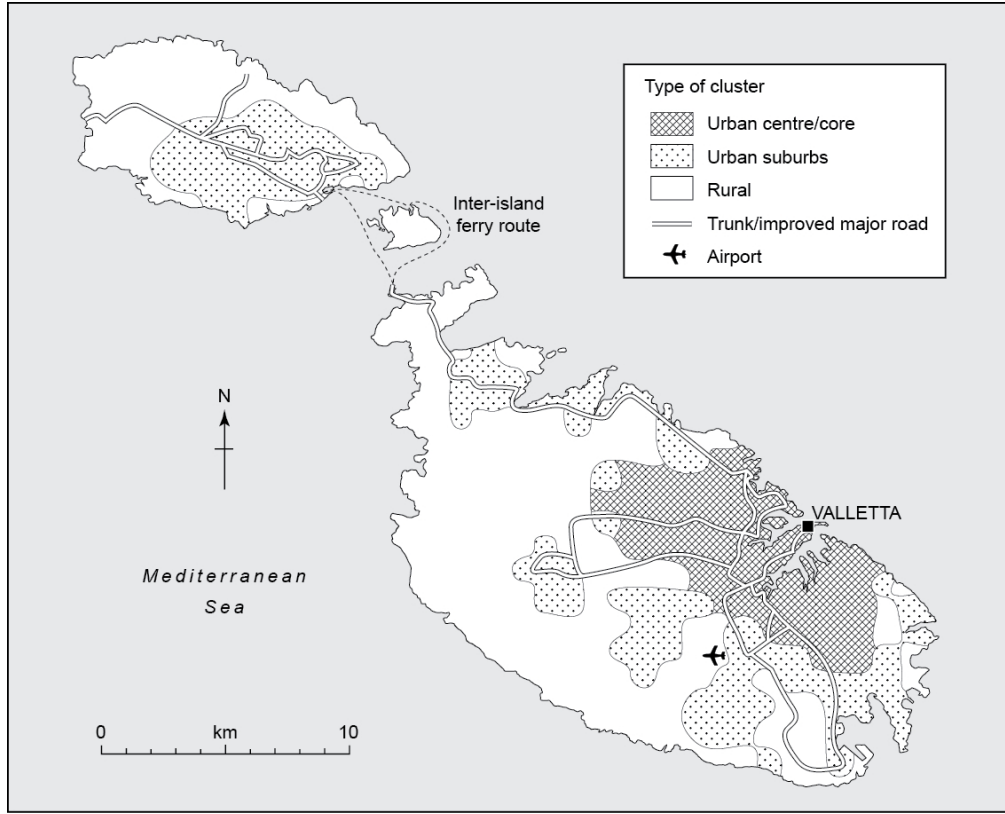
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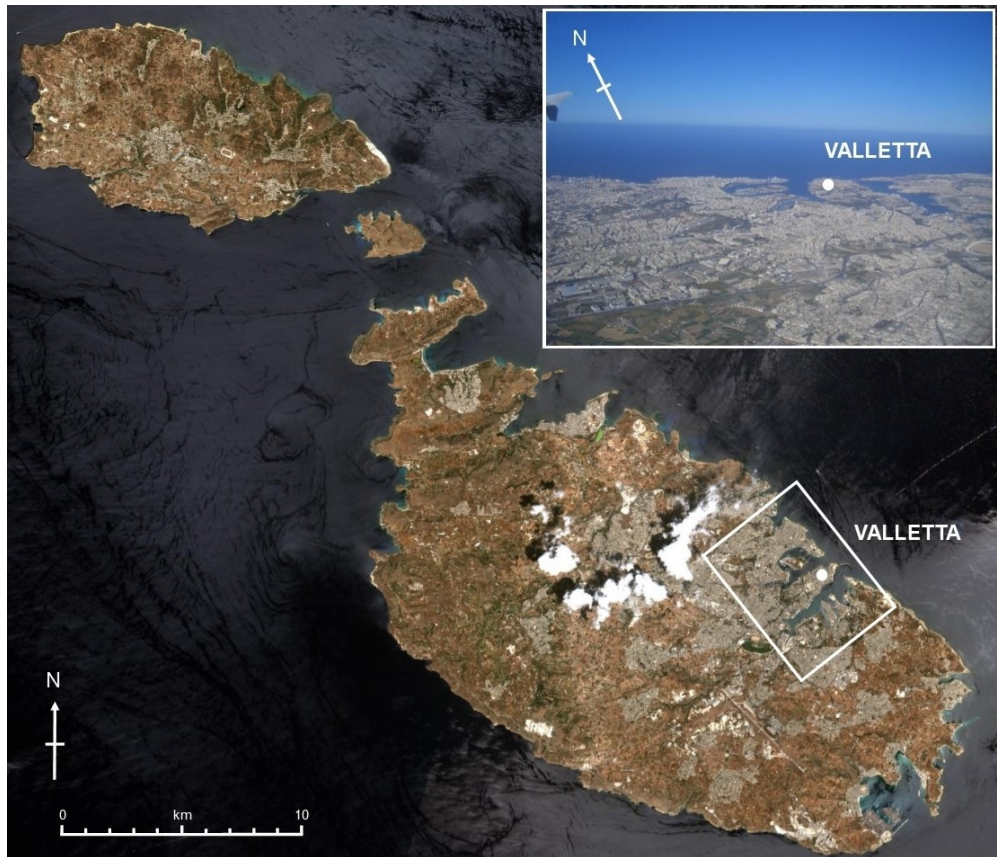
¹ Encompassing the three islands of Malta, Gozo and Comino.



Malta: Location map

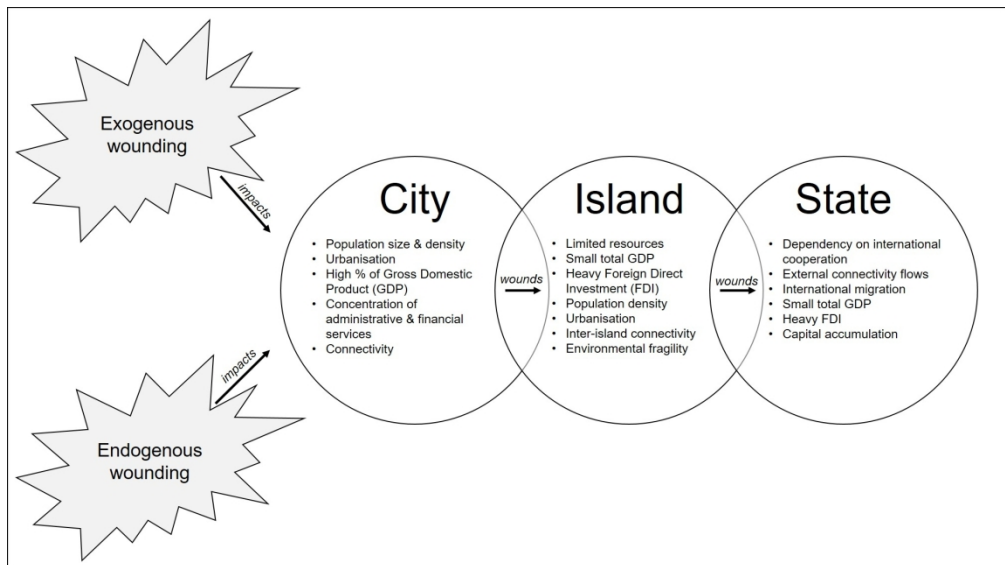


The city-island-state of Malta (adapted from Eurostat Statistics Atlas: Regional Yearbook 2019)



Malta from space via laser (June 2017), Copernicus Sentinel data processed by European Space Agency CC BY-SA 3.0 IGO (Wikimedia Commons); inset: aerial photograph over Malta's urban core (April 2008), photograph by Duncan Light reproduced with permission.

294x251mm (96 x 96 DPI)



The wounding cascade for the city-island-state of Malta (can be adapted for other city-island-states, island cities, island-states etc.). Examples of wounding for Malta are given in Table 2.

339x190mm (150 x 150 DPI)

Table 1 Comparisons between the city-island-state of Malta and other heavily urbanised island-states.

	Area		Population			GDP^(v)	
	Total (km ²)	Urban ⁽ⁱ⁾ (km ²)	Total ⁽ⁱⁱ⁾	Density (per km ²)	Urban (%)	Total (US\$)	Per Capita (US\$)
Malta	316	293.4	493,600	1,562	95.25 ⁽ⁱⁱⁱ⁾	14,542	30,075
Singapore	725.7	566	5,638,700	7,804	100 ^(iv)	364,157	64,582
Bahrain	780	549	1,569,446	1,831	88.9 ^(iv)	37,746	24,051
Mauritius	2,040	1,276	1,265,985	618	40.79 ^(iv)	14,220	11,238

⁽ⁱ⁾ Tradingeconomics.com (2010)

⁽ⁱⁱ⁾ Population data (years may vary)

⁽ⁱⁱⁱ⁾ EUROSTAT (2015); population data (2019)

^(iv) UN World Urbanisation Prospects (2018)

^(v) World Bank (2018)

Table 2 Endogenous/internal⁽¹⁾ and exogenous/external⁽²⁾ sources of wounding affecting the city-island-state of Malta.

Natural	Climatic	Other
Earthquake ⁽²⁾	Medicane ⁽ⁱ⁾⁽²⁾	Terrorism ^(1/2)
Tsunami ⁽²⁾	Waterspout ^(1/2)	Transport accidents ⁽¹⁾
Volcanic ash fall ⁽²⁾	Tornado ^(1/2)	Coastal pollution ^(1/2)
Rock fall ⁽¹⁾	Flood ^(1/2)	Hazardous material accident ^(1/2)
Landslide ⁽¹⁾	Drought ^(1/2)	Epidemic/Pandemic ^(1/2)
Block slide ⁽¹⁾	Heatwave ⁽²⁾	Mass casualty incident ^(1/2)
Soil creep ⁽¹⁾	Severe winter weather ^{(ii)(1/2)}	Solar flare ⁽²⁾
Coastal erosion ⁽¹⁾	Seiche ⁽ⁱⁱⁱ⁾⁽²⁾	Fireworks factory accident ⁽¹⁾
Ground collapse ⁽¹⁾	Storm surge ⁽²⁾	Gas explosions ⁽¹⁾
	Fires ⁽¹⁾	Building collapse ⁽¹⁾
	Climate change, including sea-level rise ⁽²⁾	Economic recession ^(1/2)
	Whirlwind ⁽¹⁾	Political upheaval/instability ⁽¹⁾
	Sand storm ⁽²⁾	Civil unrest ^(1/2)
	Strong winds ^(1/2)	

⁽ⁱ⁾ Low-pressure cyclonic systems morphologically and physically similar to hurricanes and cyclones. Between 1948 and 2016, 102 were identified of which four are known to have affected Malta (Main, 2019).

⁽ⁱⁱ⁾ Includes extreme precipitation variables (rain, hail, snow), thunderstorms, black ice, strong/violent windstorms.

⁽ⁱⁱⁱ⁾ Long-period waves triggered by atmospheric gravity waves that are amplified through resonance as they reach embayments and inlets. They often cause severe floods and damage to coastal properties, boats and port constructions.