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POST-TRAUMATIC SPATIAL SELF-ORGANIZATION OF MOBILE POPULATIONS

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Abstract

Since 2012, and particularly since 2014, instability and wars in North African countries and the Middle East have brought a wave of refugees, trying to flee from violence in their countries, to Europe. They usually go north, crossing the Mediterranean towards Italy, or the Aegean, going west to the Greek islands. In their quest for a safe refuge, a significant number drown or disappear. The rest reach in Europe carrying their traumatic experiences with them, and face immediate humanitarian needs. A major task for host cities is to provide shelter for the refugees, taking into consideration the influence of their psychological trauma on local societies. This complex task, which combines technical, economic, social, psychological, and political dimensions – simultaneously targeted on two social groups – constitutes the 'post-traumatic urbanism' which intervenes in the recreating of the refugees' spatial and social networks in the host city. This paper discusses how the complex issue of post-traumatic housing triggers spatial self-organization by the refugees, in contrast to the 'official' provisions from host states, through the lens of complex adaptive theory (resilience). This article examines the features of refugee housing in Athens and Thessaloniki through qualitative research, quantitative methods and participatory observation. Through this study, it is highlighted that the post-trauma self-organization of mobile populations is a process of gaining dignity and self-respect in a new and often hostile environment, and a tool for spatial and social resilience.

Keywords

Refugee, post trauma, self-organization, host city

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1. Introduction: Overview of the Recent Refugee Problem in the EU

Housing refugees is a global concern, especially recently, with the increased refugee flows finding their way to Europe via 'irregular' and highly dangerous routes. According to the UNHCR (United Nations High Commissioner for Refugees), it is estimated that over a million people have risked such journeys between 2015 and 2017 alone. Consequently, the challenge for the EU is learning to cope with the crisis firstly from a humanitarian perspective, but also in terms of finances and organisation/management. Unfortunately, to date, the refugee situation remains an issue with tragic features, and as stated by United Nations (UN) even back at 1951:

...until an appropriate durable solution is found for them and refugees cease to be refugees either through voluntary repatriation or legal integration (naturalization) in their new home country, it is necessary for them to be treated in accordance with internationally recognised basic minimum standards (UN, 1951).

Under the regulation of EU directives, in particular Directive 2013/33/EU and Dublin III, refugees are initially detained in 'Reception Centres' in the receiving country and resettlement procedures begin – a process which can last for years. According to the EU's legislative framework, member states can use detention to host, filter, and reject migrants. Detention is presented as a central tool in managing immigrants.

However, the growing number of refugees is straining local reception capacities and causing arbitrary detention in difficult conditions. The CMSI (Central Mediterranean Sea Initiative) action plan drafted in May 2015 also warns that the housing of refugees is one of the most important issues that needs to be resolved. A UNHCR (2018a) survey also indicates the seriousness of the matter – showing that the majority of refugees do not plan to return to their original country. Thus, they will require permanent accommodation. Managing this crisis is not an easy task for the host city, and it influences the spatial resiliency of both the city and the refugees, creating conflicts between the two.

Even though the detention of refugees entering a Member State (or anywhere else) should only be a measure of last resort under international laws and regulations, 'the Camp' is a reality that will likely persist owing to increased irregular refugee movements. The EU has been working to alter its laws to protect and provide for refugees, but the conditions in camps and their long-term effects on both refugees and their host cities are profound. As Simich and Andermann (2014) argue, these challenges 'form a formidable barrier for resilience' and constitute a challenge to human dignity.

This paper focuses on how refugees self-organise and create resilience within the urban fabric of the host city, and the importance of resilience in self-reliance (i.e. living with dignity). As was mentioned in the report of UNHCR March 2017 to the EU High Commissioner:

Both self-reliance and resilience build upon the resources and capacities of individuals, communities and States, with the objective of ensuring safe and productive futures for all those impacted by a crisis. Self-reliance can lead to resilience, while resilience is necessary to ensure that progress towards self-reliance is not eroded or reversed in the face of sudden-onset shocks and longer-term trends. (UNHCR, 2017)

Greece is the primary focus of this article. The country has been at the forefront of the refugee crisis, and only in 2015, 856,723 refugees and migrants crossed into the country (UNHCR, 2016), and particularly into its two biggest cities (Athens and Thessaloniki), which host the highest numbers of refugees. In March 2016, after passage through the so-called Balkan Corridor was completely blocked, followed by the agreement between the EU and Turkey (European Commission, 2016), over 60,000 people became trapped in Greece. Most of them were settled in 13 hospitality centres, run by the state, around Athens (about 15,000 people) and 17 equivalent ones in Thessaloniki (approximately 20,000 people). Although a small number of refugees are now being housed in rented appartments in the Athens and Thessaloniki agglomerations through the UNHCR's 'Temporary Housing of Refugees' programme, more and more people abandon the camps and join in self-organised housing occupations at the centre of the urban fabric of the two cities.

The data relating to the existing refugee camps, the refugee self-organised housing, and the interviews with the refugees shown in the following sections of this paper and used as inputs in the analysis were collected and conducted during the period 2016-2018 – in the course of a post-doctoral research – and are recorded in Tsavdaroglou and Lalenis (2020).

2. Complex and Dissipative Systems

This study is inspired by the complex systems theory of Gunderson and Holling (2002) and the dissipative structures of Prigogine (1997). In their research, the self-organisation behaviour of the refugees is discussed within the concept of post-trauma urbanism. It looks at the refugees' on the move spatiality as a social life surrounded by countless crises, contradictions, dualities, and uncertainties.

Complexity and systems theory is a concept explaining non-linear emergent behaviour and change. It offers a valuable perspective and understanding of how to respond and adapt to uncertainties, and demands change (Gemmil and Smith, 1985; Dooley and Van de Ven, 1999; Amagoh, 2008; Limnios et al., 2014). There are several factors that influence how a system can manage and survive change, especially in the context of intensified global uncertainties (be they economic, political, or climate related).

Gunderson and Holling (2002) suggest that the complexity of a system emerges from a number of smaller controlling processes and not from the random association of a large number of interacting factors. Holling further states that these systems are self-organised: 'self-organization is a term that characterises the development of complex adaptive systems, in which multiple outcomes typically are possible depending on accidents of history' (2001, p.391).

Moreover, complex systems are open systems and dissipative structures, which do not respond to external pressures in a linear manner and are subject to instability (Prigogine, 1997). These systems are open and self-organising, maintaining their order and internal far-from-equilibrium state through interactions with their environment. As the literature on ecological resilience suggests, the stability of a system is maintained as long as disturbances are absorbed by the system (Holling, 1973). However, there exists a threshold in terms of how much of disturbance a system can absorb. This threshold in dissipative structures is called the 'bifurcation point', where the system is at the edge of 'chaos' and can take on a new order by self-organising. At this point, there is unpredictability and an un-managed change process. Adaptability is achieved by a constant change of state (McKelvey, 1999). Figure 1, adapted from De Toni and Camello (2010) and Leifer (1989), provides examples of dissipative structures, where 'x' represents transformation and λ represents disturbance.

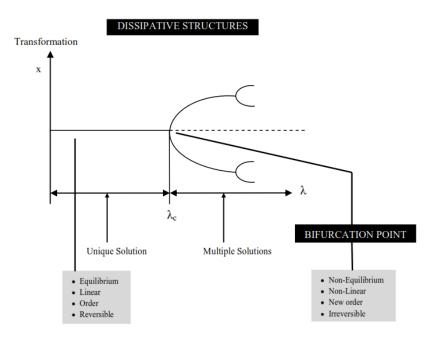


Figure 1 - Dissipative Structures and Bifurcation Point Source: Adapted from De Toni and Camello (2010) and Leifer (1989)

According to Gemmill and Smith (1985), change in the dissipative process from one state to another occurs as a coherent, simultaneous leap. The system is reversible and persistent until the threshold of λc is reached. Eventually, a variety of possible forms can emerge from such a process; estimating which forms would be resilient in which environment is very difficult. The agents in these systems interact in such a way that they adapt to the behaviour of other agents, who in turn adapt and stimulate further adaptations. As MacIntosh and MacLean emphasise, 'the systems are not only complex and adaptive, but their complexity and adaptiveness can itself change' (1999, p.14).

The world in dissipative structures is viewed as dynamic and are characterised by systems where change and transformations are associated with non-equilibrium conditions. In these systems, the interactions of non-linear relationships with random disturbances create new system configurations that are far from equilibrium and where a small fluctuation in one part of a system can escalate in unexpected ways. This can bring unanticipated and substantive changes to other parts of the system (Holland, 1992). Systems under the dissipative model describe change or transformation when internal and external elements in the system are turbulent enough to create a new order – or simply create something that was not there before – and are thus described as 'far from equilibrium' (Prigogine and Stengers, 1984). This paper is situated within this theoretical tradition, and analyses the self-organisation of refugees in the urban fabric of Athens and Thessaloniki -in contrast to the imposed organization within the camps- and how this dissipative behaviour creates resilience in the face of the uncertainties which the mobile populations face.

3. Housing of Refugees in a Host City: Cases of Athens and Thessaloniki, Greece

3.1. State Policies for the Accommodation of Refugees

The right of refugees to housing has been recognised as an integral part of the 'right to an adequate standard of living' in the Universal Declaration of Human Rights (UN, 1948). According to the United Nations (UN, 2009), the right to housing should be perceived as the right to live in safety, peace, and dignity. In addition, the European Council (ECRE, 2007) recognises that the living environment, access to housing, and housing conditions are a key factor in integrating refugees and migrants. Since 2007, Greece has adopted the provisions of the European Council on minimum standards for the reception of asylum seekers, including the right to housing (Presidential Decree, 2007). The characteristics of the right of refugees to housing, as defined by the UN Commission on Economic, Social and Cultural Rights (UN, 1991), refer to the following criteria: security, availability of services, facilities and infrastructure, accessibility, habitableness, and cultural suitability. Finally, it is stressed that housing structures should be directly linked to employment opportunities, health services, education, and child care; as well as not being in environmentally degraded or dangerous areas (Tsavdaroglou and Lalenis, 2019).

Contrary to international, European, and national standards, state hospitality centres in Athens and Thessaloniki are mostly abandoned camps and former industrial sites with a dire lack of infrastructure. Altogether, the 30 hospitality centres are located at the borders or at a considerable distance from the urban fabric of the two cities (see Figure 2 and Table 1). Even though the refugees' living conditions in Greece have been improved (thanks to the valuable contribution of transnational actors and private initiatives and donations) reports from a number of NGOs (Amnesty International, 2016; International Rescue Committee, 2016; Médecins Sans Frontières, 2016), the European Commission (2016) and KEELPNO (Hellenic Centre for Disease Control and Prevention, 2016), state hospitality/reception centres in Athens and Thessaloniki do not follow international standards - mainly with regard to capacity (space/person), sanitation infrastructure, and safety. According to the UNHCR (2007, p.210) specifications for refugee accommodation centres, the minimum capacity for decent living conditions is 45 sq.m./person in a mixed/brutto form (including public spaces, roads, and all shared use areas and public amenities). However, in most of the hospitality centres in Athens and Thessaloniki, the equivalent capacity is significantly smaller, reaching 25 sq.m./person in the hospitality centre of Skaramangas in Athens, and only 15 sq.m./person at the Softex hosting centre in Thessaloniki (Tsavdaroglou and Lalenis, 2019). Furthermore, the above figures deviate significantly from national urban planning standards (Ministerial Decision, 2004), which provide for a capacity of 28-45 sq.m./person in a netto form (without the area of roads, public spaces and shared uses and public amenities).

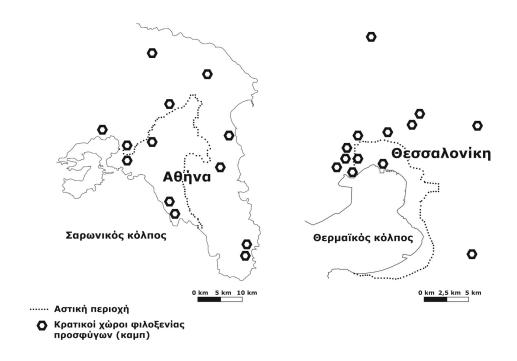


Figure 2 - Locations of State Run Refugee Camps in Athens (left) and Thessaloniki (right) Source: Tsavdaroglou and Lalenis (2019)

Δομές φιλοξενίας Host structures	Άτομα People 15.07.2016	Δομές φιλοξενίας Host structures	Άτομα People 12.07.2016
Ευρύτερη περιοχή Αθήνας Greater Athens area	15,192	Ευρύτερη περιοχή Θεσσαλονίκη Wider area of Thessaloniki	19,859
Άγιος Ανδρέας Agios Andreas	193	Αλεξάνδρεια Alexandria	755
Ελαιώνας Eleonas	2,415	Βαγιοχώρι Vagiochóri	158
Ελευσίνα Elefsina	343	Βέροια Veroia	357
Ελληνικό Ι, Γήπεδο Baseball Helliniko I, Baseball Course	913	Βασιλικά Vasilika	1,223
Ελληνικό ΙΙ, Γήπεδο Hockey Helliniko II, Hockey Course	1,126	Γιαννιτσά Giannitsa	761
Ελληνικό ΙΙΙ, Χώρος Αφίξεων Helliniko III, Arrivals	1,337	Δερβένι- Alexil Derveni-Alexil	810
Λαύριο Ι Lavrio Ι	390	Διαβατά – στρ/δο Αναγνωστοπούλου Diavata – Anagnostopoulou military camp	1,526
Λαύριο ΙΙ Lavrio ΙΙ	516	Καβαλάρι-Sinatex Kavalári-Sinatex	321
Λιμάνι Πειραιά Port of Piraeus	1,301	Καλοχώρι-Ηλιάδη Kalochori-Iliadis	495
Μαλακάσα Malakasa	1,360	Κορδελιό-Softex Kordelio-Softex	1,812
Προβλήτα Σκαραμαγκά Scaramanga Pier	3,150	Λαγκαδίκια-Βογιατζόγλου Lagadikia-Vogiatzoglou	861
Ραφίνα Rafina	98	Λιμάνι Limani	383
Οινόη (Οινόφυτα) Oinoi (Inofita)	270	Πολύκαστρο Polikastro	4,107

Table 1: State Structures for Hosting Refugees in Athens and Thessaloniki

Δομές φιλοξενίας Host structures	Άτομα People 15.07.2016	Δομές φιλοξενίας Host structures	Άτομα People 12.07.2016
		Σίνδος- κτήριο Καραμανλή Sindos-Karamanli Building	580
		Σίνδος -Frakapor Sindos-Frakapor	560
		Χέρσο- στρ/δο Μασαράκη Herso-Masaraki military camp	3,735
		Ωραιόκαστρο Oreokastro	1,415

Source: Refugee Crisis Management Co-ordinating Centre (2016), in Tsavdaroglou and Lalenis (2019).

3.2. Living Conditions of the Refugees in the Hospitality Centres

The refugees' living conditions in the state run reception centres in Athens and Thessaloniki, and the refugees' impressions about the function of the centres were described in a series of interviews which were conducted in the course of a post-doctoral programme in the Department of Planning and Regional Development of the University of Thessaly, Greece and documented in Tsavdaroglou and Lalenis (2019). Extracts of these interviews are shown below.

According to the refugee Ahmet who lived in the hospitality centre of Schisto (former military camp in Athens):

The situation in the camps is extremely difficult, the rights of the refugees have been completely violated. Camps are full of germs and diseases, very cold in the winter and with unbearable heat in the summer. All camps are out of town, no camp is located in the city. Public transportation to the city is very poor, the drivers are constantly intimidating us on the buses, and taxi drivers are asking for double rates (February 10, 2018).

Kava, a Kurdish refugee who lost his legs in bombardments in Syria, and uses a wheelchair, spent a year at the Orookastro camp in Thessaloniki.

For me, the situation is extremely difficult, I have never taken a bath for nine months in the camp, because there is no infrastructure in the showers for a person with mobility difficulties. In the evening there is no lighting in the camp, how will I go to the toilet? Actually I sit 24 hours in the tent (January 11, 2018).

Ibrahim from Iraq who lived for six months at the Basilica camp refers to similar experiences in the hospitality centres and explains the hostility which the refugees faced:

The camp is in the middle of nowhere, when we arrived was like leaving us in the middle of hell. We were very much afraid, because there were villages around, who were against the refugees, and people from there were organised and were marching against us. We were 1500 people and we were treated like animals, in fact the camp was a former poultry house and we were stacked as if we were chickens, so many people in a very small place (March 19, 2018).

According to the interviewees and NGO staff working in these camps, waste collection and sewerage facilities were non-functional, there were poor hygiene conditions, an insufficient supply of drinking water, food of fluctuating quality and quantity, and serious dangers from infectious disease. Moreover, state reception camps are located at a considerable distance from urban areas, in extremely dangerous and environmentally degraded areas. According to the General Development Plans of local municipalities, Law 4277/31-7-2014 (FEK 156/A/1-8-2014), and the Regulatory Plans of Athens and Thessaloniki, the majority of reception camps are located in areas where officially permitted land uses are up to the level of 'medium and high disturbance/ pollution' and residential uses are not allowed (Figure 3, Figures 4a and 4b).

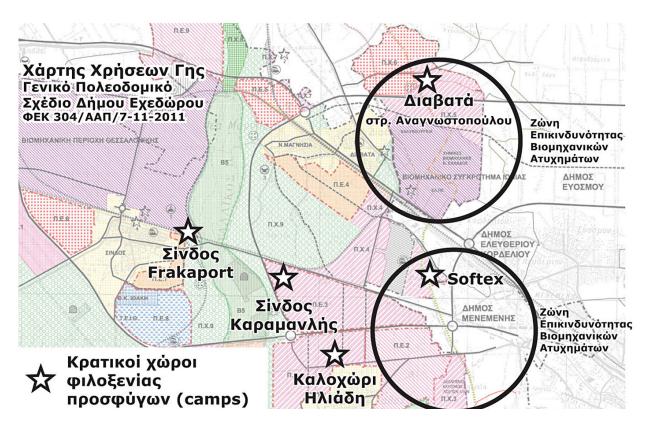


Figure 3 - Placement of State Run Reception Camps/Hospitality Centres in Western Thessaloniki in the Former Municipality of Echedoros (Present-day Municipality of Delta) on the General Development Plan of the Municipality of Echedoros (FEK 304/APR/7-11-2011, pp. 9-10), map P2 'Land Uses and Environmental Protection' Source: Tsavdaroglou and Lalenis (2019)

In Figure 3 it can be seen that the Reception/Hospitality Centres are located alonside wholesale businesses and transportation installations associated with industrial zones (Ionia Industrial Complex and Thessaloniki Industrial Zone). The reception camps Softex and Diavata are located within places with a high risk of industrial accidents. The Camp at Skaramagas Pier (Figure 4a) accommodates 2,500 to 4,500 people and has operated continuously since the summer of 2016. The camp in the former Softex factory (Figure 4b) hosted up to 2,000 people from the spring of 2016 until the autumn of 2017. Both are located adjacent to refinery facilities and are at a great distance from residential areas.

In particular, the lives of women, gay people, and children, in reception camps are extremely difficult. There are no safe spaces and a number of incidents of gender violence, domestic violence, sexual abuse, trafficking, and survival sex have been recorded (Liapi et al., 2016; Al Jazeera, 2017; The Observer, 2016; TRT World, 2017). Some reports claim that 'children and women are afraid to leave their tents when dark' (The Guardian, 2016). Even though there is a programme for transferring children to schools, a very small number have taken part because their parents are afraid to let them move long distances away from them (Tsavdaroglou and Lalenis, 2019). A study on the sexual abuse of children at refugee centres from the Centre for Health and Human Rights at Harvard University revealed that specialised child facilities in camps are inadequate; and that there are particularly dangerous living conditions in the camps, poor supervision, and a potentially dangerous coexistence of children and the adult population, weak child protection systems, and a lack of co-ordination and cooperation between competent authorities (Digidiki and Bhabha, 2017).



Figure 4a and 4b - Placement of "Skaramagas" Hospitality Centres in Attica (left) and 'Softex' in Thessaloniki (right) Source: Tsavdaroglou and Lalenis (2019)

In addition, in February 2018, the UN High Commissioner for Refugees (UNHCR) collected 622 testimonies from victims of sexual violence among refugees, according to which one-third of the refugees claimed to have been abused in state hospitality centres (UNHCR, 2018b).

Therefore, based on the above testimonies and reports, it is obvious that the hospitality centres are located in areas where social infrastructure (schools, health services, sport and cultural facilities) is lacking, and the transport links to the neighbouring urban areas are not sufficient. Consequently, refugees in state hospitality centres are forced to live in extremely difficult and precarious conditions.

3.3. Self-Organization of the Refugees

As was shown in section 3.2, refugees' living conditions in hospitality centres are far from humane. Athens and Thessaloniki have also been at the centre of the current economic crisis, which is also expressed in spatial terms (Hadjimichalis, 2011; Athanasiou, 2013; Kapsali and Tsavdaroglou, 2016; Arampatzi, 2017). One of the main consequences of the socio-spatial crisis is that several public and private buildings have been abandoned in and around the city centres (Vatavali and Siatitsa, 2011; Ministerial Decision, 2011). During the period 2015-2018, solidarity groups, along with refugees and immigrants, occupied some of these empty buildings and turned them into self-managed housing projects (see Figures 5a and 5b). According to Moving Europe (2016) over 2,000 refugees live in these squats.



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Figure 5a and 5b - Location of Self-managed Housing Projects of Refugees in Athens (left) and Thessaloniki (right) Source: Tsavdaroglou and Lalenis (2019)

In these projects, settlements are not planned in advance, but rather adaptations to new spatial circumstances are spontaneously made. According to the Housing Squat for Refugees and Immigrants of 26 Notara Street:

...we found an empty public building in Athens, at 26 Notara Street, in order to implement in spatial terms our solidarity to refugees and immigrants in order to meet their immediate needs. This venture is not based on charity, state or private, but it is a self-organised joint venture, in which locals and immigrants and refugees decide together (Housing Squat for Refugees and Immigrants Notara 26, 2016, p.2).

Similarly, in a proclamation, the Refugee Accommodation Centre City Plaza Hotel, states:

This initiative is an experiment of self-organization of refugees and locals, based on the weekly general assembly and on thematic working groups. The goal is to materialize a perception of everyday life, which through a bottom–up approach will finally lead to the creation of an 'area of freedom' that will be the proof of our vision for the society (Refugee Accommodation Centre City Plaza Hotel, 2016).

The above interviews indicate that there is an adaptation process evolving from this spontaneous selforganization, where the dignity of the participants is also considered. Hassan and Gamal – two Syrians living in the occupied School 2 in Athens – were interviewed and stated: 'Here we are free. We decide on common issues together. It is much better than living in the former camps outside the city'. Also, according to Murad, another refugee 'squats, without the influence of the state or NGOs, depend on offers, and daily work by independent volunteers. Responsibility is shared among the residents'.

4. Synopsis

The housing of the refugees in host cities can be considered to be an urban conflict of high uncertainty and a post-traumatic event for the refugees themselves. As Burke (2010) states, 'the post-traumatic condition is that potent environment in which fundamental reorganisation is possible...and no controlling mechanism operates'. This is exactly what provides an opportunity for predatory systems to dominate and where a system's resilience is exposed.

The system setup, referred to as 'Panarchy' by Holling et al. (2002), explains 'resilience' through ecological concepts and is very suitable for defining the behavioural patterns of refugees in their spatial self-organisation arragements (Figure 6) in host cities.

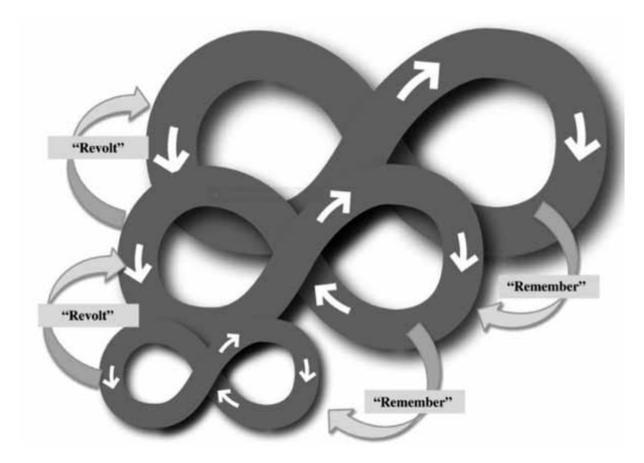


Figure 6 - Panarchic Circular System (Holling et al., 2002)

In panarchic systems, hierarchical structures bring accumulation, re-organization, and regeneration processes into existence through a long-lasting and developing adaptation recirculation. These transformational periods appear and aggregate on varying scales (from families to socio-political regions) and during different time intervals (from seconds to centuries) (Holling et al., 2002). During aggregation progressions, fast-moving and small-sized masses increase their effect on bigger ones in periods with limited reactions/revolts – termed a low-resilience period – but bigger and slower cycling masses cause small clusters to re-shape by increasing pressure on those masses through 'remember' methods. What happens with the self-organisation of the refugees in Greece is a panarchic order where resilience is exposed under the dominating predatory systems, whether they be the state, the camp, or the host city.

The system which moves slower and is bigger in scale – in this case the ingrained migration regulations and the state – holds aggregations back where opportunity for change and experimentation is limited – which could be the reason of the recent crisis of refugee housing in Greece. In any low resilience running process, the moment of activeness (change/adaptation) occurs in highly resistant small-sized systems. Post-traumatic recall is confronted and those structures are adaptated to the system. Here, the question 'why small-sized masses do not resist against such adaptation motivation?' may be asked. The answer is that remembered-reminded matter appeals to a tragic and dark area for people. For all of us, worrying about if what happened in the past happens again? That is the trauma (Volkan, 1999).

According to the resilience theory, a system that is not able to absorb incoming shocks self-organises in a very different arrangement. This is a condition that is generated by the externally originating pressure ('others'), which also establishes a distinctive structure. A refugee's life is the summation of independent and spontaneously

acting dissipative social cores swimming as discontinuity islets without taking roots in time. Žižek (2009) defines post-traumatic conditions as tabula rasa: 'When the normal run of things is traumatically interrupted, the field is then opened up for a "discursive" ideological competition'. Therefore, the self-organisation of the refugees' everyday survival activities led to a transmutation of their relations towards space and resilience.

5. Conclusion

The post-traumatic condition is an environment in which fundamental reorganisation is possible. Remembrances upon the past in post-traumatic disorders emerge as worries regarding the future. Since refugess are in motion, the boundaries of collective memoirs affect identity formation and, at the same time, keep moving. What keeps the past fresh is the strength of remembrance, reasons for remembering, and the quality of the memoirs assembled; but not those origininating close to the present. The future being 'premature' relies on refugees absorbing the possible effects of external conditions' fluctuations, and hence protect themselves, reflecting their memories towards the future. Refugees, we might say, live in a place stuck in between, waking up by fresh past –memories– and bedding down with a premature future, i.e., a kind of being in a spatial in-between state. Here, dissipative structures mentioned in 'chaos' theories of physics provided an understanting of the social attributes of the self-organisation of refugees in the host city. Like dissipative structures, self-organisations are unpredictable, and develop resistance to the order they are shaped within. Dissipative and acting at the edge of chaos is unstable, or discontinous. Here, instability is very high, and the refugees self-organise, which is a spontaneous and unpredictable strategy. This loss of stability leads to adaptation, defined as the system's resilience to increased environmental uncertainty.

The long-lasting, inadaquate and inefficient conditions in the camps have presented itself as the threshold for the refugees to revolt and create a new system under chaotic conditions.

References

Al Jazeera (2017) Violent gangs threaten refugees in Greece. [Online] Available from: <u>https://www.youtube.com/</u> watch?v=KJyAKTKvHcU [Accessed 8 June 2018].

Amagoh, Francis (2008) Perspectives on organizational change: Systems and complexity theories. *The Innovation Journal: The Public Sector Innovation Journal*, 13 (3), pp.1-13.

Amnesty International (2016) Trapped in Greece: Refugees stranded in dire conditions as Europe drags its heels. [Online] Available from: <u>www.amnesty.org/en/latest/news/2016/07/trapped-in-greece-48000-stranded-in-dire-conditions/</u> [Accessed 12 February 2018].

Arampatzi, Athina (2017) The spatiality of counter-austerity politics in Athens, Greece: Emergent "urban solidarity spaces". Urban Studies, 54 (9), pp.2155-2171.

Athanasiou, Evaggelia (2013) Sustainable cities in Greece of economic crisis. In Kanarellis, Theoklis, K. Manolidis, I. Stylidis (eds) Trasformations and re-definitions of space in Greece of crisis, conference proceedings. Volos, University of Thessaly, Department of Architecture, pp.1-8 [in Greek].

Burke, Anthony (2010) The urban complex: Scalar probabilities and urban computation. Architectural Design, 80 (5), pp.86-91.

De Toni, Alberto F. and Luca Comello (2010) Journey into Complexity. Venice: Marsilio Editori.

Digidiki, Vasileia and Jacqueline Bhabha (2017) *Emergency within an emergency. The growing epidemic of sexual exploitation and abuse of migrant children in Greece.* FXB Center for Health and Human Rights, Harvard University.

Dooley, Kevin J. and Andrew H. Van de Ven (1999) Explaining complex organizational Dynamics. *Organization Science*, 10 (3), pp.358-372.

ECRE (2007) ECRE Policy Briefing on Housing for Refugees and Migrants in Europe. [Online] Available from: <u>http://www.epim.info/wp-content/uploads/2011/02/ECRE-Policy-Briefing_Housing.pdf</u> [Accessed 9 February 2018].

European Commission (2016) First report on the progress made in the implementation of the EU-Turkey Statement, COM (2016) 231, Final Report, Brussels 20.4.2016.

Gemmill, Gary and Charles Smith (1985) A dissipative structure model of organization transformation. *Human Relations*, 38 (8), pp.751-766.

Gunderson Lance H. and Crawford S. Holling (eds) (2002) Panarchy: Understanding transformations in human and natural systems. Washington DC: Island Press.

Hadjimichalis, Costis (2011) Uneven geographical development and socio-spatial justice and solidarity: European regions after the 2009 financial crisis. *European Urban and Regional Studies*, 18 (3), pp.254-74.

Holland, John H. (1992) Adaptation in natural and artificial systems: An introductory analysis with applications to biology, control, and artificial intelligence. The MIT Press, Cambridge Massachusetts.

Holling, Crawford S. (1973) Resilience and stability of ecological systems. Annual Review of Ecology and Systematics, 4, pp.1-23.

Holling, Crawford S. (2001) Understanding the complexity of economic, ecological, and social systems. *Ecosystems*, 4 (5), pp.390-405.

Holling, Crawford S., Lance H. Gunderson and Donald Ludwig (2002) Quest of a theory of adaptive change. In Gunderson, Lance H. and Crawford S. Holling (eds) *Panarchy: Understanding transformations in human and natural systems*. Washington DC: Island Press, pp.3-24.

Housing Squat for Refugees and Immigrants Notara 26 (2016) Let's make the refugees' Odyssey of survival a journey of humanity towards freedom, in <u>www.cnet.com/features/road-trip-greece-refugee-crisis/</u>

International Rescue Committee (2016) IRC deeply concerned over poor humanitarian standards at refugee transit sites in Greece. [Online] Available from: <u>http://www.rescue.org/blog/refugee-crisis-latest-updates-storify</u>. [Accessed 9 February 2018].

Kapsali, Matina and Charalampos Tsavdaroglou (2016) The battle for the common space, from the neoliberal creative city to the rebel city and vice versa: The cases of Athens, Istanbul, Thessaloniki and Izmir. In White, Richard J., Simon Springer and Marcelo Lopes de Souza (eds) *The practice of freedom: Anarchism, geography, and the spirit of revolt*. London-New York: Rowman & Littlefield, pp.151-182.

KEELPNO (Hellenic Centre for Disease Control and Prevention) (2016) Report concerning the reception centres of refugees from the point of view of public health. 21.7.2016 no. 011/12568 [in Greek].

Law 4277/31-7-2014 (FEK 156/A/1-8-2014) New regulatory plan for Athens - Attica Region and other provisions [in Greek].

Leifer, Richard (1989) Understanding organizational transformation using a dissipative structure model. *Human Relations*, 42 (10), pp.899-916.

Liapi, Maria, E. Haridi and Thanasis Tyrovolas (2016) Investigation of the needs of women refugees residing in temporary reception shelters, Athens. Research sector of women issues (DIOTIMA), Research Centre of Equality Issues [in Greek].

Limnios, Elena, Alexandra Mamouni, Tim Mazzarol, Anas Ghadouani and Steven GM Schilizzi (2014) The resilience architecture framework: Four organizational archetypes. *European Management Journal*, 32 (1), pp.104-116.

MacIntosh, Robert and Donald MacLean (1999) Conditioned emergence: A dissipative structures approach to transformation. *Strategic Management Journal*, 20 (4), pp.297-316.

McKelvey, Bill (1999) Self-organization, complexity catastrophe, and microstate models at the edge of chaos. In Baum, Joel A.C and Bill McKelvey (eds) *Variations in organization science: In honour of Donald T. Campbell.* Thousand Oaks: Sage Publication, pp.279-307.

Médecins Sans Frontières (2016) Greece: Involuntary eviction from Idomeni creates further hardship for refugees. [Online] Available from: <u>http://www.msf.org/en/article/greece-involuntary-eviction-idomeni-creates-further-hardship-refugees</u> [Accessed 20 June 2018]

Ministerial Decision (2004) (MD) 10788/05-03-2004 (FEK 285D/05.03.2004) Approval of urban planning standards and maximum values of densities in the implementation of General Development Plans, Plans of Spatial Development of Open Cities and Urban Plans [in Greek].

Ministerial Decision (2011) (MD) 45363/07-11-2011 (FEK 304/AAP/07-11-2011) Approval of Revision of General Development Plan of Municipal Department of Ehedoros of the Municipality of Delta [in Greek].

Moving Europe (2016) Refugee-squats in Athens. [Online] Available from: <u>http://movingeurope.org/24-06-2016-refugee-squats-in-athens/</u> [Accessed 20 June 2018].

Presidential Decree (2007) (PD) 220/13-11-2007 (FEK 251/A/13-11-2007) Adaptation of Greek Legislation to the Directive 2003/9/EK of the European Council of 27-1-2003, regarding the minimum requirements for the reception of subjects applying for asylum in EC member states (EEL 31/6.2.2003) [in Greek].

Prigogine, Ilya (1997) The end of certainty: Time, chaos, and the new laws of nature. New York: Free Press.

Prigogine, Ilya and Isabella Stengers (1984) Order out of chaos. Toronto and Ontario: Bantam.

Refugee Accommodation Center City Plaza Hotel (2016) What is City Plaza? [Online] Available from: <u>http://solidarity2refugees.gr/city-plaza-leaflet/</u> [Accessed 16 January 2018].

Simich, Laura and Lisa Andermann (eds) (2014) *Refuge and resilience: Promoting resilience and mental health among resettled refugees and forced migrants (Vol. 7).* Springer.

Tsavdaroglou, Charalampos and Konstantinos Lalenis (2019) The rights of the refugees to housing. Housing commons and location policies for reception camps in Athens and Thessaloniki. *In Proceedings of 5th Panhellenic Conference in Planning and Regional Development*, DPRD, University of Thessaly, Volos, Greece, 27-30 September 2018, pp.1745-1756 [in Greek].

Tsavdaroglou, Charalampos and Konstantinos Lalenis (2020) The refugees' right to the city. Housing commons vs. state spatial policies of refugee camps in Athens and Thessaloniki. *COGITATIO Press, Urban Planning*, 5 (3), DOI:10.17645/ up.v5i3. 2924, London (in print).

The Guardian (2016) Refugees sexual assaults on children at Greek refugee camps. [Online] Available from: <u>https://www.theguardian.com/world/2016/aug/13/child-refugees-sexually-assaulted-at-official-greek-camps</u> [Accessed 5 March 2017].

The Observer (2016) Refugees in Greek camps targeted by mafia gangs. [Online] Available from: <u>https://www.theguardian.com/world/2016/aug/20/refugees-greek-camps-targeted-mafia-gangs</u>. [Accessed 5 March 2017].

TRT World (2017) Lack of security leaves refugees at mercy of gangs in Greek camps. [Online] Available from: <u>https://</u> <u>www.trtworld.com/europe/lack-of-security-at-greek-camps-leaves-vulnerable-at-mercy-of-gangs-295809</u> [Accessed 5 March 2017].

UN (1948) The Universal Declaration of Human Rights. United Nations General Assembly in Paris on 10 December 1948. [Online] Available from: <u>http://www.un.org/en/universal-declaration-human-rights/</u> [Accessed 14 September 2015].

UN (1951) General Assembly Convention Relating to the Status of Refugees. 28 July 1951, United Nations. [Online] Available from: www.unhcr.org/3b66c2aa10.pdf [Accessed 12 September 2017]

UN (1991) The Right to Adequate Housing. Committee on Economic, Social and Cultural Rights (CESCR) (Art. 11 (1) of the Covenant), Office of the United Nations High Commissioner for Human Rights (General Comment No. 4).

UN (2009) *The Right to Adequate Housing*. Office of the United Nations High Commissioner for Human Rights & UN Habitat. [Online] Available from: <u>https://www.un.org/ruleoflaw/files/FactSheet21en.pdf</u> (Fact Sheet No 21) [Accessed 22 January 2018].

UNHCR (2007) Handbook for emergencies. Geneva. [Online] Available from: <u>https://www.ifrc.org/</u> <u>PageFiles/95884/D.01.03.%20Handbook%20for%20Emergencies_UNHCR.pdf</u> [Accessed 7 February 2018]

UNHCR (2016) *GREECE: UNHCR concerned at conditions in new refugee sites and urges that alternatives be found.* Report from UN High Commissioner for Refugees. [Online] Available from <u>http://www.unhcr.org/news/briefing/2016/5/57480cb89/</u> greece-unhcr-concerned-conditions-new-refugee-sites-urges-alternatives.html [Accessed 25 April 2018].

UNHCR (2017) Resilience and self-reliance from a protection and solutions perspective. EC/68/SC/CRP.4. [Online] Available from: https://www.unhcr.org/en-my/58ca4f827.pdf [Accessed 8 January 2019].

UNHCR (2018a) Comprehensive protection and solutions strategey: Protection threseholds and parameter for refugee return to Syria. [Online] Available from: <u>https://data2.unhcr.org/ar/documents/download/63223</u> [Accessed 8 January 2019].

UNHCR (2018b) Refugee women and children face heightened risk of sexual violence amid tensions and overcrowding at reception facilities on Greek islands, UNHCR spokesperson Cécile Pouilly. [Online] Available from: <u>http://www.unhcr.org/news/briefing/2018/2/5a7d67c4b/refugee-women-children-face-heightened-risk-sexual-violence-amid-tensions.</u> <u>html</u> [Accessed 25 April 2018].

Vatavali, Fereniki and Dimitra Siatitsa (2011) Housing crisis and the need of a new housing policy encounter Athens. [Online] Available from: <u>https://encounterathens.files.wordpress.com/20/11/05/politikes-gia-thn-katoikia-11mai11.pdf</u> [in Greek]. [Accessed 25 April 2018].

Volkan, Vamik D. (1999) Psychoanalysis and diplomacy: Part I. Individual and large group identity. *Journal of Applied Psychoanalytic Studies*, 1 (1), pp.29-55.

Žižek, Slavoj (2009) First as tragedy, then as farce. Verso, London, New York.