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A View From the South

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The Anti-sprawl Policies in Tehran and the Creation of Spatial Injustice

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Abstract: The proliferation of anti-sprawl policies across the cities in the Global South and North appears to be a legitimate backlash to an ever-increasing rate of urban growth and expansion in the 21st century. Questions remain, however, around the outcomes of sprawl-controlling plans, the extent to which the Northern perspectives dominate the anti-sprawl rhetoric across the globe, and whether transferring them to the rapidly expanding Southern cities is rational and feasible. It is essential to acknowledge that the incentives and, in turn, consequences of urban sprawl in the Southern cities are substantially different from their Northern counterparts. Such divergences call for a new approach towards ‘provincialisation’ (Sheppard, Leitner and Maringanti, 2013) of urban sprawl discourses.

This paper examines the intersection of anti-sprawl debates and spatial injustice and incorporates both empirical and theoretical elements. The empirical element examines the historical development of anti-sprawl strategies in Tehran since the 1960s and scrutinises the consequences of the urban containment policies and plans, particularly in relation to the creation of peripheral spatial traps and through the lens of spatial justice, citizenship and the ‘right to the centre’ (Marcuse, 2009; Harvey, 2010; Soja, 2013). The theoretical element contributes to the debate on the ‘theory from the South’ by underlining the dialectical interplay of centre and periphery within the trajectories of urban growth in the Southern cities and arguing for the need to develop multiple urban epistemologies capable of explaining the complexities of multiple urban conditions in the South.

The core argument of this paper is thus twofold. First and through an empirically supported argument, it contends that anti-sprawl policies and strategies in Tehran act as catalysts in the densification/sprawl dialectical transformation of the cities and intensify the creation of unjust geographies in the peripheral buffer zones through displacement and compromising the ‘right to the centre’ of (non)citizens. Second and from a wider perspective, the paper argues against theorisation of urban sprawl as a univer-

sally relevant and applicable category of urban transformation and calls for a reformulation of the concept, its drivers and materialisation, and the institutional responses given to it from the Southern perspective.

Introduction

Containing urban sprawl has fervent advocates in the context of fast-growing cities of the Global South. The formation of discourses on the benefits of urban compaction at the turn of the century (Breheny 1997; Williams, Jenks, Burton 2000; Burton 2001) – as an opposing mode of development hampering expansion – essentially resulted in theorisation of the ‘compact city’ as one of the prominent models of urban development across the world. The heated debates on urban density and its environmental and social benefits triggered a policy shift towards urban intensification and inward development at the turn of the 21st century (Churchman 1999). More recently, the international summits have started to play a substantial role in disseminating the sustainability logic behind the prevalent anti-sprawl policies and in promoting urban densification as a sustainable solution (Holden et al. 2008). Holding Habitat II and III summits in Istanbul, Turkey and Quito, Ecuador respectively could be seen as an attempt to acknowledge the urban challenges faced by the rapidly growing Southern cities, and to persuade the national and local governments of the South to catch up and participate in developing a collective solution to overcome environmental and urban challenges of the 21st century. The Southern cities, similar to their Northern counterparts, have witnessed a paradigm shift towards building inward and with higher density (Burgess, Jenks 2002; Jenks, Jones 2009; Milder 2012; Howley et al. 2008; Mouratidis 2018; Meyer 2013) through an array of rhetorical debates around sustainable development and land scarcity, although their success is a matter of debate (ibid). In their approach to containing future urban develop-

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ment, the Southern cities have mostly relied on the empirical evidence from the highly developed urban regions with substantially differentiated political, social and economic structures incomparable to their geographic and contextual specificities (Jain, Pallagst 2015; Caldeira, 2017; Masoumi, Hosseini, Gouda 2018; Horn 2020a; Yunda, Sletto 2020). Lack of empirically driven theoretical frameworks and a solid grasp of the local circumstances has led to the formation of a gap between the institutional, socio-cultural and economic realities of urbanisation, and the actual ongoing modes of development in the cities of the Global South. What is missing within the discussions around the dualism of sprawl/compaction in the Global South is that the incentives and consequences of each development model are substantially different. Urban sprawl can become problematic in the Southern cities due to a variety of reasons, such as scarcity of resources, environmental constraints, inadequate services and infrastructures, poverty exacerbation and growing inequality (Watson 2009). Similarly, urban compaction could trigger a set of urban dilemmas due to inefficient urban governance and planning system, and lack of a robust socio-spatial and political agenda to control population growth (Brown 2014).

In accordance with the intellectual trend of the inadequacy of mainstream urban theories in explaining and analysing urbanisation in the Global South (Robinson 2002; Watson 2009; Parnell, Robinson 2012; Roy 2014), this paper explores the potential negative consequences of the mainstream anti-sprawl policies in Tehran as a fast-growing city in the Middle East. The present paper does not acclaim urban sprawl as the sustainable solution for urban development in the Global South; in a similar vein that it does not hail urban compaction as the best practice model. The main argument put forward in this paper is that the ramifications of each developmental model should be investigated explicitly at the local level and with consideration of the institutional frameworks and planning regimes. For the policymakers and urban practitioners in the Global South, it is crucial to establish localised, contextual frameworks to investigate the key drivers, multiple ramifications and the political economy of urban sprawl and compaction; the knowledge produced by this evaluative process would be helpful in guiding the future direction of urban development in these areas. Throughout the paper, several references are provided on the category of Global South and Southern urbanism (Schindler 2017). The

general category of Global South is itself subjected to several lines of criticism conceiving it as a reductionist and homogenising conceptual tool that incorporates various socio-political regimes and geographic territories across the world (Patel 2014). While acknowledging this line of criticism, this paper argues that the Global South particularly becomes a relevant conceptual tool when employed as opposed to the Global North and its epistemological framework. It is, however, essential for any scholarly attempt that seeks to contribute to the creation of knowledge from the South to keep embracing the pluralism upon which the category of South is founded and to acknowledge the multiplicity of epistemologically based frameworks within the South.

Acknowledging the above theoretical reference points, this paper studies the consequences of urban containment policies on the creation of peripheral spatial traps in Tehran and in doing so, employs the theoretical lens of spatial injustice. The analysis takes a descriptive, theoretical and analytic approach and exclusively consists of content analysis of the documents, papers, reports, and demographic information of the National Census; and policy analysis at both national and local level considering sprawl control policies. The paper first clarifies the notion of spatial injustice in relation to the idea of centrality. It then presents a critique of urban sprawl discourse and theories with reference to the complications arising while transferring these debates from the Global North to South. Lastly, it explores the urban containment policies in Tehran and scrutinises the ways in which local planning, political and economic specificities in Tehran have given rise to the creation of spatial injustice.

Spatial thinking of justice discourse

Spatiality has been at the epicentre of the discussions on justice for a long time (Burton 2001; Harvey 2004; Marcuse 2009; Drozd 2014; Rousseau 2014; Fainstein 2015; Soja 2016). To spatialise the notion of social justice means to intentionally underscore the spatial or geographic aspects of (in)justice. The starting point of such endeavour is in seeking fair and equitable distribution of two central notions in space: (1) socially valued resources and (2) the opportunities to use them (Soja 2013). To these two forms of spatial injustice, Marcuse added involuntary confinement as a cardinal new form that underscores a coercive and forceful ele-

ment in spatial injustice patterns. Involuntary confinement in space denotes a condition in which a politically formed spatial structure of segregation acts as a barrier to both the physical and social mobility of a group of people (Marcuse 2009). This spatial structure, while favouring and embracing the political and economic privileges of a certain group, simultaneously and dialectically undermines the living conditions of another section of the population and restrains their access to socially valued resources (Soja 2013). To these spatially induced approaches to justice, we can also add Young's (2011) attempt to distinguish between two visions of justice: A vision of justice based on a distributive paradigm that promotes an individualist and consumer-oriented conception; and a vision of justice as empowerment that seeks democratisation and collective decision-making (Young 2011). What Young calls 'justice as empowerment' is a theoretical extension of the spatial justice forms offered by Soja and Marcuse. Thus spatial (in)justice simultaneously indicates both an outcome and a process of empowerment. The dual formulation of spatial injustice demonstrates the concept as a fluid geographic pattern which, at every moment, is in the state of becoming. The attention, therefore, should be redirected towards identifying and understanding the underlying processes of the creation of spatial injustice.

In the Global South, an instance of the realisation of geographies of spatial injustice is within the peripheral urbanisation patterns (Keil 2018) and spatial (poverty) traps (Bird 2019). Spatial trap refers to the geographic concentration of poverty in a territory (Bird, Higgins, Harris 2010). The peripheral location of spatial traps makes them a suitable analytical category to investigate the link between urban sprawl and spatial justice. Spatial traps are commonly approached and studied from a material perspective by underscoring the lack of infrastructure and services, and their inability to respond to the basic needs of their inhabitants (Haddad, Perobelli 2005; Burke, Jayne 2008; Bird, Higgins, Harris 2010; Grant 2010). From a different perspective, spatial traps are also associated with immaterial shortcomings and as an embodiment of injustice in space which limits encounters and strips the dislocated of their right to the city; the right to have access to urban space as a citizen, not an outsider.

This paper theorises the notion of spatial injustice, not through a distributional discourse of services and infrastructure, but based on the discourse of (dis)empowerment and through

the lens of centre-periphery dialectic and relational distance from the centres of power, activity, commerce and experience. In this sense, spatial injustice is created when the 'right to the centre' (Lefebvre 1974, 2003; Purcell 2002, 2003; Schmid 2012) is compromised through structural mechanisms of displacement and expulsion. The right to the centre or centrality is an extension of Lefebvre's 'right to the city'. As Lefebvre puts it: "the right to the city is the right to... the renewed centrality, to places of encounter and exchange..., to enabling the full and complete usage of these moments and places" (Lefebvre, Kofman, Lebas 1996: 179). The right to the centre is therefore not about being in the absolute geographic centre of the city, but rather underlines citizenship and the right to the urban conditions that it entails.

The ideas of centre and centrality, however, have witnessed a shift in the way Lefebvre conceived and theorised them, particularly in response to the industrialisation of the city centres and commodification of the urban space, expelling of the working class to the peripheral enclaves and the ultimate demise of the traditional city centres in Europe. In his later writings, Lefebvre attributes centrality not to an absolute geographical condition as he used to maintain in the 1960s, but to a form (Schmid 2012); a centre of attraction, encounter, assembly and simultaneity (Lefebvre 2003: 118) and the arena of action towards structuring and organising social space. A pattern of spatial injustice that hinders access to the centre – in the latter sense – is, in fact, peripheralising the citizens politically. The struggle for (social-spatial and political) centrality (Kipfer, Saberi, Wieditz 2013), therefore, emerges as the core principle of calls to the right to the city.

The way this article frames the centre is akin to both early and late Lefebvre's conceptualisations. Considering the historical trajectory of urban development in Tehran and the transformation of its centre, centrality is still a concept contingent upon an absolute geographical location. Simultaneously, centrality in Tehran is in transition, meaning that it is increasingly becoming relative, calling out for content, actions, people, encounters, situations, simultaneity, and an overlap of time, space and presence. Tehran is, thus, at a critical moment, within the dialectical transition of an absolutist centre to a moveable, relative centrality based on encounters between citizens. It is in this climate that this article interconnects anti-sprawl policies with the creation of spatial injustice patterns in Tehran.

Planetary urban sprawl: from North to South

Despite the plethora of theorisations, frameworks and debates, urban sprawl has largely remained ambiguous in terms of its institutional and political underpinnings, physical manifestations and relevance in various geographic contexts. It is crucial to address the current debates on urban sprawl through the lens of the North-South divide. The question of Southern urban theory is, more than ever, relevant to the current landscape of massive urbanisation and, in parallel, to the highly facilitated modes of knowledge transfer and dissemination of ideas, principles and concepts from the North to the South. Southern cities are simultaneously confronting an array of unprecedented socio-economic, political and cultural challenges stemming from their striking rate of urbanisation, and absorbing, appropriating and implementing the body of knowledge unfamiliar to their concrete realities (Watson 2009; Mitlin, Satterthwaite 2013; Schindler 2017). Studying the duality between the real-life, contextual challenges on the ground, and the expertise and knowledge channelled from the North to solve these challenges should be at the foreground of any attempt to make sense of the current state of affairs in Southern urbanism. Global South is not a geographical signifier, but rather an invoked collective materiality, spatial relations, networks and resource flows, and more importantly, the everyday life of the people living within these dynamics. From the Southern perspective, this duality is not a secondary concern that should be addressed elsewhere; on the contrary, the North-South conflict and divide is omnipresent in every aspect of the social life of Southern citizens and is vividly manifested in the material embodiment of this social life, the city.

At the abstract level, urban sprawl could be outlined as a mode of urbanisation happening at the threshold of centre and periphery. It is the ontological and material distinction between the centre and periphery, between inside and outside, that explicates sprawl as a process of horizontal expansion of the city. However, methodological *cityism* (Angelo, Wachsmuth 2015; Connolly 2019) has been denounced by “urban theory without an outside” (Brenner 2013) and the planetary urbanisation thesis (Brenner 2013, 2014; Brenner, Schmid 2015). The planetary urbanisation thesis denounces the presence of the typological rural-urban binary as the basis of the dialectical

relation between agglomerations and their operational landscapes and maintains that society is urbanised at the planetary level. The thesis is, however, criticised from an empirical point of view and by highlighting its unifying tendency of neglecting local differences and political struggles at the everyday level (Khatam, Haas 2018; Reddy 2018). The empirical evidence supporting this line of criticism is most commonly emerging from urban scholars dealing with local level urban narratives, political struggles, and socio-cultural specificities of the urban phenomenon in the Southern cities. There have been attempts by the proponents of planetary urbanisation doctrine to discredit this line of criticism by undermining its core argument as empiricist without any subtle theoretical explanation of how planetary urbanisation can appreciate local differences (See Angelo, Goh 2021). What seems to be the shared line of thought among multiple critical approaches to the planetary urbanisation thesis is the belief that the struggles around the everyday are not completely absorbed into the urbanisation processes (Ruddick et al. 2018). An epistemic plurality of urban studies (Oswin 2018) stands against ‘a new epistemology of the urban’ as outlined by Brenner and Schmid (2015). This plurality suggests the existence of many outside, each characterised by its specificities. As Khatam and Haas show, “centralities and peripheries may emerge as a result from collective struggle or political strategies aimed at socio-spatial distinctions, rather than from generalised structural dynamics of capitalist accumulation” (Khatam, Haas 2018: 14). It is within this context that urban sprawl in the South takes up a distinctive meaning, interlinked with multiple contextual trajectories of social and political development.

A common attribute of urban governance structures in the Southern cities is their unenforceable land-use planning regimes (Angel et al. 2011). The underlying causes of ineffective policies and incompetent governance structures in the Southern cities are manifold and span from political fragmentation to longstanding regional instabilities and political conflicts or, in some cases, brokerage and corruption at an urban governance level (Angel et al., 2011; Brown, 2014). In this environment, overreliance on the unenforceable policies leads to, on the one hand, an illusion of accomplishing the objectives, and on the other hand, neglecting the elephant in the room and continuation of urban informality in the realm of the unplanned or hardly plannable in the Southern cities.

There is an ongoing debate, more fervently in the US, about the historical roots of sprawl and whether the outwards expansion of cities is associated with the individual's choice of the place of living (Hogan, Ojima 2008; Kirkman 2010). The discourse of personal choice and the preference of rural/suburban living is based on the premise that, under equal conditions, urban residents opt for the more promising option that provides them with a better quality of life and positive economic outlook. Indeed, the notions of choice and the freedom to choose the place of living could be skewed, influenced and mediated by various externalities such as housing affordability and systemic class-based, race-based or ethnicity-based segregating mechanisms. Notwithstanding the effect of these mechanisms, the question remains whether all forms of urban expansion identified as sprawl across the world could be explained through the lens of personal choice. In other words, if the relevance of personal choice in the formation of sprawling patterns could be challenged in the Southern context, then perhaps the application of mainstream urban containment policies in the cities of the South could also prove ineffective and, in some cases, detrimental. It is crucial to be cautious not to fall into the same trap of taking the Global South as a uniform entity with similar trajectories and experiences; nevertheless, the migratory patterns towards the periphery and expansion of the cities in Iran and Egypt are argued to be involuntary displacement rather than matters of personal choice (Roshan et al. 2010; Masoumi, Hosseini, Gouda 2018).

Moreover, the majority of the definitions of urban sprawl explain it by the physical features and material attributes of the outcome (Pendall 1999; Razin, Rosentraub 2000; Wolman et al. 2005; Bruegmann 2006; Couch, Petschel-Held, Leontidou 2008; Ewing 2008): low-density, scattered, leapfrog, low accessibility, single land-use, etc. Scrutinising sprawled settlements through their physical attributes essentially obscures the socio-political and institutional arrangements that have given birth to these settlements (Bruegmann 2006; Bhatta 2010). Even when the politico-economic imperatives of urban sprawl are acknowledged in the western context, their scope has remained limited to the emergence of new possibilities for the urban middle-class to improve their quality of life; possibilities that result from long-term accumulation and a generally accepted American tendency towards suburban living and individualism (Squires 2002). Nev-

ertheless, this middle-class lifestyle aspiration might not be totally relatable to many Southern cities and societies where the distinctive formation process of modern, urban middle-class has resulted in different aspirations compared to EuroAmerican households (Razin 1998; Steel, van Noorloos, Klaufus 2017; Horn 2020b). The above discussion justifies the necessity of embarking on a theoretical endeavour to develop a 'Southern' perspective to urban studies (Patel 2014), an alternative urban epistemology to provincialise urban theory (Sheppard, Leitner, Maringanti 2013) and a neo-colonial schematic system of thought (Roy 2011, 2014; Simone 2011) representing and explaining the Global South.

Urban sprawl and its controlling mechanisms in Tehran

Urban sprawl has been a controversial narrative of change in the past fifty years in Tehran (Roshan et al. 2010; Ebrahimpour-Masoumi 2012; Gouda et al. 2016) and is by no means an understudied phenomenon in Iran (e.g., Sarvestani et al. 2011; Shahraki Zangane et al. 2011; Mohammadian-Mosammam et al. 2017; Soltani et al. 2017; Hosseini et al. 2018; Bagheri et al. 2018). Urban sprawl in Tehran has been attributed to various drivers including population growth, land speculation, transportation policies, extraterritorial conflicts and pressures, governance and management system and land use (Masoumi, Hosseini, Gouda 2018). Demographic dynamics are the most cited drivers of sprawl in Tehran (Roshan et al. 2010; Hosseini, Hajilou 2018) and are generally explained by high natural population increase during the 1980s and 1990s (Hakimian 2006), and massive rural to urban migration (Madanipour 2006; Zebardast 2006; Bayat 2010) (see Table 1). The economic drivers of sprawl in Tehran could be explained through housing price escalation in the inner-city areas which acts as a push factor, and low commute costs due to heavily subsidised fuel prices, the low price of land in peripheral areas, and the practices of land speculators and shortcoming in policy monitoring and enforcement as pull factors (Gouda et al. 2016). The most critical driver of urban sprawl, however, could be traced to governance and administrative deficiencies of the planning system in controlling peri-urban developments (Masoumi, Hosseini, Gouda 2018). These deficiencies take various forms, such as the weakness of ratified laws and regulations,

Year	Country population	Increase (%)	TMR Population	Increase (%)	CAB Population	Increase (%)	TMR population minus CAB	Increase (%)
1956	18954700		1990300		1560934		429366	
1966	25788722	36.05	3456300	73.66	2719730	74.24	736570	71.55
1976	33708744	30.71	5332000	54.27	4530223	66.57	801777	8.85
1986	49445010	46.68	8108000	52.06	6058207	33.73	2049793	155.66
1996	60055488	21.46	10344000	27.58	6758845	11.57	3585155	74.90
2006	70495782	17.38	13422000	29.76	7711230	14.09	5710770	59.29
2016	79926270	13.38	15000000	11.76	8693706	12.74	6306294	10.43

Tab. 1: Population of the country, Tehran Metropolitan Region, Tehran City and the city peripheries between 1956 to 2016. (Source: National Census data, The Statistical Centre of Iran)

inconsistency of urban laws and construction codes, political fragmentation (Razin, Rosentraub 2000; Watson 2009), the outbreak of conflicts between the Ministry of Housing and Urban Development and the local municipalities, and lack of an integrated, multi-scalar urban management system (Madanipour 2006; Lalehpour 2016; Hosseini, Hajilou 2018).

The first anti-sprawl planning initiative in the history of modern Tehran in the twentieth century is dated to 1968 and was part of the first Master Plan of the city. The plan, devised by the American town planner Victor Gruen and his Iranian counterpart, was based on a multi-level urban governance model and proposed three concentric boundaries for the city: a five-year service area zone (230 km²), the Juridical/administrative area or twenty-five-year zone (630 km²) and the urban regional boundary (2476 km²) (Madanipour 2006). During the coming decades, the three-urban-boundary scheme remained one of the primary sources of confusion, irregularities and policy conflicts (Norouzi Fard, Barakpour, Arabi 2014). The Ur-

ban Region Act of 2005 attempted to unify the existing frameworks and to generate a consistent approach to define what different urban regions mean. The Act proposed two legislative zones as 'mahdoude' or 'city boundary', and 'harim' or the peripheral buffer zone around the city which, later in 2006, were deployed as the guiding principles in the new Tehran Master Plan. Despite its success in consolidating the legislative frameworks, the Urban Region Act of 2005 was criticised for lack of clarity with regards to the governance conflicts at the borders of these zones and the possibility of formation of informal settlements in the buffer zone (Norouzi Fard, Barakpour, Arabi 2014).

The latest episode of anti-sprawl control policies was finalised recently in 2016 through the Strategic Plan of Tehran Boundary (SPTB) (Figure 1). The underlying focus of the planning policy to tackle the problematic of urban sprawl in this period was on redesigning existing institutions, minimising direct interference, delegating considerable authority to local agents, and planning for the most efficient use of avail-

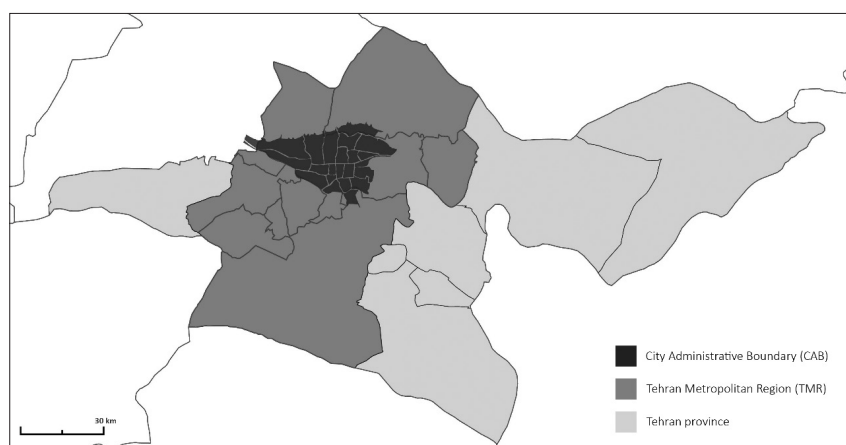


Fig. 1: The Strategic Plan of Tehran Boundary (2016).

able resources (Iran National Habitat Committee Secretariat 2016). The SPTB has proposed some seemingly strict controlling mechanisms to limit further residential development within the *harim* or the peripheral buffer zone of Tehran and argued for a reorientation of policies towards enforcing green belt restrictions. The policy proposed two boundaries: The City Administrative Boundary (CAB) with an area of 730 square kilometres – analogous to the city boundary in the previous plan – and the massive regional zone called the Tehran Metropolitan Region (TMR) (Figure 1) with an area of approximately 6000 square kilometres. The plan maintains that any form of city growth should be limited to the CAB, which is controlled, serviced and legislated directly by the Tehran Municipality, while a set of restrictive rules should be enforced to hamper any further development and formation of human settlements in the TMR area. The TMR includes 27 cities, 237 towns, and 94 villages and encompasses nine counties within the province: Tehran, Shemiranat, Pardis, Rey, Eslamshahr, Qods, Shahryar, Robat-e-Karim, and Baharestan (Figures 2 and 3). The population of the TMR is projected to reach approx. 13 887 000 in 2026, ten million of which will be living in the city of Tehran, 2 750 000 in the peripheral cities and 1 100 000 in small towns and villages.

The origin of the mushrooming peripheral towns in the TMR is attributed to the formation of spontaneous settlements, mostly during the first few decades after the 1979 revolution (Sheikhi 2001). These settlements were formed as a result of spontaneous movement

and practices of their primary citizens – mostly migrants from rural areas – and developed in accordance with their needs, priorities, potentials and resources. Land ownership, patterns of land occupation, land division and uses were all determined at the local level and in parallel to the formal and regulatory frameworks that were being practised within the CAB (Sheikhi 2001; Zebardast 2006). Despite massive policy incentivisation and financial support of the new towns around Tehran, it is the spontaneous settlements that have been inhabiting the surplus population of the city (Habibi, Erfani, Pourmohammad 2017).

The Strategic Plan of 2016 based its core foundation on three principles: to preserve the remaining natural landscape, resources and land around Tehran; to manage land uses, functions and practices cohesively and across different scales; and to enhance environmental quality within the TMR. The peripheral urban areas will not be considered as reserve lands for future urban expansion but as lands with irreplaceable environmental value (The Strategic Plan of Tehran Boundary 2016). The Plan indicates a shift of perspective from a purely normative, land-use control planning approach to a strategic spatial planning approach (Albrechts 2015) founded on the environmental imperative of preserving the natural landscape.

The impact of the international rhetoric of anti-sprawl strategies is evident in the Strategic Plan approach towards implementing a ‘green belt’ policy as the internationally recognised solution to contain urban expansion (The Strategic Plan of Tehran Boundary 2016). The Plan has allocated 81.3% of the TMR to a green belt; an area where certain preservation rules apply in order to ensure restoration of the natural resources and safeguard national parks. The remaining 18.7% of the TMR is called the ‘civic zone’, specifically allocated to urban development. In addition to the green belt policy, Iran’s national Habitat III report published in September 2016 outlines the national-level strategies that are being implemented to tackle urban sprawl. The strategies include upgrading and regeneration of the urban informal settlements to make better use of urban land and accommodate the surplus population, and to develop new towns to provide adequate housing for the excessive urban population (Iran National Habitat Committee Secretariat 2016). The experience of peri-urban new towns in Iran is, however, marked with several challenges and hardly any of these new towns have reached their population, economic, and employment



Fig. 2: Tehran Metropolitan Region (TMR). Peripheral settlements both urban and rural are highlighted. (Source: The Strategic Plan of Tehran Boundary, Tarh-e-Kavosh, 2016)

goals (Ziari 2005). The development of the majority of these new towns has not progressed as planned which, in turn, has made them 'dormitory settlements' without any economic function (see Zamani, Arefi 2013 on urban management issue of the new towns).

The multiplicity of planning policies and implemented solutions mirrors a significant drawback of Iran's national urban policy, which is the conflict between the national and local level plans (Habibi, Basirat, Razavi 2020). An example of such political and spatial conflict is manifested in the thresholds of the peripheral cities within the TMR, where the civic zone meets the green belt. Unlike the city of Tehran, the boundaries of the peri-urban cities and towns are not strictly defined and thus spontaneous settlements can emerge; a situation which leads to what could be termed as 'sprawl within sprawl' and has been previously spotted in cities such as Eslamshahr (Pourahmad, Seifoldini, Parnoon 2011; Habibi, Erfani, Pourmohammad 2017). The multiplicity of approaches also suggests that the discourse around sprawl in Tehran is heavily marked with recurring changes, inconsistent policies, confusing terminology, overlapping geographic categories, massive irregularities and a lack of a comprehensive supporting mindset behind the plans and strategies. To these must be added the political fragmentation in the country during the post-revolutionary era. The decades after the 1979 Revolution witnessed the formation of new governmental and quasi-governmental 'revolutionary organisations' (Khatam, Keshavarzian 2016) and political institutions which marginalised the existing state administration through their parallel authority (Keshavarzian 2005). These organisations include multiple charitable foundations, holding companies, and several state and non-state agencies which have been involved in a complex web of political and economic relations and shaping the urban landscape of Tehran (See Mashayekhi 2019 for a detailed account of the politics of urban development in post-revolution Iran). Overall, and in spite of a long history of plan development in Iran, the devised plans and mandates have mainly remained unenforceable, crippled by political fragmentation, financial dependency of the local authorities on levies applied to plan infringements, contradictory jurisdiction regulations and weakness of the enforcement frameworks, and lack of an integrated urban management system (Masoumi, Hosseini, Gouda 2018).

Spatial Traps; the embodiment of spatial injustice in Tehran

One of the highly debated consequences of anti-sprawl policies across the world is the classical land economy argument of a shortage of urban land and acceleration of residential speculation in the inner city (Brueckner, Fansler 1983) which leads to land scarcity, price increases, and speculative practices in the land and housing markets. In the case of Tehran, the limited supply of urban land has led to irregular land-use changes from agriculture and essential services to residential and commercial, leading to the expansion of informal settlements in the peri-urban areas, illegal land subdivision, and an increase in the construction numbers, going beyond the recommended built-up area and population density in the Master Plan (Iran National Habitat Committee Secretariat 2016).

Urban expansion in Tehran in the 20th century has been intertwined with increasing inequality and the dialectic of destruction-construction (Shirazi, Falahat 2019). The dialectic of destruction-construction machinery unfolded both within the loosely defined urban boundaries of Tehran and across the inner-city neighbourhoods, and more importantly, at the meso level of the dynamics between the city and its peripheries. Recent empirical evidence from Tehran highlight two distinctive, yet deeply intertwined processes of transformation (Zareyan 2015; Zali, Hashemzadeh, Esmailzadeh 2016; Ghadami, Newman 2019; Masoumi, Terzi, Serag 2019): densification of the inner city neighbourhoods; and simultaneous creation of peripheral satellite towns and cities outside of the administrative boundary of the city. These two processes resemble what has been characterised within the critical urban theory discourses as the dialectic of centre-periphery, urban-suburb, proximity-distance, planned-unplanned, and implosion-explosion (Lefebvre 2003; Brenner 2014; Merrifield 2014; Keil 2018). In Tehran, similarly to many other Southern cities that are witnessing this dialectical mode of urban transformation (Gouda et al. 2016; Üçoğlu, Güney, Keil 2020), the result is manifested through speculation in land and housing markets in the inner city areas and consequently, successive waves of forced displacement of the most vulnerable, working class and urban poor to the peripheries beyond the city administrative boundary, where the prices are still affordable. Demographic data shows that the proportion of CAB to TMR

Year	Population of CAB to population of TMR (%)	Population of TMR to population of country (%)
1956	78	11
1966	79	13
1976	85	16
1986	75	16
1996	65	17
2006	57	19
2016	58	19

population has been steadily falling from 85% in 1976 to 58% in 2016, while the proportion of the TMR population to the whole country has been steadily increasing from 11 per cent in 1956 to 19 per cent in 2016 (see Table 2). This suggests that the share of peri-urban settlements within the TMR in terms of population has been increasing in the past 40 years.

The notable drop in the CAB to TMR population suggests that the population in the TMR has been increasing at a faster rate compared to the population in the CAB. In other words, the relatively higher rate of population increase in the TMR could be attributed to the recently emerged trend of reverse migration from Tehran to its peripheral regions. According to the latest National Census data (2011), in the five-year period between 2006 to 2011, 755 546 Iranians migrated from urban to rural areas while in the same period, 655 251 took the opposite migratory pathway (National Census 2011). This was an unprecedented national-scale trend. In 2016, the census data suggested a negative net migration rate in one in three of the provincial capitals across the country (National Census 2016). The data on Tehran between 2011 and 2016 shows that 27% of the 369 000 Teheranis who moved out of the city resettled in the peripheral regions of Tehran, the areas between the two boundaries, CAB and TMR which serve as the setting of the majority of the expansion in the form of creation of peripheral towns and villages (light grey area in Figure 2). Similar cases to the phenomenon of ‘reverse migration’ (Potts 1995; Rahman Bhuyan, Khan, Ahmed 2001; Costello 2007) have been identified within the Northern discourses as ‘counter-urbanisation’ (Bijker, Haartsen 2012) and ‘decentralisation’ (Cheshire 1995; Panebianco, Kiehl 2003). The problematic of reverse migration in the cities of the Global South, however, does not lie in environmental degradation and loss of valua-

ble peripheral lands, although these concerns are legitimate and need attention. The central concern is with regards to displacement of the urban poor, marginalisation, creation of informal settlements, and exacerbation of spatial inequality due to insufficient services and infrastructure.

A consequence of the implosion-explosion dialectic and reverse migration in Tehran has been the creation of spatial patterns of injustice in the form of peripheral *spatial traps* (Grant 2010). Based on an announcement made by an official from the State Welfare Organisation in 2018, 19 million peri-urban settlers live in 3000 peripheral regions – each includes several towns and villages – across the country (ISNA 2018) – representing approximately 23% of the whole population. The insecure and dynamic nature of this mode of settlement, coupled with the above-discussed irregularities in the cities’ administrative boundaries makes the existing estimations speculative and perhaps inaccurate. Notwithstanding this drawback, the official accounts suggest that the problematic of peri-urban settlements is undeniable and is rapidly exacerbating.

A closer look at the distribution of the peripheral urban zones around Tehran reveals three regional agglomeration areas – Regions one, two, and three in Figure 4 – formed on the east, southwest and southeast of the city. Each region is comprised of a cluster of peripheral cities with their own fixated urban boundary (blue lines in Figure 4). Among these three regions, only region two to the southwest of Tehran falls into the boundaries of the TMR. The demographic data suggest that in three successive periods, the population increase rate in all of the three regions has been considerably higher compared to Tehran (Table 3).

The socio-economic condition of these peripheral regions has recently become a point of interest for the scholars analysing the regional disparities (Zebardast 2009; Meshkini, Rahimi 2011; Shirazi 2013; Ahmadi, Esmailzadeh 2014; Habibi, Erfani, Pourmohammad 2017; Fard 2018; Shafiei Sabet, Shakiba 2019). A recent study has classified the peripheral regions of Tehran into three categories of developed, semi-developed, and underdeveloped based on a set of economic, social, cultural, health and infrastructural indices (Esmailzadeh, Esmailzadeh 2020). The results proved an extensive disparity between the municipal area of Tehran and its peripheries. Most notably, the most deprived areas were identified in the southwest region (region two in Figure 4) and three coun-

Tab. 2: The proportion of the population of the CAB to the TMR, and the TMR to the whole country between 1956 to 2016. (Source: National Census data, The Statistical Centre of Iran)

Counties	1996	Increase Rate %	2006	Increase Rate %	2011	Increase Rate %	2016
Region 1 Damavand Firouzkouh Pardis	131 497	68%	220 932	10%	242 744	35%	328 098
Region 2 Eslamshahr Rey Shahryar Qods Robat Karim Malard Baharestan	1 257 516	68%	2 110 306	18%	2 494 338	13%	2 814 603
Region 3 Varamin Qarchak Pishva Pakdasht	577 966	36%	785 155	14%	893 145	11%	990 447
Tehran	6 714 039	17%	7 885 895	4%	8 188 734	7%	8 737 510

Tab. 3: Population increase rate in the three peripheral regions or spatial traps around Tehran.
(Source: National Census Data 2016)

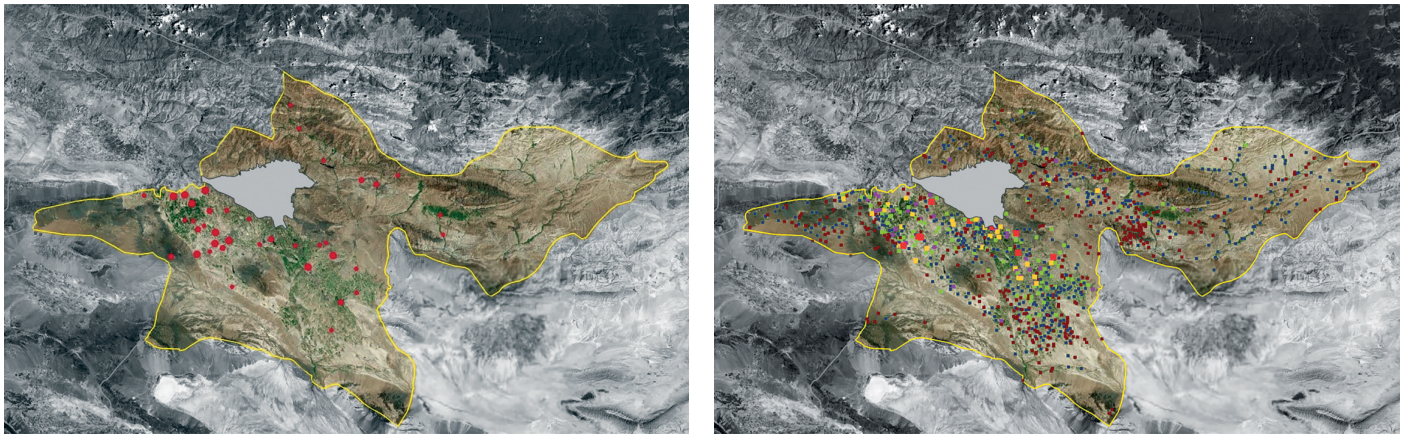


Fig. 3: Distribution of urban (top) and rural (bottom) settlements in Tehran province.
(Source: Management and Planning Organisation of Tehran)

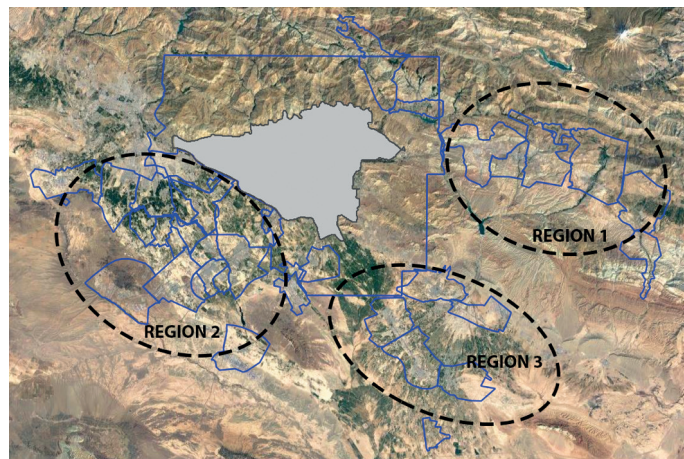


Fig. 4: Three prominent spatial traps in the periphery of Tehran.

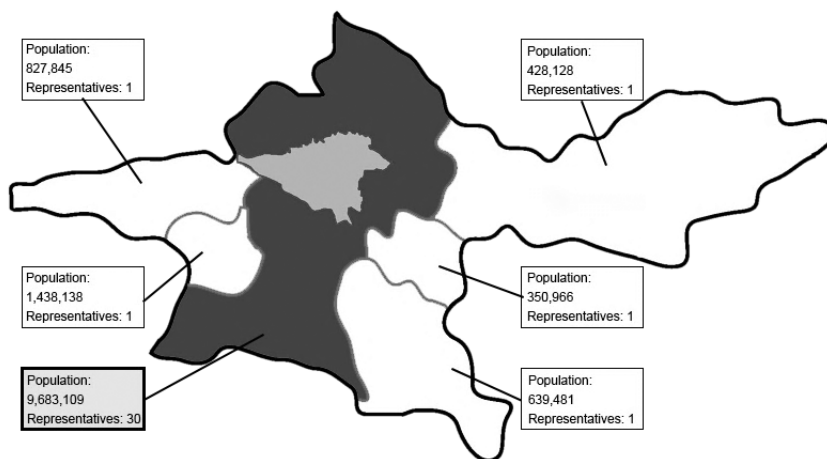


Fig. 5: Political representation comparison between Tehran and its peripheral regions.

ties including Varamin, Qods and Malard are classified as underdeveloped areas (ibid). Furthermore, the Gini index of the urban areas in Tehran province in 2019 is the second-highest in the country (0.41), which signals high income disparity within the province including the city of Tehran and the TMR (*Statistical Centre of Iran*, no date). The latest data on average house prices released in June 2020 shows that house prices in Tehran are at least twice as expensive as the peripheral areas of the city. Thus, house prices could be seen as an imperative driver of population displacement where both the current population of Tehran and newcomer migrants are forced into living in the peripheral areas where land and property prices are more affordable and, indeed, the essential services are inadequate (Norouzi Fard, Barakpour, Arabi 2014).

In terms of mobility and transport equity, the peripheral regions within the TMR are in a critical condition. The report published by the Ministry of Roads and Urban Development (MRUD 2018) indicates that the automobile is the only available means of transport within the TMR where no regional passenger rail network is operating. The road traffic data from May 2018 shows that daily traffic from region two (see Figure 4) to Tehran stands at approximately 540 thousand vehicles per day, which is considerably higher than the other two peripheral regions, region three and region one with, respectively, 266 and 238 thousand vehicles per day (ibid). The overall number of journeys from the peripheral settlements to Tehran per day in May 2018 was approximately one million which, according to the report, had gone up by four per cent compared to 2017. Furthermore,

and in terms of transport accessibility, the TMR demonstrates an inauspicious image with the People Near Transit (PNT) measure of 3 per cent meaning, that only three per cent of the population of the region live 1 km or less from transport nodes. The measure becomes striking when compared to the Tehran CAB with a PNT of 61 per cent (ibid).

It is helpful to underline the degree of disparity in the allocated annual budget between Tehran and its peripheral region within the province. In 2018, the governor of Tehran province proclaimed that while the total allocated budget for the province by the central government is 300 billion Tuman, the city of Tehran, with its decentralised financial structure and independent budgetary policies, has approved the annual budget of 16 thousand billion Tuman (EghtesadOnline 2018). The discrepancy is huge and reflects the unequal allocation of financial resources across deeply intertwined and adjacent regions.

The notion of spatial justice based on discourses of empowerment and democratisation within the spatial traps around Tehran can also be addressed in terms of political representation in the Iranian Parliament. While the central constituency that includes the city of Tehran is represented by 30 members in the Parliament, all the other surrounding constituencies in the region are represented by a total of 5 members (Figure 5).

Overall, the case of Tehran shows that patterns of spatial injustice within the peripheral spatial traps have created an unprecedented condition of in-betweenness where a fraction of (urban) inhabitants are dispersed across the territorial infusion of centre and periphery.

This condition challenges the notions of citizenship for the population who are not considered as *cit(y)zens – dwellers of the city* – while being economically and politically chained to the city. The notion of centre-periphery dualism brings the critical concept of citizenship to the foreground of urban sprawl-control mechanisms and policies. Citizenship thus underscores the status, rights, privileges and responsibilities of a citizen. The common element of spatial injustice in this light is depriving those living in the peripheries of their citizenship and their right to the city (Lefebvre 1967), and its more abstract formulations ‘right to space’ (Lefebvre 2009:210) and ‘right to the centre’ (Schmid 2012).

Discussion

Tehran is a spatial reality much bigger than its administrative area. The political presence of Tehran as a strong territorial entity in Iran not only overshadows its adjacent territorial landscapes, settlements, cities and villages, but asserts massive economic, political and socio-cultural influence over the whole country. This paper attempted to outline the contours of a spatial injustice framework tailored to explain the social and spatial ramifications of the anti-sprawl policies in Tehran. While it does not seek to undervalue the distributary aspect of justice discourses, the proposed framework of spatial injustice particularly emphasises the notions of right to the centre and citizenship and maintains that geographies of injustice are being constantly created and recreated through exclusion, displacement and expulsion of the citizens from the centre under the influence of ill-defined urban policies and their ensuing socio-economic inequalities.

The dialectic of inner-city densification and urban sprawl in Tehran, coupled with successive urban containment plans that have not been sensitive to the specificities of the context, has led to land and property speculation, housing price booms and unaffordability, and growing income inequalities. The paper argued that that anti-sprawl strategies in Tehran, far from being a rationalised approach towards preservation of the environment and maintaining control over distribution of services, are institutionalised exclusionary mechanisms of displacing the priced-out working-class and surplus populations to the peripheral spatial traps. Anti-sprawl policies, even if driven by the environmental imperative of preserving valuable land

for agriculture, in reality, might undermine the peri-urban natural landscape and lead to a shift in land use from agriculture to residential in spontaneous peripheral townships. Moreover, it was shown that the institutional context and planning system in Tehran embody unique characteristics such as institutional parallelism and conflicting planning policies at different scales, which make them incomparable to the coordinated and capacitated regimes in the Global North, a condition that, arguably, could be discovered in many Southern cities.

The social and political apparatuses of the state in Iran and the domain within which the state practices its sovereignty and political domination have been historically linked to the notion of centre (Boroujerdi 1974). The history of the modern state in Iran in the twentieth century is marked by a stronghold centre of political power which rules over the territorial boundaries of the modern nation-state and asserts its political domination on the peripheries (Amanat 2017; Abrahamian 2018). The same still applies to the relationship between Tehran as a strong centre that absorbs resources, capital and labour, and dominates the peripheries at multiple regional and national-territorial scales. The centrality of Tehran condenses wealth, means of action, knowledge, information, and culture. The consolidation of the notion of ‘periphery’ in Tehran and the ever-increasing number of (non) citizens living in the periphery might become a factor contributing to popular mobilisations. It is foreseeable that such movements would be primarily fuelled by economic incentives and driven by the socio-economic inequalities that are engulfed between the centre and the periphery in Tehran. Nevertheless, escalation of such public calls for more just conditions into a wider political struggle, one that is specifically against the centre of power, commerce and authority, seems inevitable. The past years in Iran have indeed witnessed the sparks of such mobilisations. The November 2019 protests, in which the peripheries of the Iranian major cities witnessed violent social unrests, to the surprise and ostensibly incuriosity of the urban middle class, were instances of the struggle of the periphery against the centre; a divide that is becoming commonly observable within the social movements and political oppositions across the world such as the Yellow Vest movement in France or the UK vote to depart from the European Union.

The discussion on the origins of the contemporary usage of the term ‘urban sprawl’ suggests that urban growth trajectories in the Global South, if not intrinsically distinctive, do

not share some of the central premises of the western notion of sprawl. First and foremost, urban sprawl in the Global South should be studied concerning the unprecedented rapid urbanisation process that the Southern cities have experienced during the second half of the 20th century. The genuine question is, thus, to what extent can the Northern lessons of controlling urban sprawl be applied to the Southern cities, given their fundamental dissimilarities. What is at stake in this problematic inquiry is not the historically practised and commonly accepted idea that controlling sprawl is a necessity. Southern urbanism must acknowledge the fact that its foundational conditions of existence and historical development trajectories are distinct from the Northern cities and that globalisation of capital and labour under the capitalist rationality and through imperialist and colonialist channels has hugely impacted their ontological existence and left them unprepared to respond accordingly.

Unravelling the complexities of Southern urbanism and developing a theory capable of explaining urbanisation in the South has been a fashionable area of study in Northern academia for a long time (Lawhon, Truelove 2020). This approach, however, is destined to fail if it unconsciously emulates the conventional western-centric theorisation of urbanism and rejects the epistemological plurality of the category of South. There is no doubt that Southern megacities such as Mumbai, Lagos, New Mexico and Sao Paulo are fascinating 'city-laboratories' to investigate mass urbanisation, inequality and poverty in the South. Nevertheless, it is worth reiterating that the general category of Global South could be subjected to the critique of homogenisation of a vast number of socio-political and geographic territories in Asia, Africa and South America (Patel 2014). While acknowledging the North-South distinction is of imperative value for developing more context-specific urban theories, the epistemological pluralism of the category of South should be considered to avoid stepping into the same river twice.

Lastly, much of the emphasis on communication networks and globalisation in the urban age tends to theorise the world from the centre where the alternative worlds of the peripheries could not be fully grasped and taken into account. Any planetary epistemological formulation of urban phenomenon fundamentally obscures the lived reality of real people of the South (Schindler 2017). Within the Southern territories, global capitalism is far from the only force shaping the cities and the lives of their

inhabitants (ibid). This statement does not argue for neglecting the detrimental and destructive impact of global capital circulation and the longstanding exploitation of the South by the North. On the contrary, for the Southern cities, the detrimental ramifications of hyper-mobilised capital and labour and geographically uneven development must be addressed at all scales, from the city as a powerful political and physical entity, to the supra-urban level of global capitalism.

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