

ARTICLE

Alienated imagination through a mega development project in Turkey: the case of the Osman Gazi Bridge

Deniz S. Sert^{1*} and Umut Kuruüzüm²

Abstract

Since the rise of the ruling Justice and Development Party in the early 2000s, Turkey has invested in several mega transport and infrastructure projects for the purposes of economic transformation, growth, and development. This article explores the impact of a recently completed mega-project—the Osman Gazi Bridge—on material change and popular imagination about the future. It claims that, while the Bridge created a colossal material change that can be observed by everyone, it also animated an imagined post-industrial transition and inclusive development in the industrial town of Dilovasi. Although the dream of a better future serves as a medium for the industrial town's underprivileged inhabitants to connect and socialize, along with the current marginalizing conditions, it also has the potential to fuel future resistance, if imagination is unable to be transformed into reality.

Keywords: Materiality; development; imagination; alienation; dispossession; time

Introduction

Turkey has recently focused on several multi-billion-dollar mega-projects¹ as part of the Justice and Development Party's 2023 vision.² The most notable of these are the Canal İstanbul Project (a new waterway connecting the Black Sea to the Sea of Marmara), the third Bosporus Bridge, the Eurasia Tunnel, the Dardanelles Strait Bridge, the İstanbul International Airport, the Sinop Nuclear Plant, and, finally, the recently completed Osman Gazi Bridge (hereafter, the Bridge)—a section of the mega-highway connecting İstanbul and İzmir. The prevailing view in economics

[©] The Author(s), 2022. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



¹Department of International Relations, Ozyegin University, İstanbul, Turkey and ²Department of Economics, İstanbul Technical University, İstanbul, Turkey

^{*}Corresponding author: Email: denizsert@gmail.com

¹ The term "megaproject" here follows Altshuler and Luberoff's (2004) definition, denoting initiatives that are physical, very expensive, and public. For a detailed discussion of the term, see Söderlund, Sankaran and Biesenthal (2017).

 $^{^2}$ This vision describes a set of goals to be reached by the centennial of the Republic of Turkey, underlining the prominence of public infrastructure investments in further sustainable economic growth and urban development.

literature is that investment in large infrastructure projects, particularly in transport, accelerates economic growth and inclusive development (Krugman 1991; Munnell 1992). Recently, McKinsey and Company (2013) claimed that the world must spend approximately \$57 trillion on infrastructure by 2030 to realize desired levels of global GDP growth. However, the extent to which the benefits of such projects reach local populations or are distributed equitably among residents has been subject to critical scrutiny and treated with much skepticism.³ As Ferguson (1994) has shown through an examination of the Thaba-Tseka Development Project in Lesotho, development can be turned into a machinery of social control. Hence, how development is delivered, as well as its unintended consequences, should be critically examined in order to comprehend the true impact of a material change in relation to its rhetoric.

In this article, we explore the impact of the Bridge over the Marmara Sea. The fourth-longest suspension bridge in the world and the second-longest in Europe, it forms part of an integral section of the İstanbul–İzmir mega-highway. It was built with the aim of slashing the travel time between the two metropolises by more than half.⁴ We examine how residents of the town of Dilovası—located at one end of the Bridge and the connected highway—have experienced the material change it has brought into the area as well as the discourse surrounding its construction and the promise of future wealth.

While mega-development projects provide connection, mobility, and opportunity for some, they also dispense 'disconnections' (Gardner 2012), a 'mechanism of control' (Escobar 2011 [1995]), and 'political disempowerment' (Ferguson 1994) to others. As is widely acknowledged in the literature on the anthropology of development, the economic and social benefits of development initiatives are more often unevenly distributed and fail to trickle down effectively to all who seek them. In our case, the Bridge does not entirely illustrate another case of 'discordant development' (Gardner 2012), generating continuous conflict and dissension in relation to increased inequality and alienation. However, it does animate imaginings of an alternative future built upon a post-industrial landscape, replacing the current, highly polluted, and dismissive industrial setting, and it has started to bring wealth to its marginalized suburban residents through rising land values. In this way, it has also produced hope and manufactured consent for the excluded suburban population. The Bridge, it is argued in this article, achieves this by creating a time vortex, causing excluded suburban people to imagine a better time in the future when they will gain material advantage from the current material changes that are taking place.

The article closely notes how imagining an alternative future is imposed upon material change experienced today, stirring not only increased dissent, but also an imagined inclusion and consent for increased inequality and marginalization. Disconnection from today's reality is reinterpreted in light of the projected tomorrow. This multiplication of time and space imagined between industrialization and post-industrialization in the same location is a fertile ethnographic context for reinterpreting the theoretical background of post-industrial societies, dating back to the 1970s when it was popularized largely by Bell (2018 [1973]). On the one hand, the

³ For an overview of recent work on Turkey, see Bilsel and Zelef (2011); Enlil (2011); Kargı (2013); Marschall and Aydogan (2015); Dogan and Stupar (2017); Bilgen (2018).

⁴ See Özcan (2018) for a recent history of the privatization of massive roads backed by high traffic and revenue guarantees in Turkey.

article follows the stream of literature around capitalist societies evolving from the industrial to the post-industrial and, on the other hand, it discusses social change (or the lack of change) by citing the information society through the example of Silicon Valley. While doing so, it demonstrates the insignificant role of the newly emerging information society or IT sector in shaping urban dynamics as there is no interaction between the two groups, i.e. the residents (who are factory workers) and the white-collar class, in an isolated environment.

The methodology is centered on a case study focused on the material construction of the Bridge and employs a relational historical analysis of mass industrialization, a suburban housing boom, and imaginations of a different daily future. It used a variety of primary data collection approaches, including face-to-face interviews, semistructured in-depth interviews, participant observation, and, lastly, website profiling of companies. In order to understand how the material erection of the Bridge affects the town's residents, historical analysis is combined with participant observation and 40 face-to-face in-depth interviews, the majority of which were conducted during field trips between March 2019 and March 2021. Despite being unable to maintain face-to-face contact because of the COVID-19 epidemic since March 2020, we continued to meet over the phone with our informants. Although we had prepared semistructured questions in advance, the interviews frequently descended into more open-ended discussions about ordinary issues. Themes were then conceptually analyzed and validated by the researchers, and responses were manually analyzed using content analysis to discover emerging themes, sub-themes, and patterns. The article's findings and insights were enhanced by participant observation during field research, which provided reflexivity. Finally, when the study and analysis were completed in December 2021, a face-to-face follow-up meeting was held with our informants in Dilovası to receive information about the most recent situation and to look for future research areas.

The following section includes a brief theoretical overview and a discussion about alienation and development, and how the concept of temporality can be integrated into the analysis of socialization and marginalization. The article then provides a brief historical overview of the rapid and unplanned mass industrialization of Dilovası as a suburban town. This section will explain the establishment of the town, which was built on the back of heavy industry, such as steel and chemicals, and drew migrant families from the east of Turkey as a labor reserve. The third section details the materialization of the Bridge, analyzing its contradiction with the industrial past of the town and imagined connections to the creation of an alternative post-industrial future landscape. The final section concludes with an explanation of how a megadevelopment project, in this case, the Bridge, has not only created further marginalization and alienation but also generated an imagined inclusion and consent on the part of the excluded suburban populations of the town through animating an alternative future landscape against the current exploitative and discriminating industrial present. Yet, simultaneously, as this imagination becomes detached from today's preconceived reality and the power to change the conditions, the potential power of resistance builds up over time.

Time, development, and imagining a future

... all development is taking place in irreversible time is obvious—tulips that grow from bulbs can be expected and speculated upon, but the reverse —tulips reverting back into bulbs— is impossible.⁵

Scholarship on development could readily be labelled *literature of despondency*, describing a world in which

the rich get richer, the poor get poorer, and the resulting failures continue to be blamed on the usual culprit: benign neglects on the part of those in power, inappropriate policies and weak institutions, lack of resources, widespread corruption, and growing cynicism and rank opportunism on the part of those supposed to benefit.⁶

Within this critical literature, development—with its mission of empowerment, participation, and democracy—is cast as another way of controlling, co-opting, and integrating poor and marginalized populations into a project of modernity, namely, that of market-making, value creation, accumulation, and mass consumption (Cooke and Kothari 2001). As is explained in the next sections, this project comes to fruition through mega development projects, in our case, the Bridge and the erection of a shopping center called 03 Oxygen that is not accessible by the local population of Dilovası who do not have the economic means to participate. Critics of development, e.g. Arturo Escobar (2011 [1995]) and James Ferguson (1994), assert that it is an imposed phenomenon that does not work, at least for the poor and the marginalized populations. Yet, this does not mean that people do not seek development. Development has lost neither its charm nor its attractiveness. Whether we like it or not, development is inexorable, whether initiated by locals (whose opinion on subsequent changes is often disregarded) or external authorities through top-to-down policies or, more often, some combination of the two (Gow 2008, 3).

The literature on development projects primarily focuses on construction, such as building roads in rural areas, and its impacts (Van de Walle 2009) on matters as diverse as poverty reduction (Gachassin et al. 2010), market access, well-being, and nutrition (Stifel and Minten 2017), economic growth (Jerome 2011), employment (Rand 2011), and migration decisions (Castaing 2013). A similar line of research on urban projects is also emerging, focusing on the methodology used to assess urban road transport development projects (Griškevičiūtė-Gečienė and Burinskienė 2012), urban redevelopment as multi-scalar planning and contestation (Zhang and Li 2016), environmental degradation (Alo 2008), and damage to cultural heritage (Parumog et al. 2003). While these studies focus on spatial alterations rather than social changes or material change experiences, our goal in this article is to focus on the residents' experiences on the ground and their reactions to material change.

While the scale of urban and social contingencies may not relate to asymmetries in Dilovası, Vancouver provides a good example for a theoretical discussion of North

⁵ Zittoun and Gillespie (2015, viii).

⁶ Gow (2008, 3).

American post-industrial metropolitan places. Hence, focusing on downtown Vancouver, Hutton (2004, 1953) highlighted:

The city has broadly succeeded in asserting public interests as contingencies of change within the core, but these processes have created new social conflicts, tensions and displacements, as well as a glittering and paradigmatic 21st-century central city. In theoretical terms, the Vancouver experience marks a clear break from the classic model of the post-industrial city, the latter typified by a monocultural, office-based economy, extreme spatial asymmetries of investment and development and modernist form and imagery. At the same time, emergent production clusters, residential megaprojects and spaces of consumption and spectacle in the central area present marked contrasts to the spatial disorder and chaotic patterns of 'incipient' post-modernism, underscoring an exigent need for innovative and integrative retheorisation.

What does such a retheorization entail? The global South is entering an 'Urban Age', in which cities will outnumber rural areas for the first time in history, as Datta and Shaban (2016) highlighted. Even amid global economic crises, and given that the collapse of neoliberal urbanism is scarcely imminent (Jou et al. 2012), not only does the classical division between industrialism and post-industrialism become irrelevant, but the need for advanced, original, and unifying retheorization appears more salient than ever. Underlining the need to establish the analytical links between 'everyday life and systemic trends and struggles'—thus linking the insights produced by 'particularistic accounts'—Bayırbağ and Penpecioğlu (2017, 2) took alienation as 'a universal mechanism facilitating the accumulation of capital' via physical dislocation and dispossession.' The state is also a part of this process not only in terms of its ideological apparatuses but also through punitive processes of criminalization and control.

Wacquant (2009) examined how in the age of neoliberalism, the lower classes have been marginalized and denied access to basic public services that is every citizen's right, while the upper class is constantly enriched by the state, protected by iron gates and armed guards in watch booths with intercoms. For him, the state protects the upper class from the deteriorated environment it has created while forcing the poor, marginalized, and discriminated-against lower class into a destructive space characterized by inconvenient living conditions and a severe lack of space, air, light, water, and sometimes food. Wacquant (2009, 1078) referred to this process and space formation as 'urban relegation' rather than 'poverty territories' or 'low-income communities'. In so doing, Wacquant (2016, 1078) highlighted that the 'proper object of inquiry is not the place itself and its residents but the multilevel structural processes whereby persons are selected, thrust and maintained in marginal locations, as well as the social webs and cultural forms they subsequently develop therein'. For Wacquant (2008, 71), the central paradox of development in the age of late capitalism is

 $^{^{7}}$ See, for example, Zalik (2009) for an examination of how offshore extraction, space contestation, and physical displacement in the Nigerian Delta and the Mexican Gulf are inextricably linked with separation, alienation, and dispossession.

the promotion of the market as the optimal contraption for organizing all human activities requires not only a minimalist "small government" on the social and economic front, but also, and without contradiction, an enlarged and diligent penal state armed to intervene with force to maintain public order and draw out salient social and ethnic boundaries.

We believe that the paradox results not only from punitive state processes and hegemonic social control, but also from the alienation and separation of the inhabitants from their space, time, interests, and claims. While the literature review here discusses alienation with reference to negative mental and emotional implications of dispossession and dislocation, this discussion may also be rooted in Cresswell's (2002) theory on place which explores the geographical imaginations that lie behind mobilization by re-evaluating place and thinking through a politics of mobility and change. As Lefebvre (1991) argued in his theory of dialectics of space, that space is inherently social when the experience in the perceived space will be mediated through the expectations of the conceived space into the lived space. Here the 'third space' of Soja (2008, 63-75) helps us to arrive at a synthesis of hybridity that displaces the histories that it constitutes and sets up new structures of authority, new political initiatives. On the one hand, this hybridity of space involves subordination and participation, but, on the other, it also encompasses alternative imaginations and resistance to produce a change in space (depending on the democratic processes available on the ground).

In our case, we discovered that the plurality of time must be added to the hybridity of place because our informants frequently come to socialize within different settings in a dialectical manner with time. According to Munn (1992, 116), time is a symbolic process that is constantly being produced in everyday practices. It is lived concretely through the various meaningful connections between people, objects, and space that are constantly being made in and through the everyday world (Munn 1992, 116). As a result, time is social and can be traced within a relationship established between human and non-human transactions, which Durkheim (2008 [1912], 11–12) saw as a sociological issue. He saw society as a kind of clock, with moving parts consisting of individual human beings and periodic recurrences of rituals, feasts, public events, and ceremonies. These collective representations and divisions, which emerge from social life's rhythms, result in a meaningful, qualitatively variegated temporality rather than an abstract, homogeneous one. In what ways, then, may an alternative socialization of time develop from a particular historical relationship and become a force in influencing today's political and economic landscape?

Time is marked by extraordinary doubt and conflict, according to Laura Bear (2014, 2016, 2017). For Bear (2014, 7), 'dominant in modern time is the abstract time-reckoning of capitalism, which acts as the basis for the universal measure of value in labor, debt, and exchange relationships'. For her, this abstract time-reckoning of capitalism habitually comes into conflict with the concrete experiences and social rhythms of time. In our ethnographic case, the Bridge animates the integration within an imagined global post-industrial time which is in conflict with the current local social industrial time experienced by its residents. In this irreconcilable and unpredictable sequence of dialectics between the Bridge and everyday life, a distinct time-space emerges, somewhere between the present and the future, as a zone of

Figure 1: The Bridge. Source: The authors.

negotiation and reconciliation between the capital and the early migrant laborers who settled around the industrial factories.

An ordinary day in the toxic valley

A tall factory chimney, which is visible from every distant corner of Dilovası, welcomed us on a rainy December day in 2018 as we entered the industrial town—'the toxic valley', as some call it (See Figure 1). It was a familiar monument, one we had passed by numerous times on the journey between istanbul and Anatolia. Our car traversed the factories and wound its way up to the new hospital, located on the north-east side of the valley between the chimney and the Coal Dealers' Organised Industrial Zone (Kömürcüler Organize Sanayii Bölgesi, OSB). The dominance of the massive industry on the floor of the valley was evident from the hospital. Dozens of heavy industrial plants sprawled across the valley basin have forced residents to retreat to the edge of the hills. A torrent of thick, black smoke battered the houses clinging to the slopes.

After watching the industrial landscape for a while, we drove down to a coffee shop in front of the municipal building. The city center was crowded when we arrived, and the police had set up a roadblock in front of the town hall (See Figure 2). We then realized that there were ongoing popular protests over the trial of two young locals who had hung a banner from the Bridge that read: 'Temiz hava için kömürcülere hayır' (For clean air, no to coal dealers). The vast fields of coal stockpiles located in the Kömürcüler OSB and overlooking the valley to the east have been a regular source of complaint. When the northern winds sweep in, they churn up the coal, dousing



Figure 2: Coal protest in front of the municipality. Source: The authors.

the town in black dust. As the valley basin belches fumes into the air, blizzards of coal dust blow down, hence the name 'the toxic valley'. According to a resident, the coal dust coats the roofs and windows of houses miles away, agitating the lungs of anyone unfortunate enough to inhale it and causing breathing problems:

Coal flies and sticks to the house we live in, the clothes we wear and the bread we eat. Our balconies turn black, even though cleaning is done every day; everywhere is pitch black due to coal dust. Black coal is pouring down on us like snow. Where are we supposed to go? This is our home. That's why we continue to breathe a lot of coal into our lungs. Doesn't that bring respiratory disease?

As one of the protesters stated, 'Dilovası is a place abandoned to industry, and the state does not exist here ... indeed it hasn't existed for a long time, but we feel its absence more when coal is raining down on us.' He continued to explain, 'Everyone acts as if everything is normal. We even got used to the rain of coal. Sounds normal. Looks normal. We took a walk today to remind ourselves that this is not normal.' After chatting with protesters, we continued toward the seaside to the city's Diliskelesi district and back through the industrial depths of the valley. Finding ourselves lost while trying to find the port, a stylish shopping center called O3 Oxygen appeared before us. We passed by some slums and parked the car (See Figure 3). The parking area is rammed up against fences separating the slums of the industrial town and the



Figure 3: 03 Oxygen shopping mall on the highway. Source: The authors.

shopping center and the modern highway. Cameras and security guards greeted us, and a skyscraper as tall as the factory chimney in the valley towered above, this time on the west side of the town behind a Starbucks. The skyscraper is a part of the IT valley project—the Turkish Silicon Valley—striving for progress in informatics and communications technologies with a budget of \$400 million. This recently erected and envisioned post-industrial landscape bears no connections to the industrial town of Dilovası; in fact, it is positioned directly on the opposite side of the industrial landscape.

The coal storage zones, which sit directly adjacent to supplies received from Russia and deliver fuel to local factories, were previously situated at the foot of the Bridge. They were later moved to their current location above the city to remove the unpleasant view. The flow of fresh air seemed comparatively much better than in the toxic valley we had left behind a few minutes before. The weather was clear, and the scenery was gorgeous in the IT valley. The highway leading to the Bridge seemed to fracture time and the town into two distinct zones: on the one side, a heavily industrial site full of William Blake's dark, satanic mills and workers living under coal rain and, on the other, a post-industrial oasis with Edward Hopper's lonely people drinking coffee in a sterilized landscape in front of their laptops. When asked about the relations between the town and the IT valley, a white-collar professional who has been working on a mission to attract start-ups to the valley comments:

There are no relations between the two sides of the highway. Yet, we should not seek the answer of what the IT valley can provide for the town, but what the town can provide for the IT valley. As it is, Dilovası does not offer us anything.



Figure 4: Map of the region. Source: Author.

In the following sections, we will continue to explore these two intersecting, but also alternating, landscapes and how they affect the individuals who are excluded from the material change and development that occurs there.

The industrial boom town

The geographical location of this region is particularly important to understand how it became an industrial and transportation hub over the past 60 years (Kanbak 2013) (See Figure 4). Small mountains on its eastern and western borders, and from the south, zmit Bay butts up against Dilovası, containing seven ports, container terminals, and industrial zones. The region is responsible for roughly one-fifth of Turkey's steel production, and ranks among the top ten in the world. Today, two superhighways that connect istanbul and Ankara pass through Dilovası: the Transit European Motorway (TEM) and the D-100 (also referred to as the E-5). The district of Dilovası gained significant value in 1955 with the construction of the D-100 superhighway.

Industrialization began in Dilovası in the late 1960s. From then until 1980, 11 factories were established in the quaint town of Gebze. These factories are still among the most important in Turkey. In 1967, Izocam became the first company to invest in the area, followed by Oluklu Mukavva Sanayi (Olmuksa), a subsidiary of Sabancı Holding, in 1969. The Marshall Paint and Polisher Corporation started constructing its factory in 1967 and began production in 1972. BASF, the world's largest chemicals company, together with Sumerbank, invested in Dilovası in 1970. The Polisan Dilovası plantation, which currently owns two international ports in Dilovası, started production in 1974. Among the other companies that migrated to the area in the first wave of industrialization were NASAŞ, Diler Demir Çelik, Yaşar Holdings, and Atabay Chemistry. Thus, the region became a hub for the production of petrochemicals, steel, aluminium, and machinery.

The formation of the Dilovası Municipality in 1987 marked a significant milestone for the development of the district. Dinçer (2007) explains that the most intensive developments in terms of industrialization, migration, and urbanization materialized before the announcement of the organized industrial zone in 2002. Only 14 factories were operating in Dilovası when the municipality was established in 1987; by 2002,



Figure 5: Kömürcüler OSB. Source: The Authors.

the Dilovası Organised Industrial Zone (Dilovası Organize Sanayii Bölgesi, DOSB) was home to 171 factories (See Figure 5). Driven predominantly by factories, migration has always been a crucial element of population growth in Dilovası. The first significant population increase accompanied the establishment of the Dilovası Municipality. Today the population is made up of migrants from all over the country, most notably from Ağrı (approximately one-third of the current population), Kars, Erzurum, Gümüşhane, and Bingöl. A local resident and potential candidate in the local elections told us: 'to win any election in Dilovası, one either has to be from Gümüşhane or Bingöl or secure the support of one of these groups.'

Although Dilovası has been known for its pollution due to heavy industrialization since the 1970s, the first incident to attract media attention happened in 1994. A cholera outbreak killed 12 children, highlighting concerns about the effects of the pollution produced by industrial plants encircled by blue-collar migrant neighborhoods in the suburbs of the industrial town. As Dinçer (2007) explains, the political response to the public backlash from the cholera outbreak was to create organized industrial zones. Nevertheless, the Dilovası Industrial Zone was not established until 2002.

Since the 2000s, it has been widely acknowledged that the environmental and health problems in Dilovası were the result of 50 years of unplanned industrialization by the central government, which, until the enactment of Metropolitan Municipality Law no. 5216 in 2004, made decisions about business authorization and licensing. This law granted local municipalities the authority to authorize and supervise industrial plants. Dinçer (2007) defines this period of erratic development as a consequence of



Figure 6: The Dilovasi port and the Bridge. Source: The authors.

successive governments' seeking to promote industrial growth at all costs. Rising air and water pollution linked to an increasing number of mills brought the issue of cancer to the agenda in the 2010s (See Figure 6). An alarming report (Hamzaoğlu et al. 2011, 372) revealed for the first time the astronomical rate of cancer-related deaths (33 percent of all deaths) in Dilovasi. This figure is 2.6 and 2.7 times greater than the average for Turkey and the world, respectively. The report (Hamzaoğlu et al. 2011, 374) also highlighted that the risk of death due to cancer, irrespective of age group and tobacco usage, was 4.4 times higher for people who had been resident in the Dilovasi district of Kocaeli for more than ten years than for those living there for less than ten years.

Finally, the coal problem that is wreaking havoc today emerged in the early 2000s. In 2001, the Kocaeli Governorate and the Coal Exporters Association demanded land in Dilovası to create an organized industrial zone for coal. The Ministry of Industry and Commerce approved this in 2007 and granted them land in Dilovası. The zone's construction took three years and was completed in 2010. All coal dealers in Kocaeli were given until 2012 to relocate their operations to the Kömürcüler OSB, which covers approximately 72 hectares of land. Residents of Dilovası, together with members of political opposition parties, protested against the creation of such a zone near residential areas. They blocked the roads coal dealers used for transportation and claimed that their homes would be swallowed by dust from the five million tonnes of coal planned for export each year. The past decade witnessed several small popular protests by Dilovası residents targeting the coal zone. Residents demanded that the

coalfield be moved, explaining the harmful consequences of heavy coal dust, which included a prevalence of asthma among Dilovası's children.

For Wacquant (2008, 56), the policy of 'punitive containment' pursued by the state complements labor, land, and environmental deregulation. It entails the 'gradual replacement of the social welfare treatment of marginality by its punitive management through the aggressive rolling out of the police, the courts, and the prison in and around the hyperghetto' (Wacquant 2010, 217). In an area where the dominance of capital is so pronounced and the Weberian neutral arbitrator state has nearly vanished, police respond to resistance with swift punishment. In fact, as the state no longer governs the space through arbitration, it conversely violently pushes against resistance to establish perceived 'presence.' It is precisely for this reason that Onur Hamzaoğlu, who reported on the escalating cancer rates in Dilovası, and the teenagers who hung the banner from the Bridge to protest against the coal dust were swiftly imprisoned.

The Bridge and the future

In 2010, construction began on the Bridge to link Gebze to Yalova Province and carry the O-5 motorway across the Gulf of İzmit. Even before construction was completed, in July 2016, state officials heralded the Bridge as an exemplary scheme for the future development of Dilovası. In April 2016, a newspaper article claimed that 'the Bridge benefits Dilovası the most' (Osman Gazi Köprüsü 14 April 2016). The article quoted Dilovası District Governor Hulusi Şahin: 'Museums, shopping centers, cafes, social facilities will be built in Dilovası, through which the Bridge passes.' He stated that a shopping mall (now 03 Oxygen) to be built right by the Bridge would be a source of employment for around a thousand Dilovası locals (Osmangazi Köprüsü 27 June 2016). Şahin also suggested that the Bridge would reduce the industrial burden on Dilovası by helping to create new organized industrial zones in Yalova and Bursa. Hence, it was expected that the Bridge would not only stimulate economic growth and provide employment to the local population through investment in infrastructure, but also advance development by enhancing residents' quality of life and increasing competitiveness. At the end of the day, as some of our informants have argued, the most significant impact that directly benefited local inhabitants was the predicted rise in real estate values. For Şahin, real estate prices in Dilovası started to rise even before the construction of the Bridge and land values would increase exponentially as the Bridge was built, which would ultimately bring wealth to the residents of Dilovasi in the near future.

With one foot of the Bridge in Dilovasi, the town is situated right next to the new highway that cuts travel time, from over eight hours to just three-and-a-half, between two of Turkey's largest cities. Shopping centers, restaurants, and gas stations have mushroomed along the highway. The customers of these facilities on the sides of the highway can afford the high tolls. The O3 Oxygen shopping center standing right behind the giant mills in Dilovasi also welcomes white-collar employees who travel everyday between istanbul and the town. Local residents are unable to visit the shopping center due to the high prices charged, except for the local youngsters who sneak into a corner of Starbucks to use the free Wi-Fi and the beggars who previously stood before Dilovasi mosques but now prefer to find a spot in the mall. Besides, only one of

the six workers we spoke to was from Dilovası; the others travel every day from Gebze by shuttle. The O3 Oxygen shopping center has delivered wealth to passing motorists with high purchasing power while contributing to the further marginalization of local residents who breathe coal dust every day. When we asked local residents about the impact of the Bridge on their lives, none of them mentions any increase in employment opportunities or the development of recreational areas and facilities. Instead, our informants often talked about the rising property prices of their land, which have skyrocketed since the announcement of the Bridge. According to one real estate agent who saw a business opportunity and relocated from Bodrum to Dilovası, the price of a one-square meter apartment has increased from 100 TL in 2014 to 700 TL in 2020 as a result of the Bridge's construction, as well as rumors, gossip, and humor about the relocation of Kömürcüler OSB, and urban renewal and reconstruction plans for the industrial town's future. In Dilovası, he described the rapidly rising real estate values as follows:

We used to joke that each piece added to the Bridge increased house prices by 10 per cent. Normally there was not even a demand [for houses]. Anyone wanting to sell his house could not find a buyer. Who would buy property around here? We would only see the chimney on our way to istanbul. We would pass by quickly. I came here from Bodrum in 2014 when the construction of the Bridge accelerated. I planned to buy land and then sell it because I predicted that prices would rise. We have been here for five years now; I also became a real estate agent.

In addition to the boom in property prices brought by its construction, the likely damage to the Bridge itself from industrial pollution has been an ongoing topic in ordinary people's everyday conversations. One state official confirmed the harm and argued that the industrial zone should be moved somewhere away from the Bridge. Rumors circulated that the state would remove the factories in the city center to protect the Bridge. As a result, the area near the Bridge will be suitable for expensive new residences and villas to be sold to the rich. In fact, a similar process has already taken place when the Bridge pushed former seaside coal storage companies to relocate. According to one of our informants, the state's plan is to remove local residents living on valuable lands in the city center, before evacuating the old factories polluting the town. For him, by means of inexpensive loans, the state will seek to sell cheap houses with title deeds and buy the buildings without title deeds from the residents. Eventually, it will relocate the mills, turn that location into a real estate paradise, and try to make money by selling out the land.

In June 2020, the Ministry of Environment and Urban Planning of Turkey declared that the Kömürcüler OSB in Dilovası would be relocated once again, now outside of the town, and the area used to develop a mass housing project (around 15,000 homes) for middle- and low-income groups in Dilovası with the assistance of TOKİ (the Turkish Housing Development Administration). As explained above, some of our informants believed this event to be part of the gradual displacement of local worker families from the city center in preparation for the relocation of industrial mills and gentrification of the area with the arrival of tech and service companies, as one local resident explained:

They intended to kick us out of here anyway. First, they poured coal dust over our heads so we would leave the town. Now they will offer us a house with cheap credit. When we get there, they will remove the factories. Where will I work when these factories are closed? Without work, I won't be able to repay any loan; so, they will take away the house they gave me. If they are going to do urban transformation, they should start first with factories, not building houses.

The heavy industry accumulating in the valley basin no longer tends to generate the high profits it once did, and there is speculation it will be shuttered. The area can be transformed into an entrepot, a warehouse, for imports bound for the two largest cities of Turkey, İstanbul and İzmir, which are now connected by the Bridge. It is not clear when this will happen, but several residents have heard or read somewhere that the service sector is now replacing heavy industry around the world, and they believe that they have evidence that the town will follow a similar fate. The potential transition, accompanied by a program of urban restructuring and transformation, seems to energize investors, who will scoop up cheap plots of land before the prices skyrocket, as well as residents who prefer to endure the coal rain rather than selling out their already valuable properties. This male worker, who has lived in the town for more than 20 years, explains why he prefers to wait:

So that we will leave, they are raining coal over us and poisoning us from below. We have had noise and poison in this town for years, so why should we go now? We watch the view of the Bosporus from here. We have one asset, and that is the land we sit on. Now they're trying to kick us out of here. If I see this town without these factories, I will die in peace. If I walk away now, they will win. I will remain here so I can build a nest-egg for my children. We have suffered the most; it is time to enjoy the fruits of our labor and sufferings.

Several residents believe that the chimney stacks in the valley that now belch out black smoke will shortly be relocated, and then the town will be ideal once again, as one of the neighborhood representatives of the town explained:

Imagine—we actually used to swim here in the old days. My father, for instance, swam here. Imagine, now, when all these factories are gone. Dilovası is the new Bosporus. They tell us why we live here. This is our hometown now. We have suffered, why should we leave now? Can you afford a house on the Bosporus? Here is my house on the hill looking over the Bridge. Imagine there is a beach down there tomorrow. I hope my son will swim soon, just like my father once did.

Dilovası is today being shaped both by its material industrial past and its imagined non-industrial future. The Bridge, as a megaproject, is central to this, opening a wormhole in time and fueling an imagining of a future that is radically different from the materialized conditions of the present. While today's alienating materialized conditions produces resistance, imagining about tomorrow inspires inclusion and hope. On the one hand, the Bridge alienated local residents and furthered their

marginalization as present-day non-consumers, but, on the other hand, it oriented the excluded toward imagining a better future and a landscape where they benefit from the material development of the town. Dilovasi's slum dwellers located around the industries in the center are urged to advocate for and support the removal of companies and the coal storage areas. Yet, given the lack of democratic processes and participation in political decision-making, they are unsure how much of what they imagine will materialize. While keeping up with the change and providing their consent, resistance potentially accumulates over the possibility that dreams will not come true. One of our interviewees described this multiplicity of positions as follows:

We were in favor of the removal of factories from here to another location. We said to get them out of our town so we started breathing again. It looks like they misunderstood our support. They think we leave as well together with the factories. If it's easy, let them come and pull me out of here. I have been living here for more than 30 years, breathing the filth of these factories, and I'm still sick of it. It's time to reap the rewards of our labor, so that at the very least, our children will be better off. I'll set Dilovası on fire if they try to remove me. I will sell my house for good money whenever I want and move to another place. Then my labor will be paid for.

The families of workers and immigrants who have lived in Dilovasi's slums for many years are hopeful for the future. Along with the Bridge, the land on which no one wanted to live for years and on which they built their slums have suddenly became valuable in the market. They continue to wait for the factories to be removed in the hopes that their land will become even more valuable as a result. Their ambition is to sell their land for a high price and be compensated for the years of struggle they have endured. While these dreams have been triggered by the Bridge, they are quite disconnected from today's conditions. In December 2021, enterprises in Kömürcüler OSB were still operating on top of the town. While Dilovası's heavy industrial factories continue to emit smoke from their chimneys in the heart of the city, coal continues to flow over the houses of the worker families. For the time being, an alternative post-industrial future created through popular imaginations provides the excluded with a means of negotiating and participating in the change brought about by the Bridge, but unsatisfied expectations may soon arise to fuel resistance.

Conclusion

In this article, through our case study of the Bridge, we offered an alternative way of seeing and construing a mega development project in Turkey as a tunnel between an industrial and post-industrial landscape and time. While this tunnel is currently accessible only to the privileged groups of the town, access and inclusion in the near future are dreamed of by the excluded suburban population as well. This can be analogously compared to the tunnel we passed through the suburban houses of Dilovasi on which the industrial expansion of the town depended for over 40 years to the elegant O3 Oxygen shopping center along the modern highway leading to the Bridge, cut off from the rest by a fenced parking area. While the modern areas built with the

Bridge provided a post-industrial landscape solely for the wealthy, residents living beyond the fences continue to live in the coal rain and industrial pollution.

Dalakoğlu (2010) used the example of the small city of Gjirokastr in southern Albania and the highway Kakavia-Gjirokastr, which connects Gjirokastr with the main cross-border passage to north-western Greece, to demonstrate how roads can act as elements that disconnect things when they fail to provide the connectivity and integration that they promise. According to Dalakoğlou and Harvey 2012, roads as we know them promote connectivity and integration, as well as the formation of new relationships, while also generating concurrent and conflicting events. As much as roads facilitate mobility, making them a source of trade and travel, they also have a negative side effect in that they change the settlements around them and create a new ones, causing the inhabitants to either lose their living territory they have shaped, or be dislocated as they are forced to relocate. In our case, megainfrastructural highway expansion has resulted in dislocations that are neither hopeless nor without desire. Alienation from today's material realities, while allowing for fantasizing about a new future, has simultaneously animated both connection and disconnection. The excluded suburban population, who are currently unable to benefit from the material transformation, is convinced that they will benefit at some point in the future. It is not yet clear when or if this change will occur. Having this possibility is what nourishes the alienated imagination, as we call it. So, the residents continue to wait. And while they wait, they continue to dream. This dream was triggered by the concrete presence of the Bridge, but it is also disconnected from the current realities of Dilovası. For Castoriadis (1987, 30-31), imagination, which is neither a good nor a bad thing, is the dynamic and changing constituent and substance of our social reality. The extent to which this imagination can transform reality depends on democratic processes. The more the imagination is separated from the ability to change, the more alienated it becomes.

Imagining an alternative future is a way of socializing and legitimizing with the current conditions of Dilovası for some residents, but it simultaneously constitutes a potential reserve for resistance. In this respect, resistance and subordination should not be seen as mutually incompatible or contradictory processes. As Yurchak (2006, 283) wrote, reproducing the system and participating in its continuous internal displacement can be constitutive processes. Imagination is not limited to either resistance against or subordination to dominant norms; rather, it allows for a variety of positions. As the gap between reality and fantasy widens over time, the excluded residents may turn into a more coordinated resistance in one way or another. It is not yet clear how much of the economic value created in Dilovası with the construction of the Bridge will be distributed to the town's slums. It is clear that construction companies, together with the state mechanism, do not intend to leave the valuation of land to the slum owners for an urban transformation project which is already on the agenda of the Dilovası municipality. With a second big development project, the residents of Dilovasi may face a process of displacement. It is unclear how much of the value gained will be handed to slum owners, but as time goes on we will see how much opposition the established dreams put up against the urban change effort.

References

Alo BI (2008) Contribution of road transportation to environmental degradation in Nigeria's urban cities. Paper presented at the Lamata Annual National Conference on Public Transportation, 7 May, Lagos, Nigeria.

Altshuler AA and Luberoff DE (2004) *Mega-Projects: The Changing Politics of Urban Public Investment.* Washington, DC: Brookings Institution Press.

Aschauer DA (1993) Genuine economic returns to infrastructure investment. *Policy Studies Journal* **21**(2): 380–390.

Bayırbağ MK and Penpecioğlu M (2017) Urban crisis: Limits to governance of alienation. *Urban Studies* **54**(9): 20–56.

Bear L (2014) Doubt, conflict, mediation: The anthropology of modern time. Journal of the Royal Anthropological Institute (N.S.): 3-30.

Bear L (2016) Time as technique. Annual Review of Anthropology, 45: 487-502.

Bear L (2017) Anthropological futures: For a critical political economy of capitalist time. Social Anthropology/Anthropologic Sociale, 25(2): 142–158.

Bell D (2018 [1973]) The Coming of Post-Industrial Society. New York: Routledge.

Bilgen A (2018) The Southeastern Anatolia Project (GAP) revisited: The evolution of GAP over forty years. *New Perspectives on Turkey* **58**: 125–154.

Bilsel C and Zelef H (2011) Mega events in Istanbul from Henri Prost's master plan of 1937 to the twenty-first century Olympic bids. *Planning Perspectives* **26**: 621–634.

Castaing GM (2013) Should I stay or should I go? The role of roads in migration decisions. *Journal of African Economies* 22(5): 796–826.

Castoriadis C (1987). The Imaginary Institution of Society. Cambridge: Polity Press.

Cooke B and Kothari U 2001. Participation: The New Tyranny? London: Zed Books.

Cresswell T (2002) Introduction: Theorizing place. In Cresswell T and Verstraete G (eds), Mobilizing Place, Placing Mobility: The Politics of Representation in a Globalized World. Leiden: Brill, 11–31.

Dalakoğlou D (2010) The road: An ethnography of the Albanian-Greek cross-border motorway. *American Ethnologist* 37(1): 132–149.

Dalakoğlou D and Harvey P (2012) Roads and anthropology: Ethnographic perspectives on space, time, and (im)mobility. *Mobilities* 7(4): 459–465.

Datta A and Shaban A (2016) Mega-urbanization in the global south: Fast cities and new urban utopias of the postcolonial state. New York: Routledge.

Dinçer ME (2007) The Transformation of an Industrial Location: Dilovasi from 1990s to Present. MA dissertation, The Atatürk Institute for Modern Turkish History, Boğaziçi University.

Dogan E and Stupar A (2017). The limits of growth: A case study of three mega-projects in Istanbul, *Cities* 60: 281–288.

Durkheim E (2008 [1912]) The Elementary Forms of Religious Life. Oxford: Oxford University Press.

Enlil ZM (2011) Neoliberal agenda and the changing urban form of Istanbul. *International Planning Studies* **16**(1): 5–25

Escobar A (2011 [1995]). Encountering Development: The Making and Unmaking of the Third World. Princeton and Oxford: Princeton University Press.

Ferguson J (1994) The Anti-politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho. Minneapolis: The University of Minnesota Press.

Gachassin M, Najman B and Raballand G (2010) The impact of roads on poverty reduction: A case study of Cameroon. World Bank Policy Research Working Paper 5209. Available at https://openknowledge.worldbank.org/handle/10986/19924 (accessed 15 December 2021).

Gardner K (2012) Discordant Development: Global Capitalism and the Struggle for Connection in Bangladesh.

London: Pluto Press.

Gow D. (2008). Countering Development: Indigenous Modernity and the Moral Imagination. North Carolina: Duke University Press.

Griškevičiūtė-Gečienė A and Burinskienė M (2012) Towards creating the assessment methodology for urban road transport development projects. *Technological and Economic Development of Economy* **18**(4): 651–671.

- Hamzaoğlu O, Etiler N, Cavit IY and Cağlayan C (2011) The causes of deaths in an industry-dense area: Example of Dilovasi (Kocaeli). *Turk J Med Sci* 41(3): 369–375.
- **Hutton TA** (2004) Post-industrialism, post-modernism and the reproduction of Vancouver's central area: Retheorising the 21st-century city. *Urban Studies* **41**(10): 1953–1982.
- Jerome A (2011) Infrastructure, economic growth and poverty reduction in Africa. *Journal of Infrastructure Development* 3(2): 127–151.
- Jou SC, Hansen AL and Wu HL (2012) Accumulation by dispossession and neoliberal urban planning: Landing the mega-projects in Taipei. Contradictions of Neoliberal Planning, GEJL 102: 151–171.
- Kanbak A (2013). İstanbul sanayisinin Kocaeli iline mekânsal etkileri. AİBÜ Sosyal Bilimler Enstitüsü Dergisi 13(2): 275–300.
- **Kargi B** (2013) Interaction between the economic growth and the construction industry: A time series analysis on Turkey (2000–2012). *Emerging Markets Journal* **3**: 19–34.
- **Krugman P** (1991) Increasing returns and economic geography. *Journal of Political Economy* **99**(3): 483–499. **Lefebvre H** (1991) *The Production of Space*, Nicholson-Smith D (trans). New Jersey: Wiley-Blackwell.
- Marschall M and Aydogan A (2015). Mega projects and the limits of urban planning in Megacities: The case of Istanbul in the AKP era. *Middle East Institute*. 1 December. Available at https://www.mei.edu/publications/mega-projects-and-limits-urban-planning-megacities-case-istanbul-akp-era#_ftnref8 (accessed 15 December 2021).
- McKinsey and Company (2013) Infrastructure productivity: How to save \$1 trillion a year. McKinsey Global Institute. 1 January. Available at: https://www.mckinsey.com/business-functions/operations/our-insights/infrastructure-productivity (accessed 15 December 2021).
- **Munn DN** (1992) The cultural anthropology of time: A critical essay. *Annual Review of Anthropology*, **21**: 93–123.
- Munnell AH (1992) Policy watch: Infrastructure investment and economic growth. *Journal of Economic Perspectives* **6**(4): 189–198.
- Osman Gazi Köprüsü En Çok O İlçeye Yaradı (2016) Star. 14 April. Available at https://www.star.com.tr/guncel/osman-gazi-koprusu-en-cok-o-ilceye-yaradi-haber-1106247/ (accessed 15 December 2021).
- Osman Gazi Köprüsü Sanayi Baskısını Azaltacak (2016) TRT Haber. 27 June. Available at https://www.trthaber.com/haber/ekonomi/osmangazi-koprusu-sanayi-baskisini-azaltacak-258429. html%20Accessed%2016%20March%202020 (accessed 15 December 2021).
- Özcan Çİ (2018) The privatization of roads: An overview of the Turkish case. Regional Economics Applications Laboratory Discussion Paper. Available at http://www.real.illinois.edu/d-paper/18/18-T-06.pdf (accessed 15 December 2021).
- Parumog MG, Mizokami S and Cal PC (2003) Using travel cost and contingent valuation methodologies in valuing externalities of urban road development: An application in valuing damages to cultural heritage. *Journal of the Eastern Asia Society for Transportation Studies* 5: 2948–2961.
- Rand J (2011) Evaluating the employment-generating impact of rural roads in Nicaragua. Journal of Development Effectiveness 3(1): 28–43.
- Söderlund J, Sankaran S and Biesenthal C (2017) The past and present of megaprojects. *Project Management Journal* 48(6): 5–16.
- **Soja EW** (2008). Thirdspace: Toward a new consciousness of space and spatiality. In Ikan K and Wagner G (eds), *Communicating in the Third Space*. New York: Routledge, 63–75.
- Stifel D and Minten B (2017). Market access, well-being, and nutrition: Evidence from Ethiopia. World Development 90: 229–241.
- Van de Walle D (2009) Impact evaluation of rural road projects. *Journal of Development Effectiveness* 1(1): 15-36
- Wacquant L (2008) The militarization of urban marginality: Lessons from the Brazilian metropolis. International Political Sociology 2: 56–74.
- Wacquant L (2009) Punishing the Poor: The Neoliberal Government of Social Insecurity. Durham, NC: Duke University Press.
- Wacquant L (2010) Urban desolation and symbolic denigration in the hyperghetto. Social Psychology Quarterly 73(3): 215–219.
- Wacquant L (2016) Revisiting territories of relegation: Class, ethnicity and state in the making of advanced marginality. *Urban Studies* 53(6): 1077–1088.

Yurchak A (2006) Everything Was Forever, Until It Was No More: The Last Soviet Generation. Princeton: Princeton University Press.

Zalik A (2009) Zones of exclusions: Offshore extraction, the contestation of space, and physical displacement in the Nigerian Delta and the Mexican Gulf. Antipode 4: 557–582.

Zhang C and Li X (2016) Urban redevelopment as multi-scalar planning and contestation: The case of Enning Road project in Guangzhou, China. *Habitat International* 56: 157–165.

Zittoun T and Gillespie A (2015) Imagination in Human and Cultural Development. New York: Routledge.

Cite this article: Sert, Deniz S. and Kuruüzüm, Umut (2022). Alienated imagination through a mega development project in Turkey: the case of the Osman Gazi Bridge. New Perspectives on Turkey 66: 160–179. https://doi.org/10.1017/npt.2022.2