Urban planning and climate transition post COVID-19

A case study of Athens, Greece

Themistoklis PELLAS

Abstract

This paper deals with the risk of the spread of infectious diseases through space, looking at how COVID-19 is becoming a concern in planning. To this end, it employs as a case study the urban development project “The Great Walk” by the Municipality of Athens, Greece. By doing so, it evidences the link between the response to COVID-19 and climate change at the local level in the EU.

Keywords

Planning, Climate Change, COVID-19

1. Introduction

The World Health Organization (WHO) declared coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), to be a pandemic on March 11, 2020. Richard Horton (2020), editor-in-chief of The Lancet, proposed to call it instead a ‘syndemic’ (the notion conceived by medical anthropologist Merrill Singer), to underline its social origins, rather than to see it merely as a comorbidity. There is no pharmaceutical intervention (vaccine or antiviral drug) for the prevention or treatment of COVID-19 with proven clinical efficacy to date (Maguire and Guérin, 2020). Non-pharmaceutical interventions (NPIs) have been deployed instead (Anderson et al., 2020). The responses have been disparate (Desvars-Larrive et al., 2020; Zheng et al., 2020). They have been guided by mathematical models (Metcalf et al., 2020). They have also been political (Bozorgmehr, 2020; Political casualties of the COVID-19 pandemic, 2020). There is differential exposure leading to increased risk of infection with COVID-19 (e.g., limited material circumstances or work-related exposure), differential susceptibility leading to increased risk of severe COVID-19 (e.g., poor general health and nutritional status or underlying chronic conditions), and differential consequences of COVID-19 (e.g., unemployment), including from the effects by both the imposition and lifting of containment measures (e.g., Burström and Tao, 2020; Flaxman et al., 2020; Ruktanonchai et al., 2020).

Geography, Urban/Regional Studies and Planning literature has attended in the immediate moment to the geographical tracking of the spread of the disease (e.g., Kamel Boulos and Geraghty, 2020) and in time to other spatial–functional (land uses, mobility, and spatial allocation of related indicators), spatial–political (policy scale and spatial allocation of related indicators), spatial–economical (spatial allocation of development indicators), spatial–social (spatial allocation of demographic indicators), and/or spatial–environmental (land cover and spatial allocation of related indicators) aspects (e.g., Aalbers et al., 2020; Angel, 2020). This paper deals with how the risk of the spread of COVID-19 through space is becoming a concern in planning (e.g., Forsyth, 2020) in relation to public administration and public policy. To this end, it employs as a case study the urban development project

“The Great Walk”

Source: Author

“The Great Walk” by the Municipality of Athens, Greece. In particular, it analyses what administrative acts have been deployed for this project before and during the period of the imposition and the progressive lifting of containment measures in Greece and the European Union (EU). By doing so, it evidences the link between the response to COVID-19 and climate change at the local level in the EU.

2. Research background

Planning, public administration, and public policy link the delimitation of land use and land cover, and in general land policy, with that of administrative competence (e.g., Marshall et al., 2020; Lagopoulos, 2018; Schmitt and Wiechmann, 2018; Taşan-Kok et al., 2020). A theoretical and practical problem is the asymmetry between input, throughput, output, and outcome of an administrative act, an iteration of the problem of the asymmetry between the geographical jurisdiction of administrative division and policy impact, or, in general terms, the delimitation of spatial units for analysis and/or regulation (e.g., Freemark et al., 2020; Granqvist et al., 2020; Hirschl, 2020; Pan et al., 2020; Pistor, 2017; Sassen, 2018; Simone, 2020). Such asymmetries link to ‘territorialism’, the ideology of the hierarchical, political-administrative division of space, and the preconditions of it, geographical constituency and state monopoly on the use of force, and the absolute (in contrast to relative) conception of space as a container (in contrast to network) (Faludi, 2018). A project compensates for such asymmetries, not by aiming at resolving them (for example, in contrast to structural reform), but by prioritising them within a policy instrument mix (e.g., Capano and Howlett, 2020; Lascoumes and Le Galès). COVID-19 has

exacerbated pre-existing conditions, while projects have responded to it as an opportunity to propel pre-existing developments (e.g., Zukin, 2020).

The challenges facing the EU have been fragmentation (e.g., economic disparity), interdependencies (positive and negative externalities), and policy mismatch between, on the one hand, the geographical jurisdiction of political-administrative divisions of the EU Member States, and on the other, the spatial-functional impact of their policies (European Observation Network for Territorial Development [ESPON], 2019; see also King and Le Galès, 2017). The European Commission has proposed climate and energy transition (i.e. the climate-neutrality objective, COM(2019) 640; see also Rietig, 2020) to be central in the EU Recovery Plan, including the Next Generation EU for 2021–2023 and the next EU Multiannual Financial Framework (MFF) for 2021–2027 (COM(2020) 441 final/2; COM(2020) 442 final; COM(2020) 443 final; see also Pellerin-Carlin et al., 2020). The EU member states, under the “Regulation on the Governance of the Energy Union and Climate Action” ((EU)2018/1999, see also COM(2019) 412 final, COM(2019) 285 final, COM(2018) 375 final – 2018/0196 (COD), p. 14), are required to develop ten-year National Energy and Climate Plans (NECPs), starting from 2021, to direct the MFF funding through policy integration. The European Commission has proposed the Sustainable Europe Investment Plan (2021–2027) within which the Member States will link their NECPs to the European Semester for economic policy co-ordination (COM(2020) 21).

In Greece reform of planning legislation and land policy (e.g., Karadimitriou and Pagonis, 2019; Tulumello et al., 2019; Vitopoulou and Yiannakou, 2020) has followed the policy conditionality both under the regular economic surveillance framework for euro-area Member States under the European Semester for economic policy co-ordination and under the enhanced surveillance framework (2018–2020), which succeeded the Macroeconomic Adjustment Programmes under the Greek Loan Facility (2010–2011), the European Financial Stability Facility (2012–2015), and the European Stability Mechanism (2015–2018). Morbidity and mortality of COVID-19 depends on a number of parameters among which, the previous state of health of the population, the infrastructure, the human resources and the preparedness of the health system, the densities in the living and working spaces, the percentage of the elderly (the demographic ageing) and the types of living of these people, intergenerational relationships (frequency of contact of people of different generations connected to each other), the intensity of interpersonal relationships and meeting places (private / public), the extent of vulnerable groups, the intensity of exchanges with countries with high morbidity, the time of onset of the pandemic (especially in countries with high tourism) as well as the time of reaction-taking measures (the NPIs) and the degree of their acceptance by the population (Kotzamanis, 2020). The particularities of the built form—polykatoikia, the most prevalent construction type, and the lack of open/green spaces—have to be highlighted, when looking at the NPIs (Leontidou, 2020), while also considering the confluence (and change) of the traditional (small-scale, self-financed) real estate development pattern and the contemporary (large-scale initiative, big private capital) pattern (Delladetsima, 2006) with the emergence of a new pattern, including short-term rentals, Golden Visa, and mandatory (online) auctions (e.g., Spyridonos et al., 2019), along with a growing, though yet to substantiate, influence of measures for climate change, climate and weather extremes, and related disasters (e.g., Serrao and Melissas, 2019).

Polykatoikia is a multi-storey shell close to the domino technique of a skeleton by reinforced concrete. The repetition of polykatoikia characteristics—pilotis, flat whitewashed plaster roof, generic facade—has demarcated the city grid, and peripheral and generally residential neighbourhoods forming since the 1950s (e.g., Vaiou et al., 1995). The stereotypic built form of polykatoikia crystallises main factors that have defined city texture in Greece, i.e. late and low, compared to other north-atlantic states, industrialisation in general and professionalisation in construction more particular, strong ties with the countryside, and popularised homeownership via self-promotion of housing. Self-promotion of housing stems from rural traditions of self-provision and self-building. ‘Self’ refers to the reproduction of family and patrimony. This is the process, similar to the other Southern European nation states, that supported rural to urban migration in the 20th century. It is based on small property and low manufactured capital. It has developed collectivised forms of provision (e.g., a developer may be paid instead of money with ownership of an apartment after the completion of a construction) and adapted crafts

based practices (e.g., on site training of worker teams that dated back centuries in ottoman-occupied greek cities) to reinforced concrete skeleton buildings. This does not imply a system of low commodification, but rather, one of low defamiliarisation. Self-promotion of housing and property owning have been an investment against social risks in the absence of explicit family policy measures: difficulties faced by individual families have not been tackled via public mobilisation but through people's private strategies, while care services within the family, have been allocated to females, and not externalised to the market except when (since the 1990s) outsourced to female migrants (e.g., Vaiou and Stratigaki, 2008). The patterns of post war high social mobility (e.g., Tsoulouvis, 1996), based on the transformation of large numbers of internal rural migrants to urban homeowners, and social reproduction related to petty employers, self-employed and salaried workers in small units with family ties and resources (Small Enterprises SMEs) shift, and the most vulnerable segments of the population—traditionally the low wage and/or undocumented labor immigrants—expand. The metropolitan area of Athens (corresponding to the region of Attica) is a paradigmatic case of the confluence of the real estate and development patterns (e.g., Chorianopoulos and Pagonis, 2020; Maloutas and Spyrellis, 2020).

3. Methodology

The paper gathered evidence from administrative documents that are publicly available online through the Transparency Portal (diavgeia.gov.gr). All government institutions in Greece are obliged to upload their administrative acts and decisions to the Transparency Portal (Law 3861/2010). Administrative documents are not valid unless published online (Law 4210/2013). Each administrative document uploaded to the Transparency Portal is digitally signed and assigned a unique Internet Uploading Number. The paper used the advanced search engine of the Transparency Portal (diavgeia.gov.gr/search?advanced). Two search terms were used. The first search term was the exact title of the programmatic agreement between the Municipality of Athens and the National Technical University of Athens: "Traffic and Parking Standards in the Centre of Athens" (In Greek: Πρότυπες Ρυθμίσεις Κυκλοφορίας και Στάθμευσης στο κέντρο της Αθήνας). The document is available online from the Transparency Portal (diavgeia.gov.gr/doc/9P6IQ6M-ΞAY?inline=true). The second search term was the administrative reference number (In Greek: Αριθμ. Δ1α/ΓΠ.οικ. 31688) of the Joint Ministerial Decision (JMD) of the Ministry of Citizen Protection, the Ministry of Health, the Ministry of Interior, and the Ministry of Infrastructure and Transport "Imposition of temporary traffic measures and regulations in the area of the Centre of Athens to address the risk of the spread of coronavirus COVID-19". The document is published in the Official Government Gazette (OGG) Volume B, Number 1970, 21–5–2020. It is available online from the National Printing House (et.gr). To determine the search terms, evidence was used from the official website of the urban development project "The Great Walk" (megalosperipatos.cityofathens.gr), and the decision of the Council of State (the Supreme Administrative Court of Greece) with reference number A1992/2020 and European Case Law Identifier (ECLI) ECLI:EL:COS:2020:1009A1992.20E1572, which cancelled the JMD (OGG B, 1970, 21–5–2020) on October 9, 2020. The reference period was September 2019 to September 2020. The research proceeded in three sequential phases. First, documents were accessed and catalogued in a chronological order. Second, they were categorised according to the administrative types referenced in the Transparency Portal (diavgeia.gov.gr/typesOfDecisions) and the public authorities that issued them. Third, they were reviewed. Themes were defined according to their subject.

4. Research results

In total, 38 documents were identified. 27 documents were from the first search term. 11 documents were from the second search term. The time period was from November 28 to October 10, 2020. 17 documents were programmatic agreement (first search term). 3 documents were budget approval (first search term). 2 documents were expenditure commitment (first search term). 1 document was expenditure approval (first search term). 1 document was payment finalisation (first search term). 5 documents were individual administrative acts (second search term). 2 documents were assignment of projects / supplies / studies (second search term). 2 documents were regulatory acts. 2 documents were contract awarding. 20 documents were

issued by the National Technical University of Athens (first search term). 7 documents were issued by the Municipality of Athens (first search term). 11 documents were issued by the Municipality of Athens (second search term). 2 main subjects were identified: 1) Research Project, 2) Urban Equipment for Public Spaces.

5. Discussion and conclusions

The urban development project “The Great Walk” comprises a series of administrative acts. The “pilot phase” of the project launched in May 2020, while the rationale of the project had been set in November 2019, in the programmatic agreement for a research project between the Municipality of Athens and the National Technical University of Athens. That agreement defined the project in terms of “sustainable urban mobility”, linked it to the Sustainable Urban Mobility Plan of Athens (svak-athina.com), and soft mobility (over pedestrianisation), while it demarcated two spatial units, the area of the intervention (within the city centre) and the area projected to be affected by the intervention (the area around the city centre), both areas within the geographical jurisdiction of the Municipality of Athens. The legal basis of the “pilot phase” had been provided by the JMD “Imposition of temporary traffic measures and regulations in the area of the Centre of Athens to address the risk of the spread of coronavirus COVID-19” (OGG B, 1970, 21–5–2020). In that light, “pilot” has meant an exemption from the procedures / instruments and administrative competence delimited in planning and administrative legislation with regard to the deployment of the urban equipment. Recently, that legal basis was cancelled by the Court of Appeal, which stated in its decision that the risk of the spread of COVID-19 does not justify this exemption. The idea behind the “The Great Walk” is not new. It dates back to the 1833 plan of Athens (by Kleanthes and Schaubert). What is new is the particular context, namely the three real estate and development patterns, within broader drivers, such as the consolidation of the new growth strategy of the EU through the European Green Deal. This paper has analysed the urban development project “The Great Walk” with respect to the administrative acts it comprises, through a novel use of the Transparency Portal. Future research, while evidencing the real estate and development patterns in Greece, could take a comparative look into related spatial contexts, drivers, and/or trends (e.g., Mitrašinić, 2006; Christiaanse et al., 2019; Gomes, 2020, Van Assche, 2019), and with regard to the resurgent scholarly interest in the urban core (e.g., Broitman and Koomen, 2020).

6. References

- Aalbers, M.B., Beerepoot, N. and Gerritsen, M. (2020) ‘Editorial: The Geography of the COVID-19 Pandemic’, *Tijdschrift voor economische en sociale geografie*, 111(3), 201–204.
- Angel, S. (2020) ‘On the Spatial Structure of the Covid-19 Pandemic: Some Scale and Density Effects’, Working Paper, NYU Marron Institute. <https://marroninstitute.nyu.edu/papers/on-the-spatial-structure-of-the-covid-19-pandemic>
- Bozorgmehr, K. (2020) ‘Power of and power over COVID-19 response guidelines’, *Lancet*. [https://doi.org/10.1016/S0140-6736\(20\)32081-X](https://doi.org/10.1016/S0140-6736(20)32081-X)
- Burström, B. and Tao, W. (2020) ‘Social determinants of health and inequalities in COVID-19’, *The European Journal of Public Health*, 30(4), 617–618.
- Broitman, D. and Koomen, E. (2020) ‘The attraction of urban cores: Densification in Dutch city centres’, *Urban Studies*, 57(9), 1920–1939.
- Capano, G. and Howlett, M. (2020) ‘The Knowns and Unknowns of Policy Instrument Analysis: Policy Tools and the Current Research Agenda on Policy Mixes’, *SAGE Open*. <https://doi.org/10.1177/2158244019900568>
- Chorianopoulos, G. and Pagonis, T. (2020) *In the traces of the Mediterranean City: Urbanism, planning and governance in the Athenian metropolis* [in Greek]. Athens: Kritiki.
- Chu, D.K., Akl, E.A., Duda, S., Solo, S., Yaacoub, S. and Schünemann, H.J. (on behalf of the COVID-19 Systematic Urgent Review Group Effort (SURGE) study authors) (2020) ‘Physical distancing, face masks, and eye protection to

prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis', *Lancet*, 395, 1973–87.

Christiaanse, K., Hanakata, N. and Gasco, A. (2019) *The Grand Project: Understanding the Making and Impact of Urban Megaprojects*. Rotterdam: nai010.

Delladetsima, P.M. (2006) 'The Emerging Property Development Pattern in Greece and its Impact on Spatial Development', *European Urban and Regional Studies*, 13(3), 245–278.

ESPON 2019. ETRF – European Territorial Reference Framework. Final Report. Version 03/05/2019.

Faludi, A. (2018) *The Poverty of Territorialism. A Neo-medieval View of Europe and European Planning*. Cheltenham: Edward Elgar.

Flaxman, S., Mishra, S., Gandy, A., Unwin, H.J.T., Mellan, T.A., Coupland, H., Whittaker, C., Zhu, H., Berah, T., Eaton, J.W., Monod, M., Imperial College COVID-19 Response Team, Ghani, A.C., Donnelly, C.A., Riley, S., Vollmer, M.A.C., Ferguson, N.M., Okell, L.C. and Bhatt, S. (2020) 'Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe', *Nature* 584, 257–261.

Freemark, Y., Steil, J. and Thelen, K. (2020) 'Varieties of Urbanism: A Comparative View of Inequality and the Dual Dimensions of Metropolitan Fragmentation', *Politics & Society*, 48(2), 235–274.

Forsyth, A. (2020) 'What role do planning and design play in a pandemic?', Harvard GSD Website. <https://www.gsd.harvard.edu/2020/03/what-role-do-planning-and-design-play-in-a-pandemic-ann-forsyth-reflects-on-covid-19s-impact-on-the-future-of-urban-life/>

Granqvist, K., Humer, A. and Mäntysalo, R. (2020) 'Tensions in city-regional spatial planning: the challenge of interpreting layered institutional rules', *Regional Studies*. <https://doi.org/10.1080/00343404.2019.1707791>

Gomes, P. (2020) 'The birth of public space privatization: How entrepreneurialism, convivial urbanism and stakeholder interactions made the Martim Moniz square, in Lisbon, 'privatization-ready', *European Urban and Regional Studies*, 27(1), 86–100.

Häkli, J., Kallio, K.P. and Ruokolainen, O. (2020) 'A Missing Citizen? Issue Based Citizenship in City-Regional Planning', *International Journal of Urban and Regional Research*. <https://doi.org/10.1111/1468-2427.12841>

Hirschl, R. (2020) 'Constitutions and the Metropolis', *Annual Review of Law and Social Science*, 16. <https://doi.org/10.1146/annurev-lawsocsci-051920-020619>.

Hsiang, S., Allen, D., Annan-Phan, S., Bell, K., Bolliger, I., Chong, T., Druckenmiller, H., Huang, L.Y., Hultgren, A., Krasovich, E., Lau, P., Lee, J., Rolf, E., Tseng, J. and Wu, T. (2020) 'The effect of large-scale anti-contagion policies on the COVID-19 pandemic', *Nature* 584, 262–267.

Horton, R. (2020) 'Offline: COVID-19 is not a pandemic', *Lancet*,

Kamel Boulos, M.N., & Geraghty, E.M. (2020). Geographical tracking and mapping of coronavirus disease COVID-19/severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) epidemic and associated events around the world: how 21st century GIS technologies are supporting the global fight against outbreaks and epidemics. *International Journal of Health Geographics*, 19(8). <https://doi.org/10.1186/s12942-020-00202-8>

Karadimitriou, N. and Pagonis, T. (2019) Planning reform and development rights in Greece: institutional persistence and elite rule in the face of the crisis. *European Planning Studies* 27(6): 1217–1234.

Kotzamanis, B. (2020) 'The gains in life expectancy in Greece after 1950 and their deceleration in the last decades in the light of the recent pandemic' [in Greek], *Demo News*, 39. http://e-demography.gr/news/docs/eDemography_News_Doc_00020_gr.pdf

Lagopoulos, A.P. (2018) 'Clarifying theoretical and applied land-use planning concepts', *Urban Science*, 2(1), 17.

- Lascombes, P. and Le Galès, P. (2007) 'Introduction: Understanding Public Policy through Its Instruments—From the Nature of Instruments to the Sociology of Public Policy Instrumentation', *Governance: An International Journal of Policy, Administration, and Institutions*, 20(1), 1–21.
- Leontidou, L. (2020) 'Urban planning and pandemics in the compact Mediterranean city: Human-geographic collateral losses of Covid-19' [in Greek], *The Greek Review of Social Research*, 154, 11–27.
- Maguire, B.J. and Guérin, P.J. (2020) 'A living systematic review protocol for COVID-19 clinical trial registrations', *Wellcome Open Research*, 5(60). <https://doi.org/10.12688/wellcomeopenres.15821.1>
- Marshall V., Cadenasso M.L., McGrath B.P. and Pickett S.T.A. (2020) *Patch Atlas: Integrating Design Practices and Ecological Knowledge for Cities as Complex Systems*. New Haven and London: Yale University Press.
- Maloutas, T. and Spyrellis, S.N. (2020) 'Segregation trends in Athens: the changing residential distribution of occupational categories during the 2000s', *Regional Studies*, 54(4), 462–471.
- Metcalf, C.J.E., Morris, D.H. and Park S.W. (2020) 'Mathematical models to guide pandemic response', *Science* 369(6502), 368–369.
- Mitrašinović, M. (2006) *Total Landscape, Theme Parks, Public Space*. London: Routledge.
- Pan, H., Yang, T., Jin, Y., Dall'Erba, S. and Hewings, G. (2020) 'Understanding heterogeneous spatial production externalities as a missing link between land-use planning and urban economic futures', *Regional Studies*. <https://doi.org/10.1080/00343404.2019.1701186>
- Pellerin-Carlin, T., Eisl, A. and Magdalinski, E. (2020) 'Overcoming Covid-19 Crises by Building a Clean and Resilient Europe', *Jacques Delors Institute Policy Brief*. <https://institutdelors.eu/wp-content/uploads/2020/04/PB-200410-TPC-EN-2.pdf>
- Pistor, K. (2017) 'From Territorial to Monetary Sovereignty', *Theoretical Inquiries in Law*, 18(2), 491–517.
- 'Political casualties of the COVID-19 pandemic', *Lancet Infectious Diseases*, 20(7), P755.
- Rietig, K. (2020) 'Multilevel reinforcing dynamics: Global climate governance and European renewable energy policy', *Public Administration*, 1–17.
- Ruktanonchai, N.W., Floyd, J.R., Lai, S., Ruktanonchai, C.W., Sadilek, A., Rente-Lourenco, P., Ben, X., Carioli, A., Gwinn, J., Steele, J.E., Prosper, O., Schneider, A., Oplinger, A., Eastham, P. and Tatem A.J. (2020) 'Assessing the impact of coordinated COVID-19 exit strategies across Europe', *Science*, 369(6510), 1465–1470.
- Sassen, S. (2018) 'Embedded borderings: making new geographies of centrality', *Territory, Politics, Governance*, 6(1), 5–15.
- Serraos, K. and Melissas, D. (2019) *Natural disasters and spatial policies* [in Greek]. Athens: Sakkoulas.
- Simone, A. (2020) 'To extend: Temporariness in a world of itineraries', *Urban Studies*, 57(6), 1127–1142.
- Schmitt, P. and Wiechmann, T. (2018) 'Unpacking Spatial Planning as the Governance of Place', *disP - The Planning Review*, 54(4), 21–33.
- Spyridonos, A., Rentoulis, P., Eustathopoulos, G. and Poulou, E. (2019) *Contemporary issues of real estate law* [in Greek]. Athens: Nomiki Vivliothiki.
- Taşan-Kok, T., Atkinson, R. and Martins, M.L.R. (2020) 'Hybrid contractual landscapes of governance: Generation of fragmented regimes of public accountability through urban regeneration', *Environment and Planning C: Politics and Space*. <https://doi.org/10.1177/2399654420932577>
- Tsoulouvis, L. (1996) 'Urban Planning, Social Policy and New Forms of Urban Inequality and Social Exclusion in Greek Cities' *International Journal of Urban and Regional Research*, 20, 718–732.

- Tulumello S, Cotella G and Othengrafen F (2020) Spatial planning and territorial governance in Southern Europe between economic crisis and austerity policies. *International Planning Studies* 25(1): 72–87.
- Vaiou, D. and Stratigaki, M. (2008) 'From 'Settlement' to 'Integration': Informal Practices and Social Services for Women Migrants in Athens', *European Urban and Regional Studies*, 15(2), 119–131.
- Vaiou, D., Mantouvalou, M. and Mavridou, M. (1995) 'Social Integration and Urban Development in Greece: Local Parameters in a United Europe' [in Greek], *To Vima ton Koinonikon Epistimon* (C11), 73–105.
- Van Assche, K. Beunen, R. and Oliveira, E. (2019) 'Spatial planning and place branding: rethinking relations and synergies', *European Planning Studies*, 28(7), 1274–1290.
- Vitopoulou, A. and Yiannakou, A. (2020) 'Public land policy and urban planning in Greece: Diachronic continuities and abrupt reversals in a context of crisis', *European Urban and Regional Studies*, 27(3), 259–275.
- Wentz E.A., York, A.M., Alberti, M., Conrow, L., Fischer, H., Inostroza, L., Jantz, C., Pickett, S.T.A., Seto K.C. and Taubenböck, H. (2018) 'Six fundamental aspects for conceptualizing multidimensional urban form: A spatial mapping perspective', *Landscape and Urban Planning*, 179, 55–62.
- Zheng, Q., Jones, F.K., Leavitt, S.V., Ung, L., Labrique, A.B., Peters, D.H., Lee, E.C., Azman, A.S. and HIT-COVID Collaboration (2020) 'HIT-COVID, a global database tracking public health interventions to COVID-19', *Scientific Data* 7, 286.
- Zukin, S. (2020) 'Planetary Silicon Valley: Deconstructing New York's innovation complex', *Urban Studies*, 1–33. <https://doi.org/10.1177/0042098020951421>