

Infrastructural gap

Commons, state and anthropology

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An infrastructural gap (IG) emerged after the outbreak of the crisis in 2008 and it refers to the difficulty of the state and the private sector in sustaining the level of infrastructural networks in the Western world. Yet, infrastructures comprise the realm where the state or the market materialize a great proportion of the social contract. Citizens therefore often experience IG as a challenge of the entire political paradigm. Nevertheless, as research in the country that is at the center of the current euro-crisis—Greece—records, we have novel and innovative forms of civil activity focused on the IG. Such activity, applying principles of self-organization and peer-to-peer relationships, along with practices of social solidarity and ideals of commons, attempts to address IG in innovative ways. However, such practices call for theoretical and empirical innovations as well, in order to overcome the social sciences' traditional understandings of infrastructures. This paper—based on the inaugural professorial lecture I gave in acceptance of the Chair in Social Anthropology at the Vrije University Amsterdam—seeks to initiate a framework for understanding this shift in the paradigm of infrastructures' governance and function, along with the newly emerging infrastructural turn in socio-cultural anthropology.

Key words: infrastructures, state, commons, anthropology, Greece

Infrastructural gap and the (too) invisible hand of the market

Between 2006 and 2013 alone, European infrastructure companies' activities decreased by 80% (Linklaters 2014). The International Energy Agency has warned that even the European Union's (EU) energy security is under threat unless there are investments in the infrastructures (IEA 2014). Articles in the Press (Authers 2015) use terms such as 'infrastructural gap' (IG) for the 40% investment shortfall on infrastructure development in G20 countries. Similarly, the World Economic Forum also warned

about the IG (WEF 2014). In 2015, the European Commission (EC) responded to these challenges with the new strategic investment plan that has infrastructures investment as its first priority. However, it was made clear in all related documents that the EC is unable to fully finance it and needs the private sector's contribution (EIB 2015). But the market does not seem eager to get involved: the EU was portrayed as an unattractive destination for private investment in infrastructures by the authoritative Global Infrastructure Investment Index (ARCADIS 2014). Meanwhile, an EU member country (Greece) lies at the bottom of the Index.

Yet, infrastructures are a principle materialization of the relationship between people (citizens and non-citizens alike) and otherwise abstract state and supra-state authorities (Edwards 2003, 186; Graham 2010; Humphrey 2005; Dourish and Bell 2007, 417; Dalakoglou 2009; Larkin 2013). It therefore follows that the IG raises questions not only about the future of both hard and soft infrastructures, but the future of the relationship between European states and societies. By extension what is at stake is the future of European bourgeois democracy, as was already noticed in reference to the paradigmatic shifts in the Greek polity that followed the troika-instructed adjustments (Balibar 2010; Habermas 2012, 2015; Zizek 2015).

If the IG in reference to hard infrastructures is not felt that much as yet within Europe, what is for sure experienced by the masses is the gap in soft infrastructures. Since the outbreak of the financial crisis in 2008, European countries have continued to face challenges to their budgets in education, childcare, public health, welfare and even emergency services. One of the most recent examples of IG in soft infrastructures (and by extension of the changing relationship between European state apparatuses and society) is the so-called refugee crisis. Here we see the world's richest continent—the place that claims to host the most modern and elaborated polities—being reticent to respond in a humane or otherwise effective manner to the arrival of a couple of million refugees.¹ Furthermore, in the Netherlands, IG in soft infrastructures in statements about a shift from the welfare state to a 'participation society', whereas in Britain the concept of the 'big society' has been put forward as a new paradigm for the delivery of public services. At the same time, in the European countries most affected by the crisis—Greece and Portugal—ministries of social solidarity have recently been created, aiming to partly aid but mostly to co-opt grassroots activities that have been developed spontaneously in areas where the market or the state have traditionally operated, but do so no longer.

From the 'modern infrastructural ideal' to the IG

Although right now neither the state nor the market seem able to cover the increasing IG, this is the outcome of a long process. Most of the second half of the 20th century saw the emergence of the 'modern infrastructural ideal' in both Western and Eastern Europe with state monopolies or strict control over critical infrastructural systems (Graham and Marvin 2001; Dalakoglou 2009). Then just before the age of the IG, neoliberalism saw an explicit passage from state infrastructure provision towards private sector or public-private sector partnerships during the 1990s and 2000s. Arguably, one of the main reasons such public-private partnerships became popular during the 1990s has to do with the collapse of Communism in Europe. The political antagonism between the two systems was probably a good reason for Western states to provide as much as possible to their citizens—in terms of social policy, infrastructures or other provisions. At the same time, the other side of the Iron Curtain had developed quite an infrastructural fetishism, both theoretically but also practically, resulting in a situation where both systems were explicitly competing for the consent of their citizens via their superiority as providers of services and infrastructures (Humphrey 2005; Dalakoglou 2009, 2016a). Indeed, after the collapse of socialism and the new *modus operandi* of the Eastern European world system—neoliberal reforms, strict austerity in social policy and the limitation of state provisions—it was only a matter of time for the market to become a big player in the Western European infrastructural realm (see Dalakoglou 2016b).

We should add here that it was quite common for the private partner to benefit from the public-private agreements, as the representatives of the public sector (politicians) claimed a lack of expertise or knowhow and proposed the technocratic knowledge of the private sector as the key to a more effective, financially and

technologically sustainable form of infrastructural development. The technocrats employed to give such advice often represented the interests of the private sector, or even of specific corporations. Thus, the margins for profit were large and more flexible. Moreover, this explains the creative destruction of material infrastructure, namely, why so many infrastructural projects that were perfectly functional were demolished and rebuilt from scratch all over Europe, especially in the East of the continent, but certainly not only there (Dalakoglou 2013, 2016a; Brekke et al. 2014). The 1990s witnessed the start of what Pierre Bourdieu (1998) had called ‘the utopia of unlimited exploitation’—or growth of the built environment for its own sake—and the sake of the private sector (Dalakoglou 2016b, 2016c). Nevertheless, now that the European public sector needs a hand, after sponsoring private infrastructural interests for several decades, the celebrated ‘invisible hand of the market’ is all too invisible.

‘We are the infrastructure’: from IG to the commons

‘We are the infrastructure; the state and capital failed’, so I was told during my last major period of ethnographic fieldwork in Athens (from December 2012 to September 2014). My insightful informant was a man in his 60s who was involved in the movement for guerrilla urban gardening in the city’s southern suburbs (the Elliniko-Argyroupoli district). This movement has succeeded in occupying parts of a former US Air Force Base, transforming it into a shared allotment with vegetables and herbs. Participants are also actively involved in the appropriation of the old Athens airport, adjacent to the American base, for similar uses.

In the early 2000s, Athens saw the construction of a new airport under a public–private partnership that allegedly favored the private part (the German construction giant Hochtief). Soon the facilities of the

old airport were privatized, and even though its premises constitute a huge plot of land on a beautiful part of the Mediterranean seafront within a European capital city, it was recently sold for a mere fraction of its recommended price—very recently, in fact, as the agreement between the new owner, Lamda Development, and the Greek authorities was only signed on 6 June 2016. However, any potential investor will have to remove the people who make use of this area daily for their walks, cycling and other sport activities. They will also have to deal with the 2000 olive trees planted there as an act of guerrilla urban agriculture, as well as the self-organized social solidarity clinic and other similar facilities that are housed in the old airport’s premises, which aim to benefit the local community. Although they clearly have the characteristics of a radical social movement, the various initiatives located in the old airport attract an enormously diverse range of people; as this is not simply occupation by the usual suspects of the activist community but something well beyond them.

Even if the investors manage to kick out all these people who use the park and their activities, and even if the small private city proposed in the plans is built, the truth is that the whole movement around the old airport of Elliniko is manifesting a shift in the ways that the society imagines its infrastructures and its relationship with the state authorities, private investors, etc. Over time the protests against the privatization of the airport evolved into an elaborate demand for the creation of a self-organized metropolitan park. The proposals formed collectively by activists, local residents and even with the participation of local municipal authorities, involved small-scale, low-cost changes to the landscape, common use of the grounds, self-organized forms of management, etc. This was done more or less in accordance with a model inspired by the de-growth movement, which was already being applied spontaneously, for example, in the form of the self-organized planting of the

thousands of olive trees between airport runways.

Ethnographically, it is worth mentioning that some of those involved often draw interchangeably on the terms of ‘public benefit/good’ (demosio kalo/agatho, δημόσιο καλό/αγαθό) and ‘common benefit/good’ (koino kalo/agatho, κοινό καλό/αγαθό) when referring to their activities. But what appears to be confusion between the terms ‘public’ and ‘common’ is not really that. This interchangeable use of terms is a result of an explicit shift from notions of the public (which is even gaining negative connotations today) towards ideals of a post-capitalist economic paradigm. Although this refers to a novel realm of socio-economic and political practice that is being shaped now, one cannot ignore the rapidly transformed ways that infrastructures are imagined in Greece. Infrastructures changed from a desired or undesired object in the 1970s, to an emblem of absolute materialization of development and progress in the 1990s–mid-2000s, to a symbol of political scandals in the late 2000s and eventually to a domain of social contestation in the 2010s (Dalakoglou and Kallianos 2014, *forthcoming*). The changing ways of perceiving infrastructures came together with transformations in the conceptions of public. Public ownership and expansion of the public sector mutated gradually from a political and social goal in the 1970s–1980s, to something synonymous to the impersonal state and the governing parties, closely related to notions of corruption, social and economic devaluation, etc. Thus, what were once the marginalized practices of a few anarchist groups since the 1980s that were squatting buildings in the cities or premises within university campuses, are gradually evolving today into a new arena of social and political operation (Dalakoglou and Vradis 2011; Dalakoglou 2012). Thus, the everyday use of the concept ‘common’ is going beyond and above the public and remains a word that has mostly positive connotations in contemporary Greece. Common are considered

something that is truly beneficial for the community and not in fake ways, as with notions of ‘public’ co-opted by the state. After all, the entire story of Elliniko occupation is precisely an explicit example of the so-called collaborative commons: principles of access vs. ownership, democratic self-management vs. hierarchical management or environmental sustainability vs. growth are applied (Ostrom 1990).²

Similarly, all around the Mediterranean the refugee crisis which was a sad manifestation of the inability—and lack of desire—of the state apparatuses to mobilize a soft infrastructural system in order to organize some reception and welfare apparatuses saw this IG covered partly by grassroots and self-organized socio-technological emergency mechanisms. In other European countries like Britain we saw other informal networks, for example, families covering the lack of social housing and the privatization of higher education (ONF 2016); even in the Netherlands we see the emergence of self-organized initiatives (Uitermark 2015). Moreover, in the USA we saw the grassroots, self-organized initiative Occupy Sandy not only compensating for public sector cuts in the emergency apparatuses affecting thousands of victims when superstorm Sandy hit the East Coast in 2012, but in fact creating new spheres of social operation (Jaleel 2013). All these phenomena refer to some explicit socio-technological innovations which created a novel domain of operation that went well beyond the state–private–civil society triptych and challenged established models from below and in a critical manner.

Bigger or participatory?

In the everyday life practices that are attempting (and sometimes managing) to overcome the IG towards collaborative and different infrastructural formations, what is primarily at stake is a fundamental transformation of the very essence of social relationships. Although terms like ‘big’ and

‘participatory’ are used by the political leadership in reference to the requested social changes, in fact these are not the precise social transformations that are needed. The Greek and Portuguese examples manifest more correctly the changes required by the current conditions when the political leadership there refers to what in classical social theory (Durkheim 1893) is the determinant factor of social organization: solidarity. Words generally forgotten by European governments for years, words that until recently belonged mostly to marginalized social movements—such as ‘solidarity’, society and the commons—are actively mobilized by official governmental agents under the current state of exception. Certainly, they seem to be embedded within the context of austerity and crisis; so one needs to be very careful not to get things confused as it is a very different kind of solidarity, commons and self-management that people organize and governments intend. However, such calls represent an ongoing shift of historical proportions, and represent the political emergency. One needs to remember that the governing party in Britain, that now is desperately looking not only for society but for even bigger society to rescue the economic system, is the vanguard of neoliberalism in Europe, which 20 years ago claimed that ‘there is no such thing as society’ via its leader Margaret Thatcher.

So whilst the agents of state apparatus seem to understand this as an orchestrated top-down process, as the few examples I mentioned above show, it seems to be something that people across the world have already been putting into practice since the beginning of the crisis. Although there is a series of novel technologies and social techniques related to the so-called sharing, social and solidarity economies or even with the so-called platform capitalism that might potentially help the shaping of these novel socio-technological formations to take infrastructural properties, in principle it is the social dimensions which are the catalyst and have the formidable role. What is at stake is a

radical transformation of social relationships and the mechanisms of social reproduction within current material conditions. In these new conditions, social subjects are learning to act and think of their individual and collective selves, their relationships with those around them, as well as with the state and its infrastructures in novel ways. What we are dealing with, therefore, is a set of purely ethnographic and explicitly anthropological, and sociologically qualitative questions. These questions address new forms of identity, new forms of social bonds and social action that are being shaped or have to be shaped under the current circumstances, in which both the state and the market are abandoning a number of realms where they have traditionally operated. This new social activity operates within novel and innovative realms that challenge other traditional divisions such as the ones between the private and the public, the material and the social or soft and hard infrastructures, the digital and the analogue, the political and the social, etc. And indeed all this shift is of crucial importance in the case of Western Europe, where the relationship between citizens and infrastructures was—until recently—taken for granted in most cases.

Greece

Several leading scholars agree that the Greek debt crisis and its consequences constitute a radical version of the wider shift in the state’s apparatuses across all of Europe (Habermas 2012; Giddens 2013; Bauman 2013; Sassen 2015; Zizek 2015). Ethnographic and other empirical research (see Dalakoglou et al. 2014) supports this argument. However, if Greece became the place used as the bad example of the euro-crisis, which had to see its entire polity and economy structurally adjusted and dissolved, it is also the place where people resisted and reacted to the adjustments in some of the most innovative ways, involving solidarity and the shaping of new forms of collaborative commons

(Dalakoglou and Angelopoulos 2017). So there are already explicit signs of the shifts in the forms of governance but most importantly in the social affordances of the key infrastructures (Dalakoglou and Kallianos, *forthcoming*).

There is a proliferation of mass grassroots practices and relationships that represent a reaction to the top-down contestation of the previous infrastructural paradigm, but at the same time they further challenge this paradigm and its stakeholders (state and market) from below. Such innovative social practices, which exhibit mass participation, comprise the first steps towards creating new realms of civil and social engagement that are directly relevant to key infrastructural functions (Dalakoglou and Kallianos, *forthcoming*). For instance, apart from the above-mentioned old airport of Athens, where a transport infrastructure has mutated into common urban greenspace, one can mention the following examples.

In response to the decrease in the Greek state's public health expenditures, 42 self-organized clinics and pharmacies have started operating across the country since 2010. In July 2015, each of the 16 newly founded clinics in Athens had an average of 2500 visitors per month (Solidarity4All 2015).

Concerning the administration of the water and sewage system in the second largest city of the country, Thessaloniki, a campaign against privatization evolved into a demand for common control of water provision networks. Apart from direct action tactics, which among others included worker disobedience (e.g. the refusal to cut off the water supply to households that could not afford the bills), WaterSOS saw the majority of the electorate of the city participating in a self-organized referendum (June 2014) that saw an explicit majority turn against the privatization of the municipal water company; a fact that resulted in a halt to the government's plans.

In the area of public broadcasting, the government shut down the state's television

channels and radio station in 2012 in order to reopen a more financially viable company. However, broadcasting facilities all around the country were occupied and have been functioning under the employees' self-management, with some of them operating under self-management right until the reinstatement of the previous public company in 2015.

As far as urban waste management is concerned, the first major political clash after the signing of the loan agreement between the Greek government and the 'Troika' concerned the government's decision on the administration of the capital's waste products in the area of Keratea. This is an ongoing battle that has been raging on multiple fronts. It is a process in which communities are claiming full participation in decision-making and where the cooperative and social economy sector comes up with successful proposed solutions.

The administration of the highway system is another contested area, as its privatization and the deceleration of private and public investment saw over 150,000 drivers refusing to pay tolls in 2010, thus forcing state authorities to implement special legislative measures.

Beyond the social movement domain, but with equally important social potentialities, lay the decentralized private micro-production of solar energy that skyrocketed during the crisis, with small units on rooftops and in open fields. Many thousands of Greek citizens have interests in this market, and with recent emergency changes in the legal framework that governs this energy micro-production, the attempts of producers to organize themselves in associations have drawn on some radical discourses challenging the prevalent model in this market.

Last but not least, and not necessarily directly related to the IG, but closely related with the newly emerging realm of socio-technological activity that goes beyond the state-market-third sector triptych is the expansion of social, solidarity and even sharing economies. So food

production and circulation systems were contested from the 45 self-organized ‘without middlemen’ networks. There are 45 such networks today with 26 in Athens. A survey of GSEVEE (small and middle businesses association) for 2012 showed that 22% of Greek households were eating food that comes from ‘without middlemen markets’. The average number of food producers participating per distribution was 23, and the average number of users per distribution was 655 (Solidarity4All 2015, 21). Beyond the markets, there are also the emergency self-organized food distribution networks. In September 2012, there were 12 such food-solidarity initiatives. The households supported in 2013 were 1987, while in July 2015 the number reached 5600 (Solidarity4All 2015, 19).

Within the same context one should talk about the wider alternative economy of grassroots self-organization that grows based on all these networks, their inter-connections and interactions. Initial pilot research suggests that in 2012 there were circa 200 self-organized networks providing services and goods in Greece, while now it is estimated that these have doubled. There are over 110 social economy and self-organized initiatives (e.g. barter economy webs, time banks, alternative currency nets, etc.), while more than 300 workers’ or consumers’ co-ops are active. Among these co-ops some big ones like the chemical factory of VIOME, which has operated for some years now under workers’ control, and the second largest newspaper in the country during the 2000s which also functions under workers’ control (*Efimerida Syntakton*). Indeed, some of these new producers’ co-ops now also organize an international network of product distribution (exports) (Solidarity4All 2015, 22–23).

Conclusions: anthropology and infra-superstructures

Both state monopoly and public–private partnership paradigms in the governance

and development of infrastructures—in the case of Europe at least—are coming to an end as we knew them. The paradigm is shifting with a formidable effect on all spheres of everyday life. In several cases where new paradigms are potentially already emerging, we are witnessing them being based on novel social response and innovative socio-technological action. On the one hand, this action contests the existing paradigm—which is collapsing from within—and on the other it simultaneously produces new paradigms of infrastructural organization and provision. However, this is an ongoing process that needs to be understood as a project of thick ethnography from this early stage in order for us to be able to grasp the ongoing qualitative changes in the social relationships and produce effective new theoretical frameworks and analyses that will allow us to redefine the notions of infrastructure, but also notions of collective action within the new condition.

Anthropology touched upon infrastructures and their theoretical potentialities for the discipline in the 1960s and 1970s (e.g. Harris 1968; Godelier et al. 1978). Although the anthropological approach to infrastructures has always been distinct, these first infrastructural perspectives still drew upon the classical materialist social theory. As a result of this genealogy, infrastructures have commonly been considered, within social sciences, to be primarily connected to the material, economic and political spheres, rather than to the social one. This ‘anti-social’ understanding is reflected in ideas about infrastructures as stable and neutral technological systems leading to an everyday experienced normality that is so prevalent in the European infrastructural ideal. However, what the ethnographic approaches to infrastructures of recent years are showing is that if such ideas are ever relevant, they are mostly relevant in very few contexts, usually among the privileged global classes or in places with explicit infrastructural fetishism like post-socialist frameworks (Simone 2004; Edwards 2003, 188; Larkin 2013;

Dalakoglou and Harvey 2014). In places where people are experiencing disruptions in infrastructural networks, infrastructures are much more ‘visible’ and are perceived as social and much less neutral technological elements (Dalakoglou 2009; Chu 2014; Dalakoglou and Kallianos 2014).

At the other end, more recent work suggests that lack of reliability is always embedded in infrastructures (Dalakoglou 2009; Soppelsa 2009), yet it often just becomes more apparent during times of crisis. The fragility that characterizes infrastructures is also reflected when, for example, one studies ethnographically the people behind the production of infrastructures, such as engineers, as they almost always take the unreliability of infrastructures as a given element of the process (Harvey and Knox 2011). Indeed, one could argue that such practices could potentially simply be ‘black-boxing’ by experts and specialists in an antagonistic relationship between technology practitioners and politicians on the one side, and common people on the other (Star and Bowker 2006). However, these roles of expertise might be imaginary, as it is not a rare phenomenon for the experts to be absent from the actual production and daily function of infrastructure systems, which instead function thanks to the work of mundane low-rank, skilled or unskilled agents (Dalakoglou and Kallianos 2014, forthcoming).

All the above echoes a relatively banal but relevant statement: infrastructures are *socio-technological* elements that tend to embody ‘congealed social interests’ (Graham and Marvin 2001, 11; Graham 2010, 13). Although it is a cliché, if this statement becomes a parameter for the approach of IG, a unique window to a major theoretical paradigm shift is opened. Within this context—to put it schematically—soft and hard infrastructures do not produce socio-cultural superstructures, but socio-cultural superstructure produces infrastructural formations. So what are primarily social processes such as sharing, peer-to-peer

production, ideas of the commons and solidarity are becoming the new force behind the organization and function of novel forms of infrastructures. Nevertheless, things are complicated. Such an approach to an extent attempts to turn the classical materialist scheme on its head, and opens up a series of very crucial questions that need to be answered. For instance, what are the relationships between soft and hard infrastructures under current circumstances, and what can we potentially learn about covering the IG of hard infrastructures by the way that soft IG is covered? This also opens up to potentialities of a new radically different definition of infrastructures which needs to study and take into account at least two parameters which mutate infrastructure during the crisis in Europe: first, as realms of social and political contestation—with a focus on hard infrastructures within the context of crisis, economic meltdown and political implosion; and second, as sites of socio-technological innovation with the potentiality of articulating new and alternative governance and socio-economic networks focusing on grassroots structures and self-organized initiatives. For the first time in recent Western history, we are also witnessing the pragmatic and theoretical potential of infrastructures not only to be run by the people themselves, but to become a new type of socio-centric, socio-technological hybrid forums and agoras (Callon, Lascoume, and Barthes 2001).

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Notes

- 1 As I have argued elsewhere, infrastructures' development and the regime of border securitization of the EU are two closely related phenomena since they comprised two dominant spatialities of the years of Euro-boost (Dalakoglou 2016c).
- 2 Certainly the political economy of the collaborative commons is more complicated than that, see, for example, the three types of commons proposed by Kostakis and Bauwens (2014).

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