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GEOGRAPHIES OF EXCLUSION IN 'SMART' TOURIST PLACES. TOWARDS A CRITICAL RESEARCH AGENDA

Antonio Paolo Russo, ***Rovira i Virgili University*** **& Josep Antoni Ivars Baidal,** ***University of Alicante***

Abstract

This chapter moves from a review of the state of the art about smart city imaginaries, strategies and agencies, to develop a critical framework to analyse how 'smart' plays out in tourism places. The mobilities literature is used in this sense to identify pitfalls in the quest of 'smartening up' cities for tourists. Who wins, and who loses, in the contestation over common goods and urban resources vis-à-vis the enabling power of technologies, and where does the interest to advance into 'smart' territory comes from in tourist places? Drawing from examples of a Europe-wide assessment of Smart City genealogies and objectives, and taking in some concrete example of expected impacts of Smart City projects in Barcelona, we develop a discussion about 'smart' tourist places in relation to social inclusion, which is concluded nuancing a number of lines of future inquiry into the social geographies of 'smart' (tourist) places.

Keywords

Tourism; smart cities; technology; agency; mobilities; social inclusion

1. Introduction

Contemporary cities are facing, now more than ever, a key challenge for social inclusion, which is the transition from being sites of residence and work for stable, delimited communities, to being dwelling places for mobile populations. The challenge resides mainly in traditional social structures - characterised as 'stickier' or less mobile resident populations - not being able to cope with emerging forms of liquid, transient place uses, and losing control and access to their habitats. Possibly, this is a consequence of the sheer dimension and diversity of temporary populations, characterised by a material and economic power over urban resources that outcompetes that of less motile and adaptive populations, inhibiting their social reproduction. This chapter tackles the geographies of mobile empowerment stemming from the widespread adoption of digital technologies in tourist places: 'smart destination' systems are thus connoted as enabling sociotechnical regime, widening the access gap between resident and visitor communities.

This conceptual approach subscribes to the 'mobilities turn'. This "conjunct of questions, theories and methods" (Sheller & Urry, 2006) emerged in the early 2000 to denote an epistemological shift in the social sciences from society as *sedentary* towards a paradigm in which it is conceived as inherently mobile, and towards an understanding of social phenomena that is inextricable from that of the movement of people, objects and information. The mobilities turn clarifies that no place can be analysed, let alone managed, as a discreet and objective entity

ontologically separated from the mobility flows that define it, destabilise it, and ultimately continuously transform it (Smith & Hetherington, 2013, Dredge and Jamal, 2013). It thus invites us to engage in the analysis of mobilities to get a grip on place genealogies: what place is and means at any given moment in time, what it looks like and how it is represented, how it changes, depends critically on the mobilities that operate in it; at which scale they operate; how they connect, shield off or feed one another and with fixed elements; which power relations are played out in the negotiation for moorings; and how people, objects, technology, capital and knowledge are dynamically related in such process.

This approach makes better sense of the local-global interdependencies and takes in the intrinsic tensions between democratic representation (based on constituencies that are 'sedentary', i.e. spatially fixed) – on which traditional approaches to urban management are based – and populations of place users that are increasingly mobile, unstable, and fluid. Not only mobilities are per se a highly politicised matter, but they subsume a geometry of power-forces which are clearly stratified along class, gender, ethnic, physical condition etc. lines, as clarified among others by Cresswell (2010). For instance, the bargaining power of white skilled migrants, western (male) tourists or the elites of corporate travellers for the use of urban resources (housing, services, public space) can be greatly superior to that of resident populations, that are often shielded off from their use (Ryan & Mulholland, 2014; Conlon, 2011).

The preoccupation for the material and economic hindrances faced by sectors of the resident urban communities in tourist places has been heightened in the debate on overtourism (Milano et al., 2019) that has taken over the research agenda in the 2010s, and more recently, by the uneven immobilisations that have characterised overtouristed places during the COVID-19 CRISIS (Adey et al., 2021). The epistemological lens of mobilities invites to decipher the processes through which mobile populations become hegemonic in the (re)production of spaces of inequality and injustice. Indeed, overtourism hints at the result of intensification of the global mobility of people during the last decades and at their effects on localised social and environmental structures, which the ongoing transformations of 'ways to be mobile' and dwell – albeit temporarily – in places, defines as a whole new problem field for social cohesion and urban sustainability.

The technological enhancements of mobility management systems and services widely pursued by the travel and tourism industry – frequently part and parcel of Smart initiatives – may well be a key dimension of the transformations under scrutiny. Mobilities are tightly knit with digital technology: not only as enabling infrastructure for large-scale human mobilities, but also as agency and structuring device of the connections (physical, mental, social, financial) which drive them (Williams et al., 2008). Hence, digital systems facilitate the anchoring of mobilities and provide enhanced access to place and its 'moorings', for instance abating the cognitive barrier between travellers and unfamiliar spaces (Line et al., 2011), or assisting the establishment of social relations at destinations (Kwan, 2007). A main concern of this chapter is indeed that the widespread gains achieved by the introduction of ICT as enabling technologies for navigating the city, which evoke an ideal of emancipation and democratisation of travel, may result unsettling for less mobile collectives in the contest for urban resources, and in particular for vulnerable, dependent groups. Urban destinations may be becoming 'smarter', but it is still to a large extent to be proved how this represents an overall improvement for resident communities – and indeed the preoccupation that negative effects are prevailing is high.

These lines of research nuance a critical geography of the smart destination (SD), bringing out conceptual complexities and policy entrenchments, which to some extent represents a counterpoint to the hegemonic characterisation of smart initiatives in public and policy discourse, and also the methodological challenges which should be taken up in smart cities/destinations that aim to remain inclusive.

2. Social exclusion in tourist places and mobilities as epistemological lens

Social exclusion entails the marginalisation from the labour market, democratic and legal systems, welfare provisions as well as from family and community systems of individuals (Atkinson & Davoudi, 2000: 440). Such exclusions may stem from unbalances in representation and redistribution, and they are ingrained to processes of social and place change driven by endogenous or exogenous factors. The growth of tourism activity can be considered one such drivers, reflecting both the exogenous dimension of the rising international mobility of people and the endogenous factors through which such mobilities attract, order and fix such mobilities in the geographical spaces of destinations.

A rich stream of literature in various related disciplines has tackled the unbalances, contradictions, borderings, ideological entrenchments and also material hindrances through which the benefits of tourism accrue widely unevenly to local communities, reproducing or exacerbating social exclusion. These include place-based impacts (Agarwal & Brunt, 2006; Mordue, 2005), gentrification (Zukin, 2008; Wachsmuth & Weisler, 2018), gender representations (Aitchison, 2001), social innovation (Novy & Colomb, 2013) and the marginalisation of vulnerable sections of the population – such as people with disabilities (Small & Darcy, 2010) or low-income families (Minnaert, 2012).

As these various strands of research suggest, tourism – and mobilities more widely – have deep social and territorial consequences, manifested as relational processes through which privileged and underprivileged groups, characterised by differential material, cognitive and economic capacities, come together in (tourist) space and transform it through their agency, resulting in a constellation of hegemonies and exclusions. Cities – and especially city centres as urban tourism destinations' – are possibly the socio-spatial arenas where social diversity is most complex and dynamic, the velocity of change and adaptation higher, the results in terms of social in/exclusion most dramatic. Cities attract multiple flows of people (migrants, workers, commuters, tourists, local visitors, social relations), objects (vehicles, goods), information and capital, each one being enmeshed to, driving or constraining the others. The continuous re-articulation of such relationships through agency, political action and technological innovation comes to determine and transform the physical layers of the city and its socioeconomic fabric.

On the one hand, tourism may change the social morphology of cities through gentrification and touristification processes, hindering local – and more prominently less well-off – communities from accessing services of basic interest in core urban areas. On the other hand, tourism's financial and infrastructural barriers prevent less advantaged social groups from enjoying the benefits of recreational mobility. While not all forms of mobilities are privileged and have the same power of agency, and even within tourism mobilities there are huge variations in terms of social status, consumption power and access, the literature embracing mobilities as a field of performance and practice invites to look beyond class struggle at the way in which space becomes adapted to mobile lifestyles and biographies including some and fending off others. For instance, low-cost tourist enclaves and nightlife clusters may result very attractive for visitors on a low budget and offer residential opportunities for low-salary and precarious mobile workers, at the same time repelling middle-class residents, while exclusive commercial areas or prestigious city centres may be enticing for middle-class residents and lifestyle migrants but unaffordable for or low-budget visitors.

Thus, it is important to look at how the production of urban inequalities (rent gaps, social and spatial polarization, exclusion from employment, etc.) may be reframed in terms of mobilities. Manderscheid (2009) suggests that the study of the (re)production and contestation of urban inequalities cannot escape the mobilities dialogue: "mobilities (…) constitute a significant stratifying force through which unequal life chances are being continuously reproduced" (p.7);

and “conceptualizing inequalities as emerging from power relations shaped in multiple social spaces opens the appreciation of their contingent (but not arbitrary) as well as political character” (p. 11).

The notion of access to activities, values and goods has been the main way in which mobilities have entered the debate of social stratification and inequality (Urry, 2007). However, Urry argues that the focus of the analysis should be the social consequences of such mobilities, namely, to be able to engender and sustain social relations with those people (and to visit specific places) who are mostly not physically proximate. While there is an observable increase in socio-economic polarisations within most (western) countries, and most notably within the EU, traditional accounts of such trends are frequently framed by a national perspective, which understands societies to be territorially bounded. Yet, a focus on urban inequalities needs to take in the spatial as well as the social interconnectedness between the analytic entities. Furthermore, Manderscheid (2009), quoting Jiron (2007: 49 ff.), warns that “the mere focus on the distributional side of inequalities – in urban studies mainly on residential segregation – is not sufficient to understand the whole complexity of (urban) inequalities, because it leaves aside their everyday living implications and the daily practices of movement allowing access to resources, markets, institutions, social networks and other options”. In other words, if social relations, capitals or resources nuance specific spatialities, access to – or appropriation of – such capital rests on the distribution of power between unevenly empowered mobilities; which, in turn, require the disposition of certain resources, such as economic capital, and the necessary knowledge, capacities and skills (Cass et al., 2005). In order to understand the mechanism of reproducing social inequalities by means of mobilities, or, as Urry (2007) phrases it, “how these multiple mobilities do in fact make a difference to the contemporary nature of social stratification, to entering the gates of heaven or hell” (p. 187), further empirical investigation is needed.

Manderscheid (2009) then sets out to suggest various research strands that fully accommodate the mobilities debate. For instance, she invites to consider the frequently mentioned relationship between movements and fixities, analysing, along with Adey (2006), the material and social moorings to which mobilities become ingrained in place, and the impact of the infrastructural frame on the degree of polarization within space. In the light of the previously illustrated concepts, ICT are also conceived as mobile infrastructure and foundations of a sociotechnical urban regime: digital technologies transport (knowledge, capital), connect, enable and anchor other (physical) mobilities, they order social spaces (for instance, through age, skills or connectivity divides), and they travel themselves – as product, political project or system. For this reason, framing our understanding of ‘smart city’ through a mobilities approach goes some way towards problematising the agency of ICT in relation to social exclusion.

In the next section, we turn to look at how ‘smart’ has taken over the agenda of urban planning and management, nuancing a new playing field for the agency of tourism in urban change.

3. Tourism, cities and smartization: a confusing relationship

The relationship between the smart approach and tourism is progressively being shaped from two perspectives: the impact of digitalisation on tourism activity and the Smart City as a new paradigm for urban management. The wide influence of technological developments in tourism has opened a new paradigm of operation and value-generation for the tourism industry, defined as ‘smart tourism’ by Gretzel et al. (2015) through the following characteristics: integration of the physical and digital world; use of ubiquitous technologies (mainly mobile devices) throughout the entire travel cycle (inspiration, booking, purchase, stay at destination and post-trip); harnessing new sources of data, including information from a variety of sensors; generation and exploitation of big data; replacement of the traditional value chain, exemplified

in linear distribution (supplier-travel agency-consumer), by complex ecosystems that include the emergence of new players as digital platforms; and increasing co-creation of experiences mediated by technology. The disruptive nature of smart tourism, whose rise can be situated around 2015, brought forward a new scenario for tourism management that finds a useful reference in the emerging paradigm of smart cities (Ivars et al., 2019). In fact, it seems clear that the concept of Smart Destination is largely derived from that of Smart City. However, the relationship between the two concepts is unclear, as is the role of tourism in smart city initiatives.

Because smart city models are diverse and evolving, it could be argued that the singularity of tourism is not well resolved in the main theoretical constructions of the smart city, probably due to its specificity and transversal nature, when it is an activity with an unquestionable territorial and socio-economic impact on urban environments, especially in the period of expansion of demand prior to the emergence of COVID-19. Giffinger et al. (2007), in one of the first theoretical formulations of the smart city based on a system of indicators, include the "Touristic Attractivity" factor in the Smart Living dimension (Quality of Life), paradoxically one of the aspects that is affected in neighbourhoods with greater visitor pressure, and do not consider other tourist variables related to the dimension of mobility, economy or environment. This situation is replicated in international standards for smart and sustainable cities (International Organization for Standardization, ISO; International Telecommunication Union, ITU; European Telecommunications Standards Institute, ETSI), and Smart City assessment tools and ranking systems based on indicators, where tourism is attributed a marginal role (Ivars et al., 2021). More importantly, in the practice of urban and tourism management, there is, in general, a dissociation between smart city initiatives and tourism governance.

In this context, the Smart Destination has emerged as a differentiated approach adapted to the needs of tourism management, especially in those urban environments with a greater weight of tourism in their economic structure. Yet, just as the Smart City is subject to controversy in its conception and implementation and to different critical interpretations, the Smart Destination can be considered a fuzzy concept, also used in a rhetorical and propagandistic way by corporate or institutional interests (Gretzel and Jamal, 2020), because it lacks empirical and theoretical clarity (Gelter et al., 2020).

A number of consolidated institutional projects of Smart Destination (SD) development can shed more light on these inconsistencies. The network of smart destinations of Spain, which emerged as a pilot project in 2012 and currently brings together more than 400 destinations, has served as an international benchmark, mainly in Latin American countries such as Mexico, Argentina and Colombia. The destinations that make up the network develop an action plan based on five axes (governance, technology, innovation, accessibility and sustainability) and a system of indicators used for an initial diagnosis and subsequent monitoring of the development of the smart strategy. At European level, the Capital of Smart Tourism initiative integrates three similar categories (sustainability, accessibility and digitalisation) and includes cultural heritage and creativity. Other institutional initiatives can be seen in Asia, in countries such as China or South Korea, where ambitious government-led smart city development programmes are being implemented that also include smart destination projects, mainly focused on the application of new technologies, like Big Data, Internet of Things or Artificial Intelligence for the improvement of the tourist experience and a more effective marketing that reinforces competitiveness.

In any case, the integration of tourism into the Smart City strategy is an unresolved issue: a problem that can be extended to the difficulty of integrating tourism into the urban model in contexts of observed negative social impacts of the pressure of the visitor economy and tourism-related mobilities, and which has led cities such as Amsterdam or Barcelona to re-evaluate their dominant tourism development and promotion models. In this sense, Gretzel & Koo (2021) advocate the use of technology to manage the mix of work, leisure and mobility activities that

overlap in urban spaces through the Smart Tourism City concept, a new model of governance in which the postulates of the smart city and the smart destination converge. Compared with existing conceptions of the Smart Destination it has a more holistic scope, whose primary focus is not on residents (as in the original epistemology of the Smart City) or tourists (as in the hegemonic operational developments of the Smart Destination).

The 'capacity to be mobile' or motility involves access to different forms and degrees of mobility; competence to recognize and make use of access; and appropriation of a particular choice' (Kaufmann et al., 2004: 750). Arguably, most SD domains are oriented at augmenting the motility of visitors; they can access information and services from digital platforms, reassemble them according to their needs, situate themselves in 'unfamiliar' spaces as consumers just like any other 'permanent' citizen, and in turn diffuse this information in 3.0 channels, influencing the choices of other city users. In short, the presence and mobility of tourists in cities, once bounded by prescription and regulation, is today not substantially discernible from that of citizens; however, their power of negotiation over the city's spaces and resources can be far superior. Empowered visitors resituate the 'dominated', slow sectors of local urban societies, which, per se, represent a stratification which analyses of social exclusion needs to bring to light.

The analytic toolbox of mobilities can be deployed to further excavate the role of ICT-enhanced or 'smart' tourism in the social ecology of contemporary cities, tackling in particular the relational nature of tourism with respect to the situation of all other economic agents operating in the destination. The literature depicts a more knowledgeable and connected visitor as an urban explorer, who is likely to use residential and everyday spaces as moorings of his/her urban experience. For instance, a clear trend to prefer accommodation in private homes as an integral part of such urban experience has been observed by the burgeoning literature on p2p hospitality, highlighting in particular how the tourist activation of everyday spaces through digital platforms (and their algorithm based recommendation systems), such as homes and commercial spaces, represents a key shift in the scale, reach and effects of traditional processes of population change (López-Gay et al., 2021), inducing notable socio-spatial stratifications (Celata et al., 2020; Goyette, 2021; Ferreri & Sanyal, 2022).

Hence, a critical approach towards the planning and consumption of technology linked directly and indirectly to mobilities draws new geographies that adapt to the dynamics of the growing support of such flows (tourists and what goes with them: workers, lifestyle migrants, investments, etc.) rather than the interests of a resident community, and more sedentary groups within them, inevitably producing a clash between new and old livelihoods and ways of life.

4. The nature, scope and ambiguous social impacts of Smart initiatives

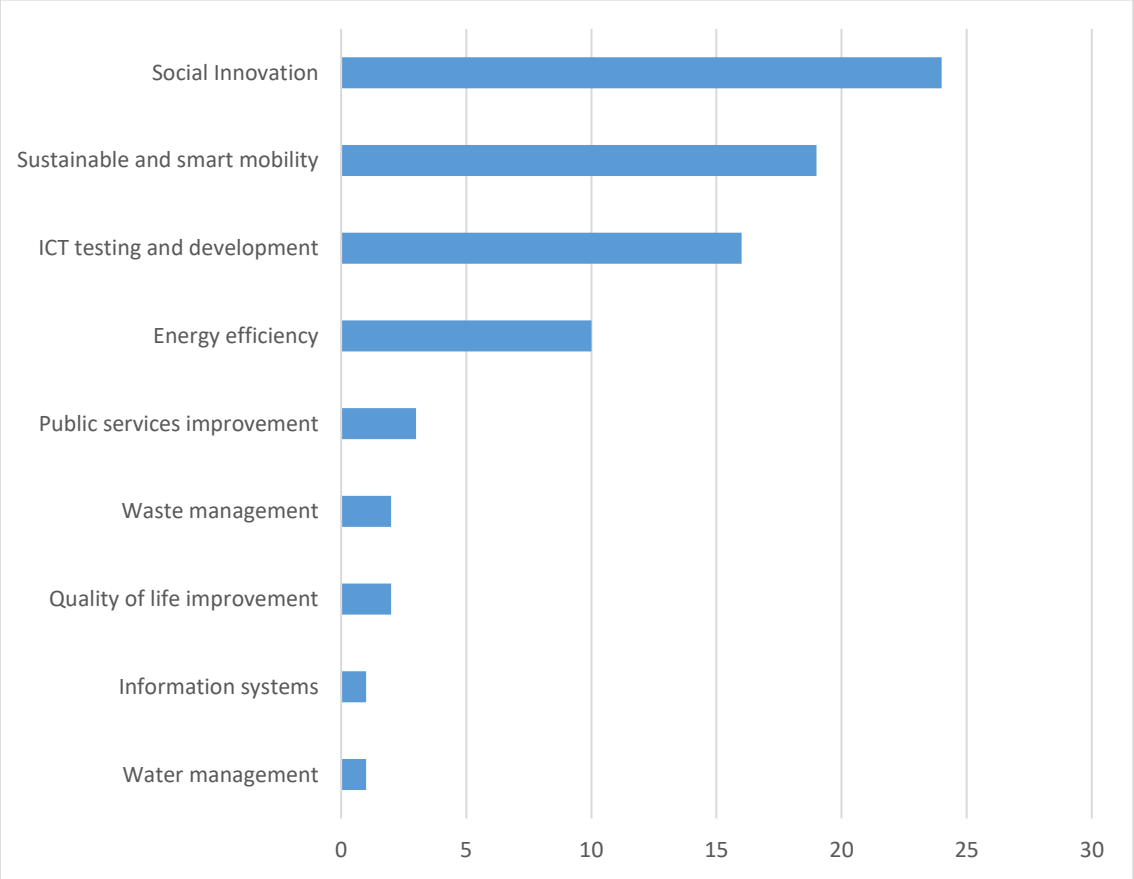
The deployment of data-driven digital services, core components of smart tourism and thus at the bases of the operational development of many Smart Destination initiatives, has on one hand favoured the sheer growth of tourism mobilities and on the other, more remarkably, facilitated their mooring at destinations, abating cognitive and material barriers in their 'contest for urban resources'. Thus, digital-empowered tourism may be seen to contribute to the processes of social exclusion mentioned in Section 2. In contrast, the Smart Tourism City concept would seek to exploit the benefits of digitalisation and correct the negative impacts caused by the intensification of inter- and intra-urban mobility. However, public action is not neutral, and its effects may not be balanced between improving destination competitiveness and tourist experience, and preserving the quality of life of resident populations. For this reason, it is interesting to examine the fundamental purpose of smart initiatives 'in the real world' and their relationship with processes of social inclusion and exclusion.

The lack of conceptual accuracy around the Smart City and its diverse adoption orientations across cities make it awkward to measure the full range of impacts expected from smart

initiatives, and analyse how they balance out from a social perspective. For this reason, a place diagnostic looking at emerging geographies of social exclusion requires closer scrutiny of the type and effects of smart initiatives implemented, that have the capacity to directly or indirectly influence practices and patterns of tourist consumption and mobility. We are using here recent evidence from the SMARTDEST project[1], using information on such programs developed over the last decade (2010-2020) from different databases and official information available online for a relevant characterisation of eight European cities: Amsterdam, Barcelona, Edinburgh, Jerusalem, Lisbon, Ljubljana, Turin and Venice.

Figures 1 and 2 show the distribution of European smart city projects and smart tourism initiatives at local level according to their main focus. The 78 smart city projects selected are distributed unevenly by city, with a couple of cities with well-established smart strategies, such as Amsterdam and Barcelona, accounting for 61% of the projects, followed by Lisbon and Turin (32% of the total number of projects) and the rest of the cities considered. These differences demonstrate the different degrees of implementation of smart strategies and the inappropriateness of referring to smart city policies as a uniform phenomenon (Birenboim et al., 2022). Even in a more detailed analysis, changes in the orientation of smart policies in the same city can be observed. Barcelona illustrates this reorientation by moving from a stage assimilated to a top-down model with an emphasis on technology and economic development (2011-2015) to a smart city approach more focused on technological sovereignty, social innovation and digital democracy, promoted by a new left-wing local government from 2015 onwards.

Figure 1. Distribution of smart city projects by main focus. Own elaboration of data collected in the SMARTDEST project (2022)



[1] Cities as mobility hubs: tackling social exclusion through "smart" citizen engagement (H2020, ref. 870753).

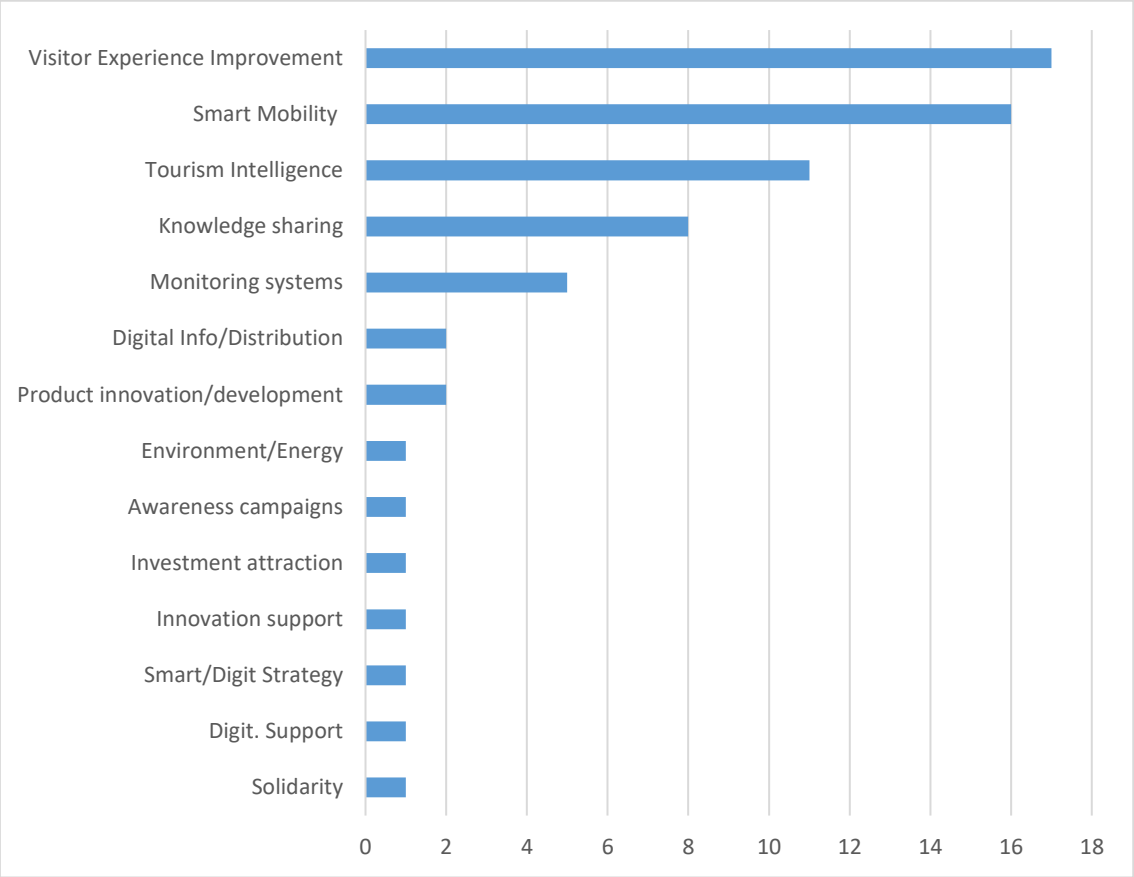
This evolutionary perspective is also relevant in the focus of the projects examined, since at the beginning of the decade, technological, mobility and energy efficiency projects predominate, in accordance with the programmes promoted by the European Union, while social innovation projects progressively grow to become the most numerous. Projects classified as social innovation include initiatives related to open innovation, entrepreneurship and social participation in the regeneration of urban areas. In many cases they are developed in the format of Living Labs, a trend that has been used to counter criticisms of the neoliberal, top-down approach to smart cities in order to reposition smart initiatives as being citizen- or community-centric (Cardullo, 2021).

Projects related to intra-urban mobility integrate a remarkable set of initiatives that combine the smart and sustainable perspective, through the application of a user-centric approach (use of data and mobile applications, participatory processes in pilot neighbourhoods, shared mobility or mobility as a service developments) and the reduction of the environmental impact of mobility (electric vehicles, alternative modes of transport, etc.). The projects most directly related to ICTs stand out for their experimental nature and the establishment of infrastructure and connectivity networks that enable the measurement of different types of urban parameters and open up new possibilities for the provision of services to citizens or support for open innovation initiatives. Finally, environmentally oriented projects (energy efficiency or waste and water management), with application generally at district level, tend to converge in the paradigm of the circular economy in which the city of Amsterdam stands out.

Smart initiatives tend to be more participatory and inclusive, including programmes such as Techconnect in Amsterdam aimed at increase equity in the technology labour market and make tech education and jobs accessible to everyone. However, views critical of the citizen-centric approach to the smart city as a neo-liberal idea highlight the limitations of citizen participation. The bias in favour of tech savvy citizens seems clear, as well as other effects that deserve to be investigated, such as the concentration of actions in central city neighbourhoods or alternative mobility services that may contribute to aggravate gentrification processes.

As far as smart tourism initiatives are concerned, it is worth noting that the degree of coordination between smart city strategy and tourism governance is relatively low. Furthermore, although five of the cities analysed can be considered to have an active smart city strategy (Amsterdam, Barcelona, Edinburgh, Lisbon and Turin), none of the cities link their tourism governance to a specific smart strategy based on the smart destination concept, which does not exclude the development of initiatives that can be assimilated to smart projects, which are the ones considered in this section. Figure 2 shows the prominence of initiatives aimed at improving the tourist experience through various technologies (information systems in real time; tourist service booking platforms; smart cards; mobile applications; immersive experiences through virtual and/or augmented reality; information on routes or urban areas through sensors, generally beacons, etc.).

Figure 2. Distribution of smart tourism initiatives by main focus. Own elaboration of data collected in the SMARTDEST project (2022)



Together with the improvement of the tourism experience, tourism intelligence and monitoring systems as destination management tools are a key area of action. These initiatives are aimed at greater efficiency, predictive capacity and personalisation of digital marketing, but they also make it possible to prevent and manage the impact of tourism on processes of social exclusion through crowd monitoring systems in public spaces, systems to control the supply of unregulated accommodation, or the development of online awareness campaigns to improve the behaviour of tourists. Knowledge-sharing projects are usually connected to tourism intelligence and to the intensification of cooperation between destination stakeholders, a premise of smart destinations that is underdeveloped, with the exception of initiatives brought together by DMOs, a central actor in tourism governance whose role is subject to review in the cities most stressed by tourism, given the need for a tourism policy more integrated into urban management and oriented towards an increasingly selective attraction of visitors.

Yet the question of how social inclusion plays out in those system is more complex, and in fact extends to any contexts in which smart city is developed (not just tourism places), if the relational, multi-scalar approaches advocated by Manderscheid (2009) introduced before, or Ohnmacht et al. (2009), is taken seriously. In this regard, Graham and Marvin (2002) have first pointed out how a narrow, technocratic focus of the concept of Smart City may lead to an underestimation of the possible negative effects of the development of the technological and networked infrastructures needed for a city to be 'smart'.

The exploration of the potential entanglements of 'smart' with social inclusion at destinations needs to be contextualized against the geography and evolution of urban destination. As a way

of example, we include here an identification and delimitation of projects, policy programs or corporate initiatives implemented or currently in development in the city of Barcelona, which have variously justified the high position of this city in different rankings as Smart City, Smart Destination or attractive destination. Thus, Table 1 presents an outline of different domains of SD, specific projects and initiatives, the agents involved and the expected outcomes from their adoption, also highlighting the adverse effects these could have on social inclusion. We must note that some of these initiatives are not necessarily implemented as part of broader smart city strategies and fall outside of the initiative of local administrations; nevertheless, city or regional governments may provide an 'enabling environment', for instance adapting regulation frameworks and legal barriers, or providing the necessary digital infrastructure.

The design and impacts of these systems and their evaluation in terms of social inclusion and inclusiveness should have a way to analyse and balance the type of effects registered (or anyway announced) in the last three columns of the table. Effects on user satisfaction and resource or system efficiency should be generally on the positive side, and however they will resent of the level of digital inclusion which may prevent at least a part of the 'local' users to compete on the standards which are generally attainable to the visiting and mobility-empowered population (Brandajs, 2021). In particular, it was analysed in work currently under review (SMARTDEST, 2022) how neighbourhoods of Barcelona where the supply of smart mobility services has been more abundant are those that are characterised by the most intense dynamics of population change in years following the implementation of these plans, with low-rent households generally displaced to other neighbourhoods. Such effects, which may unfold in distinct socio-spatial contexts according to a geography of exclusions also mediated by labour conditions, nationality and age cohorts, should be taken in full consideration and be tackled possibly in other domains of urban policy (for instance urban planning or housing policy) which can still benefit from a certain degree of 'smartification' and distributed governance.

Table 1. 'Smart' projects and system initiatives in Barcelona, involved agents, and expected effects. Source: own elaboration

DOMAINS OF 'SMART DESTINATION'	AGENTS	SYSTEMS (reference to projects)	EFFECTS ON VISITORS' EXPERIENCE AND SATISFACTION	POTENTIAL EFFECTS FOR CITIZENS INCLUSION / DESTINATION COHESION	
				Positive	Negative
SMART MOBILITY	Public and PP transit providers, Transport companies, Parking managers	Flexible routing of public transport according to user demand (LIVE, MOBIlus Driverless metro)	Facilitated use of public transport for visitors	Diminished use of public cars by visitors, reduced queues, better internal accessibility	Increased visitor pressure on public transport system in core 'tourist areas'
		Road and access pricing schemes for non-resident vehicles (DUM Area, Connected Urban Car)	De-crowding of access roads, easiest circulation	Controlled traffic, revenue to be reinvested in infrastructure and service improvement	Non-tourist commuters affected, especially workers to central tourist facilities
		Public bike rental systems (eBicing)	Availability of cheap bikes to visitors, better mobility experience	Increased use of non-contaminating transport	Heavy tourist occupation of bike lanes and infrastructure used by workers
		Parking space locator services (Parking B:SM, ApparkB)	Easier and faster parking	More ordered traffic, revenue from parking use	Increased substitution of private resident parking with visitor parking
TOURIST INFORMATION AND MANAGEMENT SYSTEMS	DMOs, attraction managers, planning authorities	User-activated personalised recommendations (Twentytú e-walk smart tour	Increased accessibility of visitor attractions, more time-efficient and tailored visits	More dispersed visitor pressure, promotion of a wider set of attractions	Increased visitor pressure in residential neighbourhoods, everyday spaces
		Immersive experiences at various heritage sites	Increased comprehensibility of heritage, events, etc.	Better capacity of promotion of intangibles, more time/money spent at sites	Capacity of representation out of the hands of citizens
		Crowd control and re-direction systems (IoT monitoring tourism in Barcelona: the Sagrada Familia)	Diminished risks from overcrowding, increased safety against robbery or terrorist attacks	Reduced risks, abatement of incidents and related costs, more efficient surveillance	Privacy infringements to vulnerable collectives
SHARING PLATFORMS	Corporate p2p platforms, private providers	p2p transport and vehicle sharing (Über, Galileo-Egnos)	Increased accessibility and security of private transport, cheaper taxis	Increased capacity of taxi system	More and unregulated cabs on the streets, aggravation of precarious labour
		Hospitality platforms (Airbnb, etc.)	Increased stock of accommodation, better adaptation to demand, better services to families	Flexible expansion of accommodation stock, promotion of 'community identity', revenue to citizens at risk of exclusion	Airbnb's effects on labour and real estate market
		Free tours and visitor experiences (various platforms)	Opportunities for personalised visits	Promotion and valorisation of personal knowledge	Casualisation of labour, de-professionalisation of guides

5. Final reflections for a new research agenda on 'smart' tourist places

The objective of this chapter was to propose a critical outlook of the deployment of smart strategies (imagined or operational) in the context of tourist cities. After framing this concern in the mobilities literature, we have approached it through an examination of smart initiatives in a relevant sample of European cities. Finally, we focused on the city of Barcelona, that has undergone substantial (though not homogeneous) processes of socio-demographic transformation in the last few years, with generally adverse effects on incumbent resident populations or more vulnerable communities therein.

Although the Smart City imagery evokes empowered and connected citizens, producing, consuming and moving around more efficiently and with lower environmental footprints, the epistemological toolbox of the mobilities turn invites us to examine more closely which citizenship we are talking about – that of long-term residents or that of global mobilities, including tourists, which a more extended supply of smart services inevitably bolster in their capacity to dwell in and navigate the city. Smart city projects have inevitable made the city more 'porous' to the intervention of global mobile populations and signs, and enhanced the negotiation capacity of mobile dwellers over 'sedentary' residents. In the emerging context of overtourism, the increasing penetration of enabled tourism in the quotidian of cities could be expected to lead to an intensification and acceleration of social exclusion.

In terms of agency, as suggested by the critical smart city literature (e.g. Hollands, 2008; Söderström et al., 2014), it is matter for further scrutiny whether and to what degree smart destinations are deaf to social imperatives, and rather skewed towards corporate interests – ranging from those of technology developers looking for big municipal contracts to real estate and financial conglomerates increasingly tuning into the mobilisation of urban assets for global consumers (Aalbers, 2019). It is however evident that local pro-commons agendas are underrepresented in smart strategies, and have little possibilities to be scaled up to a wider polity of urban resilience, as suggested by Martin (2016): for instance, in relation to the boom of the 'corporate sharing economy' in the hospitality sector.

A critical geography of 'smart places' and the related paradoxes and hindrances, taking in the ambivalence of technology as an enabler of mobility and an ally of smart and sustainable mobility, needs to tackle the difficulty of examining experimental projects in the domain of tourism and technology, which may present several problems of limited efficiency due to high cost, and ambiguities related to technological dependence. In this sense, Smart Destinations partake the problematic encasing and the biases of the smart city, and generate doubts about their territorial scope of application. This deficit makes it advisable to delve deeper into other scales and territorial environments. On the one hand, the regional scale is fundamental for obtaining synergies and complementarities between cities (Gretzel, 2018), a fundamental dimension for metropolitan areas as evidenced by many Smart City projects being developed at this scale. On the other hand, adapting the smart approach to rural and natural spaces with lower population density is a challenge to overcome the digital divide between rural and urban spaces as a brake on local development and tourism competitiveness with a distinct concern for processes of population mobility and displacement triggered by the revalorisation of successful core tourist areas (Valente & Russo, 2022).

A research agenda opening the inquiry to such dimensions should therefore be open to the following lines of inquiry:

- Genealogy of the Smart City / Smart Destination projects in terms of power relation, developing a practical approach to the scrutiny of material agencies beyond the lack of conceptual accuracy.

- A focus on the fine urban scale: regeneration of historical districts, contribution to gentrification, enmeshments and conflicts between visitor mobility and the everyday mobility of citizens and workers.
- The promotion of citizen engagement vis-à-vis digital exclusion of vulnerable communities which could hamper the effectiveness of smart as a mechanism of empowerment and inclusion.
- Citizen privacy concerns extending to question of safety, surveillance, gender inclusion and other intersectional hindrances for motility of the resident community.

In this sense, we find that concept and proposed operationalisations of Smart Tourism City proposed by Gretzel and Koo (2021) in each one of these lines of inquiry offers a good starting point. Possibly, this hints at the fact that the Smart City itself is an outdated concept, which should be replaced as an object of academic analysis by 'smarter' cities, or the development of wise cities (Young & Lieberknecht, 2019) as conducive urban environments built on user intelligence towards extended and inclusive welfare.

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