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GUEST EDITORIAL

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1 | A TALE OF TWO (SMART?) CITIES

In Yemen sits the 16th Century walled city of Shibam, now listed by UNESCO as a World Heritage site. Beyond its historical and cultural significance, something about the place is striking from a design viewpoint. Shibam, like many other ancient settlements, embeds much local wisdom in its own design. Its unusually tall buildings were constructed with locally sourced mud. Its fabric is dense and creates much needed shade in the city's narrow streets. Studies demonstrate its rather sophisticated—and certainly low-carbon—approach to passive environmental design at both urban and building level, ensuring degrees of thermal comfort in such a hot climate [1]. In the same region, also sit large cities such as Riyadh, the Saudi capital. Shibam and Riyadh, of course, have radically different sizes and economies and are not generally comparable. But it must be noted that those contemporary centres have mainly developed beyond their old historical towns, hinging not on local knowledge but on 'international' criteria—normally dictated by modernist visions of urbanism and architecture. Yet, in the harsh climate of the Arabian Peninsula, it takes much effort—and energy—to sustain cities made of steel-and-glass buildings buffered by large public spaces. Saudi Arabia seems to use about 70% of its electricity consumption simply to operate air conditioning systems.

Why am I invoking an ancient town to discuss smart cities? The point is that adopting and implementing technologies—however past or contemporary—cannot be seen as deterministically positive. It all depends on a more complex, and holistic, understanding of design approaches. Similarly, implementing new technology should not suggest jettisoning what is already there, and what we have already learnt—in a city, a place—as wholly inadequate and out-of-date. Shibam and all similar places might have been 'old' and unsuitable to accommodate rapid urbanisation, but they also embedded accumulated knowledge, wisdom and awareness of their context. Innovation, yet with such lessons in mind, could be precious in shaping contemporary cities in the same region. The point therefore is that 'making smart' without a deep understanding of place is probably not that smart after all.

Yet, the prevalent ways to frame and represent smart urbanism seem based on either rejecting the past and present city as being inadequate in tackling the big societal challenges it faces, or at best ignoring what it can offer. The prevalent discourses tend to portray cities as on the one hand, the key arena of human inhabitation and growth, yet on the other, as an increasingly broken environment. Cities—it is often argued—are under pressure by the critical challenges of overpopulation, mobility and infrastructural adequacy, environmental and social sustainability, resource scarcity, and safety. This, together with ever-changing lifestyles, makes them incapable of coping with the future, unless they embrace deep technological change. They are a 'patient' whose body is failing and where the only sensible cure is intrusive (technological) prosthetics. I resist such vision, as much as I see learning from Shibam as a more instructive and long-term useful way of designing urban environments than relying on any carbon-copy glass-and-steel quick-fix. The 'city' cannot be simplistically interpreted as a generic background of buildings and people—the latter normally framed as middle-class consumers following global, standard lifestyles—onto which new digital 'solutions' get superimposed and where only the latter are given agency.

So, whilst 'smart' might bring on an innovative wave of ideas and initiatives aimed at improving urban living and sustainability, there is a clear risk of making the same mistake of modernist urbanism approaches and ending up implementing context-blind, generic models of development that lead to urban 'solutions' that are oblivious to the power, inner knowledge, and wisdom of place.

2 | THE CHALLENGES OF METAVERSE-RICH, PLACE-POOR SMART URBANISM

The allure of bypassing the rather messy complexity of the actual city in favour of working with a virtualised and somehow sanitised set of digital tools and environments—whether to 'read' urban phenomena or take decisions and control them—is not as new as current debates, always chasing the latest buzzwords, might imply. Research and development of the 'metaverse' is becoming a significant trend in smart urbanism, ranging from the construction of 'digital twins' to the actual design of virtual—and virtually inhabitable—cities, as in the case of the Liberland Metaverse environment designed by Zaha

Hadid Architects [2]. Yet, its roots are to be found in visions that are at least 3 decades old, though this could be discussed as part of the history of urbanism from the ideal cities from the Renaissance onwards. As a combination of control-freak, digital twin visions of 'Mirror Worlds' [3], free-form designs and interactive capabilities of 'Liquid Architectures' [4], and of pollution and constraint-free living [5], much of the metaverse rhetoric echoes the fundamentally anti-urban, cyberspace-hailing hype of the 1990s. These visions point towards shaping new digital environments, a new high-tech frontier, in order to overcome the limitations proper to places. Yet, as in my initial comparison, the risk of jettisoning places carries serious challenges. Here are three to reflect on:

Relevance – Modelling can tend to simplify or eliminate what is not functional to the assumed 'model' of reality. The shaping of brand new, digitally powered environments can too easily lead to limitations in how the social milieu is framed within them and exclude or render invisible specific social groups, cultures, practices of inhabitation, and places. Tensions have been addressed between the vision of a smart city tailored to an affluent and empowered middle class population, concerned about remote working, car-based mobility and residential security, and the potentially ignored key needs of local, low-income communities [6]. Issues such as water poverty, poor housing conditions or lack of access to education and training can indeed be improved using ICTs but at the condition that any modelling or virtualisation of functions is carried out inclusively and through a much more complex, strategic, multi-dimensional and grounded approach than the deployment of a generic technological product.

Agency – Let us assume smart cities can be conceived and planned in a relevant way, by reading the place and its dimensions, thus addressing a wider range of issues. The next challenge relates to communities and social groups not just being acknowledged but actively influencing and changing the smart city, that is, their ability to act, their agency and 'right to the city' [7 8]. How transparent (or not) are the smart city and its metaverse(s)? How conducive of serendipitous, unexpected and maybe even uncomfortable encounters are they? A physical, analogue space provides, in some measure, a chance for appropriation, visibility and disruption, or more simply for community intervention and new ideas. But can you occupy part of a street and make a parklet in the metaverse? Can you proactively rearrange things and open new possibilities, or are you just a 'user' of a predetermined gamified space or, as Paul Virilio provokingly argued, a disembodied, isolated individual: 'who has lost (…) any immediate means of intervening in the environment' ([9]; 11)? The question of agency, and the parallel thread of how 'public' your public space really is, affects deeply the nature of the smart cities we shape.

Socio-spatial polarisation – Virilio's comments suggest another important side of the agency-related challenge. If the possibility of acting in cyberspace can be controlled, it is also true that the stronger the separation between 'digital' and 'physical' space, the more likely it is that a two-tier, socio-spatially polarised urban environment can be encouraged. You may be accessing something like Roblox's virtual Gucci Garden [10] and dressing up your avatar, whilst maybe struggling to pay the rent or the energy bills of your real flat. You might travel virtually to exotic locations and find it hard to move in and inhabit the city, looking for job opportunities or face-to-face social life. Focussing on improving the 'virtual' side of the urban experience does not guarantee that the physical aspects will improve too, if uncoupled from such context. In fact it can generate more polarisation in a world where those who are well off keep or further increase their ability to interact and play with actual spaces and places, whilst others are relegated to the lower-agency proposition of a digital surrogate. Despite the abundant rhetoric on the relationship between living digitally and enjoying higher degrees of empowerment, this is not such a given. Some social groups and communities can 'experience different technological topologies than the transnational elites' characterised by 'higher degrees of hierarchical control' [11].

3 | TOWARDS SMART PLACE(s)

The words we use matter, as they help in framing and defining our field of action. I find discussing and envisaging interventions in smart 'places' more helpful and meaningful than describing smart or indeed virtual 'cities'. The latter—as I have briefly outlined here—can be reduced to generic scenarios, allegedly neutral containers of new technology. Names on a map. Places instead suggest complexity, immanence, diversity, and the need for strategies that are context-rich and specific. This has implications for our processes in the shaping and designing of urban environments that are hybrid or—as Mitchell [12] would have said—recombined. Instead of stemming from what technology can do, or what it is already doing somewhere else, we should aim at generating a deep understanding of local context, with all its layers, issues, and indeed potential, in terms of embedded knowledge, wisdom and energies. Physical space is not a background but a powerful agent whose design needs to participate in any new 'smart' visions. Community groups and citizens are not end users or—worse—passive data points feeding a system they have no real dialogue with or influence on. They are holders of issues but also precious wisdom. Networks are not just infrastructures of cables and routers but a capital of human, socio-economic relationships and know-how that would be wasteful if not plain irresponsible to ignore. All of this requires multi-competence teams and wider strategic plans, able to leverage on the specificities of place. Cities need to imagine hybrid designs and 'solutions' that are uniquely suited, and highly sustainable, for them as places and communities.

CONFLICT OF INTEREST
The authors declare that they have no conflict of interest.

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DATA AVAILABILITY STATEMENT

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Alessandro Aurigi (Laurea (Arch) Florence - Italy, PhD Newcastle - UK) is Professor of Urban Design at the University of Plymouth, UK. Alex has served as Associate Dean of the Faculty of Arts, Humanities and Business, and Head of the School of Architecture Design and Environment at Plymouth. He has also worked as Director of the Architecture department at the School of Architecture, Planning and Landscape at the University of Newcastle, lecturer at the Bartlett School of Planning, and research fellow in the Centre for Advanced Spatial Analysis (CASA), at UCL. He is a member of the peer-review college of the AHRC (Arts and Humanities Research Council, UK) and Senior Fellow of the Higher Education Academy.His main research focuses on the relationships between the emergence of the information society and the ways we imagine, conceive, design, and manage our places, with a specific focus on how we can articulate a complex, recombined urban space in ways which enhance and support place quality. His publications on the topic include five books: *Shaping Smart for Better Cities* (Elsevier, 2020; edited, with Nancy Odendaal); *The Routledge Companion to Smart Cities* (Routledge, 2020; edited, with Katharine Willis); *Digital and Smart Cities* (Routledge, 2017; with Katharine Willis); *Augmented Urban Spaces: Articulating the Physical and Electronic City* (Ashgate, 2008; edited, with Fiorella De Cindio); *Making the Digital City: The Early Shaping of Urban Internet Space* (Ashgate, 2005).