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#### **Algorithmic Nations:**

#### Towards the Techno-Political (Basque) City-Region

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#### Abstract (236)

Despite the need to better understand the changing dynamics between the ongoing political regionalization processes and the re-scaling of nation-states, at least in Europe, updated and timely research that responds to these challenges fueled by data-driven societies and the algorithmic revolution invigorated by an uneven establishment of borders remains scant and ambiguous. Nations, regardless of the spatial boundary by which we define them, matter as much as political borders and account for algorithmic disruption. Hence, this paper explores these new cartographies from the regional studies perspective by presenting the *city-region* as a pivotal term amidst a wide range of challenges for cities, regions, and nation-states. The Basque Country, as a small, stateless, *city-region*alized European nation, is presented as a case study, focusing on its transitional techno-political and city-regional metaphor called 'Euskal Hiria' (Basque City). The paper examines five standpoints in the understanding of this notion as well as three potential drivers (metropolitanization, devolution, and the right to decide) that will further determine its future position amidst Spain, France and the EU. The paper explores the concept of Basque City in the context of the attempts by small states (such as Estonia and Singapore) and small, stateless city-regionalized nations (such as Catalonia, Flanders, and Quebec) to modify their governmental logics and devolve powers through blockchain technologies, thus enabling their interactions directly with citizens by setting up new cityregional and techno-political patterns that this paper terms 'Algorithmic Nations'.

**Keywords:** City-regions, re-scaling nation-states, political regionalism, algorithmic nations, Euskal Hiria, blockchain

Word count: 8,234

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#### INTRODUCTION

Today, more and more people are digitally connected through AI (artificial intelligence) and machine learning devices, yet unevenly and pervasively distributed, fueling a liquid sense of global and digital cosmopolitan citizenship. Nonetheless, it can be argued that borders still matter as much as nations do (Castells 2018, Khanna 2016).

In her speech to the 2016 Conservative party conference, the British prime minister, Theresa May, made the following statement: '...if you believe you are a citizen of the world, you are a citizen of nowhere. You do not understand what the very word citizenship means.' In the current post-Brexit scenario, this statement resonates clearly amongst the EU nationals living in the UK by provoking an ongoing, deep divide produced by non-metropolitan voters claiming that they want their country back. This remarkably points to the non-metropolitan condition of these 'left-behind' voters in some city-regions, and the outcome of this situation has been a growing sense of disempowerment and alienation among those who are not 'part of the system'. This political standpoint shared by a large number of English citizens slightly differs from the Scottish sense of pro-European openness (Keating 2005, 453). Thus, despite the socalled post-nationalism (Berezin 2007, Calzada 2017b), the reality depicts a rather more nuanced and diverse political regional picture. This is true not only for the UK, which reveals the existence of different city-regional dynamics, but also for diverse nation-states such as those in Spain and Italy (Giordano and Roller 2003), among others. Therefore, we see cityregional spaces beyond nation-states (Calzada 2015a) as constitutive fields of 'tensions between different spatial policy representations, discourses, and practices, embodied by different action rationales and with potentially different scalar effects' (Fricke and Gualini 2017, 6). In regards to diverse *city-region*al spaces, particularly on devolution schemes in the UK, Spain, and Italy, Giordano and Roller argued (2003, 911-912) that it 'is imperative to compare the experiences of other European countries which share longer histories of devolution (...) have had difficulties in their respective processes of state formation (...) have suffered from a sometimes-fragile sense of national identity'.

In this context and under the surface of a discursive homogeneity of democratic representation in nation-states, deep divides have revealed themselves, such as the divide between the 'metropolitan' and the 'rest' (Becker, Fetzer, and Novy 2016). These divides are not only the outcome of unevenness in perceived opportunities and 'having a stake' in the political decisions about state development directions, but they themselves also shape those very divisions and *borders*. In one form or another, three divisions push for greater representation of those very differences at the nation-state level (Calzada 2017a): socio-economics (geoeconomics), identity and sense of belonging to a stateless nation (geopolitics), and democratic representation (geodemocratics). Such divisions may lead to perceived 'underrepresentation' or voicelessness. This, as seen in current debates on populism (Moffitt 2016), raises major questions about basic democratic principles, and the provision of equality in representation in the tripartite relationship between people, government, and the state. Hence, one might question whether the term and notion of *nation-state* in this combination is still appropriate and, indeed, useful, especially considering the pervasive re-scaling and metropolitan phenomenon taking place in many locations in Europe.

#### According to Agnew:

The nation-hyphen-state, as the clear and coherent mapping of a relatively culturally homogeneous group onto a territory with a singular and organized state apparatus of rule has long been the structural underpinning of most claims about political legitimacy and democratic participation (2017, 347).

Within the regional studies literature, in the 1990s, many hyper-globalist scholars forecast the imminent demise of national state power because of the purportedly borderless, politically uncontrollable forces of global economic integration (Ohmae 1995). In contrast, a growing literature on state-rescaling provided a strong counterargument: namely, that national states are being qualitatively transformed—not eroded or dismantled—under contemporary capitalist conditions (Brenner 2004). In a longer historical perspective, Keating (2014) argued for the rescaling of nation-states as the politicization of regional space, which in some cases coincides with strong historical identities and national diversity, such as in the cases of small *city-regional*ized stateless nations like Scotland, Catalonia, and the Basque Country (Calzada 2018a). Connecting these together, Goodwin et al. (2012, 64) examined the devolved structures and strategies of economic development that have been put in place across the UK in an attempt to increase global economic competitiveness while tackling entrenched social inequalities, recognizing cultural and identity politics, and enabling piecemeal democratic rights.

In a broader context, this paper argues that while the world has continuously urbanized, nationstates are being also rapidly re-scaled and thus metropolitanized (Brenner 2003, Nelles, Gross, and Kennedy 2018, OECD 2016, Sellers and Walks 2013). Therefore, we might expect, then, that this metropolitanization trend is reinforcing the re-scaling of nation-states through multiple interconnected factors (Brenner 2009, Fricke and Gualini 2017, Glaeser and Steinberg 2017, Grant 2018, Katz and Bradley 2013). By examining the aftermath of the Scottish independence (Calzada 2014), the UK's continued membership in the EU (Brexit), Donald Trump's victory in the US presidential election, the transition towards algorithmic revolution embodied in estate blockchain government cases of Estonia and Singapore (Kattel and Mergel 2018, Keen 2017, Heller 2017, Jun 2018), as well as the political struggle in Catalonia (Rodon and Guinjoan 2018) and the resulting territorial crisis in Spain; we can determine how metropolitanization, devolution and the right to decide have triggered wider debates on liquid and digital citizenship, changing patterns in geographies, political and democratic governance challenges, and more generally, the organization and legitimation of nation-state power institutionally and territorially as well as politically and democratically (Jessop 1990, Park 2017, Allen and Cochrane 2010).

Hence, this keynote paper will question the very and fuzzy notion of *region*, disclosing amidst the re-scaling of the *nation-state* an instrumental and systemic term broadly accepted in the interdisciplinary field of regional studies: *city-regions*. In the following section, a literature review will be presented on the term *city-region*, which will be applied in the third section to the case of the Basque Country understood as the *political* Basque *city-region*, also known locally as *'Euskal Hiria'* (Calzada 2011, Larrea 2012, Calvo 2015, Eusko Ikaskuntza 2017,

Vegara and De las Rivas 2009). Insofar as the fuzzy *regional* meso level is altering or rescaling, not eroding, the Westphalian order of nation-states even beyond the notions of plurinationality reaching out claims for secession or independence (Requejo 2017, Sanjaume-Calvet 2018), the fourth section will shed light on political regionalism by deconstructing three factors influencing the current refoundational momentum in the EU: metropolitanization, devolution, and the right to decide. Ultimately, we will explore how the algorithmic disruption (Matias 2017, Pentland 2015, London Imperial College 2018, Jun 2018) is already modifying political geography and potential ways of implementing governance schemes in some specific nations—both stateless and established states—towards a new game in the institutional interplay between former regions and present small states. Inevitably, this suggests the need to re-define the meaning of citizenship, borders, and, regions and to examine the articulation of the current nation-states through *city-regions* in a broader, connected, and interdependent supranational realm (Acuto 2013).

#### LITERATURE REVIEW: SEEING THE CITY-REGION<sup>1</sup>

Within geography, there have been a series of debates and discussions that have run in parallel with regards to how regions (and cities) are theorized. These have wrestled with conceptualizing the bounded or unbounded socially constructed spatiality of the region (Keating, Loughlin, and Deschouwer 2003). These discussions have real significance for positioning the *city-region*, especially in terms of how we epistemologically and ontologically place regions, city-regions, and cities. Massey (1978) began to question the way regions are now comprehended within contemporary geography, though without using the language of current geographic debates that we are now kicking off with this first issue of Territories: A Trans-Cultural Journal of Regional Studies. This revolves around two different broad approaches to conceptualizing regions by looking at them either territorially or relationally. Both allow the city-region to be taken forward in order to think through the fuzziness of territory with rigidity of the state whilst considering the spatiality of flow, porosity and connectivity of a city-region. This way, we possibly can study the nature and the workings of city-regions under different conditions and evaluate the relative importance of (i) the general constitutional provisions for 'regions', institutional practices, and arrangements as 'external factors', and (ii) the relationship amongst cities and between cities and 'their' region (Herrschel 2002).

The *city-region* has increasingly become a buzzword in debates on urban and regional development and, especially, in debates about competitiveness and processes of globalization. But what is a *city-region*? How is it managed and governed, and what is its role in a state-structure? Such questions have become increasingly more urgent in the wake of the general resurgence of the 'region' after its demise during the 1980s in favor of the 'locality' (Herrschel 2002, Beel, Jones, and Rees Jones 2016). *City-region*, by its very terminology, means a combination of *city-region*al qualities both in functional and institutional-governmental terms.

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<sup>&</sup>lt;sup>1</sup> The arguments presented in this section were presented at, and refined following, three sessions on 'Seeing Like a Region' at the 2018 American Association of Geographers (AAG) Annual Meeting in New Orleans (14 April 2018), organized by Jean-Paul Addie (see Addie, 2018).

At first sight, monocentric regions may suggest a greater emphasis on the local dimension through the influence of the dominant core city. Polycentric regions, by contrast, suggest more of a regional emphasis, because of the rivalry between the smaller cities across the region. As we are going to observe in the next section, some previous analyses of the Basque case did not consider this networked configuration when examining the potential dysfunctionalities of this methodological frame.

Despite ambiguity around the term *city-region*, which could be localised in different European and global territories (Herrschel 2009), it has become a hotly debated topic in urban and regional studies (Gonzalez, Tomaney, and Ward 2006, Rodríguez-Pose 2008, Tewdwr-Jones and McNeill 2000). But there has been little comparison of diverse *city-region* cases that transgress their nation-state boundaries, which has clear consequences for the reshaping of political and economic policies and spatial configurations of the nation-states themselves (Calzada 2014, 2015a, 2017a, 2017b, 2018a). Notwithstanding the centrality of *city-regions* to modern-day accounts of economic success (Scott et al. 2001, 289), this paper argues that advocates of a new *city-regiona*lism overlook how *city-regions* are constructed politically beyond the state-centric standpoint and nation-state Westphalian order's borders (Keating and Harvey 2014).

Hence, in the distinction between the terms region and *city-region* (Moisio and Jonas 2018), it is worth pointing out a nuanced definition for each of them to further avoid misunderstandings as we are going to show in the following section when addressing some normative interpretations that have been made without enough evidence for the Basque *city-region* case.

#### According to Keating (Keating 2004):

A region may have a historic resonance or provide a focus for the identity of its inhabitants. It may represent a landscape, an architecture, or a style of cooking. There is often a cultural element, perhaps represented by a distinct language or dialect. Beyond this, a region may sustain a distinct civil society, a range of social institutions. It can be an economic unit, based either on a single type of production or an integrated production system. It may be, and increasingly is, a unit of government and administration. Finally, all these meanings may or may not coincide, to a greater or lesser degree. (xi).

In this sense, different metaphors such as regions, regionalization, and rescaling, among others, have political, economic, ideological, normative, and rhetorical aspects that could stand for different sets of interplays among regions and within nation-states and be employed in different strategies across Europe (Paasi 2002). But it is particularly the strategic and political aspect that is emphasized by the theoretical construct of the *city-region*. As such, here is the working definition we provide in this paper for the *city-region*:

*City-regions* (Scott 2002, Herrschel 2014, Tewdwr-Jones and McNeill 2000, Ward and Jonas 2004, Jonas and Ward 2007, Harding 2007, Allen and Cochrane 2007, Harrison 2012, Neuman and Hull 2011) are widely recognised as pivotal societal and political-economic formations (i) key to national and international competitiveness and (ii) rebalancing political restructuring

processes into nation-states, even changing their dynamics beyond and between them (Ohmae 1995, Keating 2001, Soja 2005).

Nowadays, we could update this definition by including *city-regions* in a broader re-scaling process occurring in nation-states. As such, *city-regions* (Harrison 2010, Paasi and Metzger 2017) are neither static territorial entities nor isolated geographical areas inside (pluri)nation(al)-states. In an attempt to expand the scope of the subject and the zoom of this analysis, Soja (2000), among others, stated that the *city-region* is not just an expression of globalization but represents a more fundamental change in the urbanization process, arising from the regionalization of the modern metropolis and involving a shift from the typically monocentric dualism of the dense city and sprawling low-density suburbanization to a polycentric network of urban agglomerations where relatively high densities are found throughout the urbanized region. As such, the case presented in the following section will fit into this pattern. Likewise, and accordingly, Jessop's notion of the (nation-)state could be complemented in the reference towards a political Basque *city-region*al configuration by a more contemporary dynamic interpretation of how metropolitanization is inevitably forcing pervasive re-scaling processes within the Westphalian nation-states' current order (Jessop 1990).

Mansvelt (2006) points out the historic and socio-political path dependency in the Basque Country as directly aligned with the establishment of an independent state, representing the geopolitical imaginations of the Basque territory. How, then, could a territorially-networked techno-political Basque city-region from top-down and hegemonic approaches without necessarily being fixed in a hierarchy of authority? What seems relevant is the interpretation of state erosion and failure stated by Scott (1998) is elaborated for established states rather than for emergent, stateless city-regional nations. Accordingly, the ambition of becoming of a state must intrinsically require rethinking again what forms of governability are needed in the complexity of our times by putting the socio-spatial possibilities in the core of political and democratic sovereignty making. This paper suggests that while the capability to claim cityregional space is unequal (Addie and Keil 2015, Calzada 2017a, Jonas and Ward 2007, Parker and Harloe 2015), stateless cases should make the best of the metropolitanization phenomena. while rethinking the state through the algorithmic disruption. City-regions' territoriality and relationality may defy hierarchical politics without abandoning the self-governance and emancipatory push towards setting-up a new state. The techno-political disruption reinforces the need to experiment with alternative spatialization and political modalities within the imprecise meaning of regional space. This is true even in present times, when the algorithmic revolution is altering the policy frameworks affecting digital citizens' daily lives by adopting new forms of real-time technological sovereignty (BITS 2016, Calzada 2018b, Kitchin 2018).

In the next section, we will provide a synthetic analysis of the Basque *city-region*, to open a debate that has been consciously narrowed from partial analysis attempting to observe an evolving *city-region*al configuration in fixed terms. Thus, this paper addresses the following questions in order to examine how *city-regions* are governed in the changing scenario of rescaling nation-states:

Are *city-regions* constructing a wider constellation of diverse and networked geopolitical units beyond their nation-states (Calzada 2015a)? Who are the stakeholders that develop *city-region*al visions, and how are their territorial imaginaries legitimized both politically and institutionally? What disruptive technologies of power, such as automation, Big Data, AI, blockchain, among others, can alter the status and the practice of citizenship to concretize the transitional momentum of the *city-region*? Which citizens and stakeholders are left behind due to exclusion, and who benefits from this exclusion? How is the *city-region* articulated from the bottom-up by grassroots innovation? In what ways do nation-state and supranational bodies interact with *city-region*al spatial politics? How will the tensions from the *city-regional* space with the established nation-states could lead us to a lock-in instead of a balance through a permanently renegotiated scalar agendas? What is the strategic and contested role that large-scale infrastructure projects play in specific *city-region*al cases?

#### CASE-STUDY: REVISITING 'EUSKAL HIRIA' AS THE TECHNO-POLITICAL BASQUE CITY-REGION IN EUROPE

In this section of the paper, we will analyze the Basque Country case by preliminarily revisiting the notion and framework built as *Euskal Hiria* presented in the doctoral thesis of the author published by the Basque regional government (Calzada 2011) by bringing together several interpretations that have been produced later from diverse academic fields. The points of departure of this section from the trans-disciplinary regional studies perspective are inevitably two main explanations to deconstruct what we mean by '*Euskal Hiria*' understood as the techno-*political* Basque *city-region*:

The techno-political Basque city-region in Europe could be defined as a model for spatial articulation that blurs the traditional borders between city and territory (countryside) in favor of new and timely, internally-articulated and externally-connected, more complex spaces. This relatively small territory affords a well-articulated urban system led by three attractive and dynamic cities, with complementary profiles, in addition to the metropolitan hubs in Navarra (Pamplona-Iruñea) and in the Northern French Basque Country (Bayonne-Anglet-Biarritz conurbation). According to the former Basque Minister of Planning and the Environment, Sabin Intxaurraga, a remarkable aspect was overcoming the sterile competition and instead working towards reinforcing the complementarity between Bilbao, San Sebastián, Vitoria-Gasteiz, also including Pamplona-Iruñea and Bayonne, drawing on the fact that territorial cohesion provides strength. Having said that, different interpretations from the more institutional competitiveness-driven orientation (Vegara and De las Rivas 2009, Azua 2002) to the more dystopic, pessimistic, and critical perspectives (Larrea 2012, Calvo 2015) demonstrate the lack of a common city-regional frame that would allow deeper analysis of the socially innovative processes having direct implications in the political realm by its actors (Calzada 2011, 2013). Before addressing five different standpoints as a contribution of this paper to this debate, when discussing about the *political* nature of the *city-region*al Basque case, two main trends are needed to frame the debate that will be developed in the next section:

- a) In the broader context of globalization, a new political pattern of regionalism characterized by *devolution* (Goodwin, Jones, and Jones 2012, Khanna 2016) and self-determination claims (Guibernau, Rocher, and Adam 2014) expressed and embodied via geodemocratic practices such as the *right to decide* (Barceló et al. 2015, Cagiao y Conde and Ferraiuolo 2016) has been regular since Franco's dictatorship in Spain. This is particularly true in the Basque Country, where the two twentieth-century dictatorships in Spain (those of Primo de Rivera, 1923–1931, and of Franco, 1939–1975) and the Spanish Civil War (1936–1939) are seen as a direct consequence of the struggles over the liberalization of Spain and the unsuccessful attempts to resolve intercultural and interregional tensions.
- b) Likewise, factors driving these changes in the Basque case could stem from *metropolitanization* insofar as a small, stateless nation is advocating a new socially progressive political agenda based on the multi-level governance around 'civic nationalism' in Europe, thus appealing to universal values, such as freedom and equality, in contrast to 'ethnic nationalism', which is zero-sum and aggressive and draws on race or history to set the nation apart (The Economist 2017).

Hence, this paper defines the techno-political Basque city-region simply as 'Euskal Hiria', the fuzzy term to systematize the complex fragmentation of a city-regional assemblage (Calzada 2011, Calzada 2015c). The Basque territory could be considered a city-region in a rather subjective, politically biased, and self-referential manner when describing its economic, social, and political evolution in the last 30 years by using a diverse range of acronyms (Azkoaga 2017). What's more, given the conflictual social relations that emerged from the traumatic context and side-effects of the political violence during this historic episode—which is, hopefully, coming to an end—territorial narratives and political rhetoric have been extremely influenced by emotionally charged and socio-politically combative landscapes. The Basque territory could be described in opposition to or as an extension of the Spanish and French states, a choice that affects not only its interpretation but also its political game stemming from rational, antagonistic, or even imagined territorial dialectics.

Notwithstanding the historic dramatic path, in a new context that could be called the Basque political era of post-violence, Basques are increasingly embracing social capital insofar as bridging simulative actions are growing (Calzada and Bildarratz 2015) in order to re-establish a social moral fabric that was gradually damaged. This momentum is also encouraging the coexistence of diverse (and often antagonistic) political strategies from two extremes: recentralization or independence. This situation is also shared by other locations in Europe.

Despite the diverse set of analogies used to described the Basque *city-region*, as stated in previous research (Calzada 2011), a systemic framework of interdependent lenses could be used to better analyze the highly metropolitanized extensive geography in the Basque Country (Figure 1, 2, and 3).

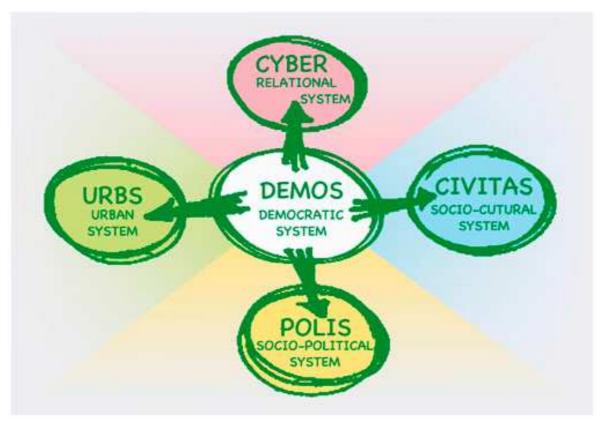


Figure 1. City-region: 5-System Framework (Calzada 2011)

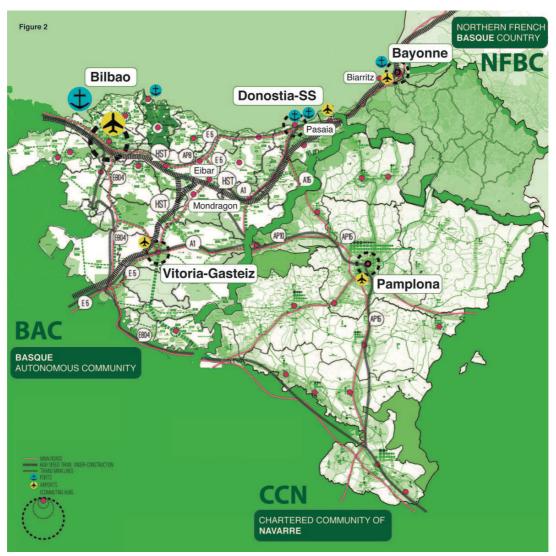


Figure 2. Basque *city-region* map: three administrative divided entities, Basque Autonomous Community (BAC), Chartered Community of Navarra (CCN), and Northern French Basque Country (NFBC) (Calzada 2015a)

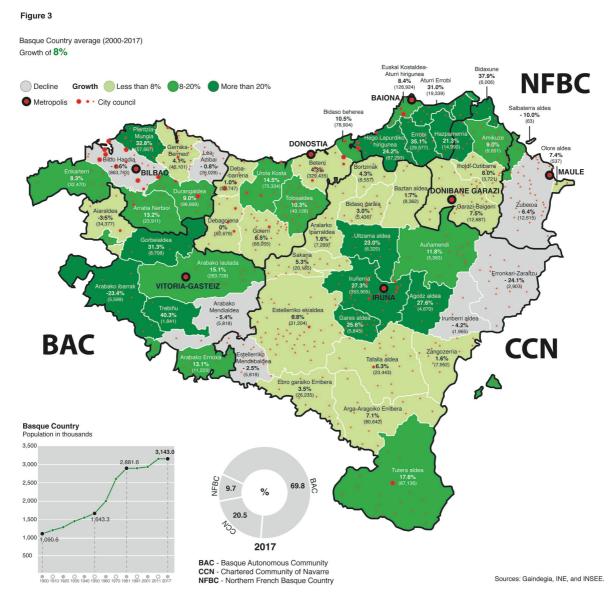


Figure 3. Metropolitanization phenomenon in the Basque Country (Berria 2018)

The *city-region*al political configuration (Figure 1) separated into three administrative entities (Figure 2) shows a rather changing metropolitan trend in favor of the concentration of population of the hinterland (Figure 3), particularly around the main capital cities or metropolitan hubs, which requires further *smart* political views beyond the traditional understanding of the regional space. Moreover, in this paper the author suggests that sooner than later the algorithmic disruption driven by blockchain technologies will alter the understanding of citizenship and thus the configuration of the new data-driven governance system, undoubtedly affecting political and territorial interdependencies (Eusko Ikaskuntza 2017, Jun 2018).

The current issues affecting the regional studies will bump into a *tsunami* of data that will be operated by blockchain technologies, at least in the EU after the GDPR (General Data Protection Regulation) will take effect in May 2018, to provide further devolved decision-

making processes in which citizens will be the basic unit to decide and to set up the direction of new public policy (Copeland 2018). It may seem a bit odd to imagine such a sci-fi implementation in the Basque *city-region* given the separation of administrative entities. However, more than 100 blockchain projects are being conducted in more than 40 countries around the world in 2018, and IBM has reported that nine in 10 regional governments worldwide will invest in blockchain projects as a decentralized decision-making algorithmic governance process by 2018 (Jun 2018). With the prospect of a digital revolution that will shift the understanding of a regional space by its citizens and governments, how will the Basque *city-region*, as a networked, highly fragmented, decentralized, complex, and confederal geopolitical sum of parts, evolve? Before discussing three of these drivers (metropolitanization, devolution, and the right to decide), the paper presents five standpoints on the debate about *'Euskal Hiria'*, as the Basque *city-region*, by intertwining several authors' past interpretations on the topic:

# (i) The assumption of the univocal meaning of the Basque *city-region* as technocratic, neoliberal, and institutionally-driven, seems to be rather biased, adding the same critic given to the buzzword *smart city* (Calzada and Cobo 2015).

Insofar as a systemic and social constructivist approach actually considers the permanent interplay among multiple stakeholders (private, public, academia/science and technology, civic society, and social entrepreneurial/activism), it can effectively provide an evidence of the policy momentum in each period. The sum of the parts of the three-sided structure as the Basque Autonomous Community, Chartered Community of Navarra, and Northern French Basque Country (Figure 2) responds to an evolving dynamic of interaction rather than to a fixed structure of isolated territories. Furthermore, the simplification of the Basque city-region with the Y-shaped High-Speed Train large-scale project or/and the institutional brand flagged by 'Euskal Hiria Congress' (Eusko Jaurlaritza 2012) annually held since 2002 (Eusko Jaurlaritza 2018) by the Basque regional government cannot be taken seriously as the only selfarticulative evidence argued by policy complex and regional interplay among many stakeholders internationally embarked in (para)diplomatic activities (Calzada 2015c). It is true that the multi-layered infrastructural and institutional links among the capitals of the three provinces of the Basque Autonomous Community are different from each other, but the Basque city-region cannot be solely understood as a homogeneous, large metropolitan area with the symbolic High-Speed Train as a flagship. The social innovation approach suggests the cityregion is being articulated by stakeholders without relying on a single actor.

### (ii) The given neoliberal ideological attachment of the 'Euskal Hiria' project is taken for granted by some interpretations.

It goes without saying that the competitiveness-driven industry 4.0 approach has fueled and hegemonized the socio-economic and thus industrial policy project so far in the Basque Autonomous Community. Actually, there are different concerns, particularly regarding the

economic viability of the High-Speed Train project, among different stakeholders. However, it is presumptuous to link the 'Euskal Hiria' brand and project in arguments about competitiveness and associated it with a strong neoliberal agenda. The usual argument that the primary scale of operation for finance is the city, while for production capital it is the region, is absolutely altered with the definition of the *city-region*, as has been exposed in the previous section. Therefore, I suggest a systemic framework to understand the city-regional interdependent dynamics among stakeholders to avoid a fixed interpretation about regional innovation, institutional thickness, cluster policy, information and knowledge, and financial and production of capitals. The political economy of the current 'Euskal Hiria' cannot be explained with fixed categories when new socio-political players are already modifying their strategies. Thus, 'Euskal Hiria' or the political Basque city-region can be seen as fitting into a spatially integrated EU dominated by nodes of key metropolitan areas (Calzada 2017a). Nonetheless, some authors emphasize an apparent ideological cleavage and contradiction between two confrontative city-regional projects: one the one hand, the institutional project led by the Basque regional government, and on the other hand, the alternative project coming from the grassroots movements. Despite the existence of two opposed versions, neither of them fit the nation-state ideal-type and cannot be easily identified as traditional, modern, or postmodern because both are very highly integrated into global symbolic and material networks and thus not practically confrontational at the local level (Calzada and Arranz 2017). Hence, 'Euskal Hiria' could reflect not only the priorities in the EU policy agenda in terms of the ongoing data-driven and algorithmic regulations (Finn 2017) but also the local specificities, agendas, and conflicts resulting from the global integration of circuits of capital (Harvey 1997). To sum up, 'Euskal Hiria' is a city-regional, strategic, socio-territorial vision in transition to another political regional configuration inside the unknown and unpredictable federal shape of the EU in its current post-Brexit refoundational momentum.

#### (iii) Systemic city-regional methodological lenses are required.

As a city-regional construction, 'Euskal Hiria' is a result of socio-territorial rhetoric, imaginaries, and discourses established by institutional and socio-economic stakeholders. Despite one dominant or hegemonic version over time (Jessop 1997), in fact the institutional version branded by the Basque regional government since 2002, the interplay and the contestation among territorial projects and processes provide further nuanced portrayals of the diverse city-regional trace and track of the Basque Country. Therefore, to capture these social innovation processes, a 5-System framework is suggested as an analytical, mixed-method tool: the URBS system responds to the physical infrastructures established and the resilient distribution of scarce material resources among citizens; the CYBER system refers to the level of usage of these resources to satisfy the physical, digital, and social connectivity demands of citizens; the CIVITAS system suggests the active consideration of the diverse and complex civilian fabric and the mechanisms within it to regenerate a transition-based, regional political economy; and the POLIS system establishes the role of politics, on global and local scales, in terms of stakeholders' complex participative interaction to reframe the governance model. Ultimately, DEMOS, incorporating the four systems above, is the systemic sum as an intradependent and perpetual balance of the *city-region* as a whole (Calzada 2015a). (Figure 1)

### (iv) City-region is a transitional and non-reversible momentum in the rescaling process of nation-states.

While the concept of belonging to the nation exists more on a meta-level, being less formalized and having meanings open to negotiation among diverse ideological stakeholders, the *city-region* is a permanent, transitional, and non-reversible socio-territorial entity re-scaling Spain as a nation-state. Moreover, this difference in national politics and attitudes toward devolution, invigorated by the ongoing metropolitanization process, has resulted in diverse political responses to the tensions between territorial statehood and spaces of historical identity and future secessionist aspirations such as the Basque Country. Nonetheless, four potential strategic outcomes should be distinguished, none of them being deterministic in the transitional nature of Spain as the nation-state: (a) status quo as a tension *per se*, (b) recentralization, (c) plurinational federalism as an asymmetric territorial *de facto* implementation, and (d) devolution as a self-government or self-rule scheme by allowing an opt-in independence referendum (Calzada and Bildarratz 2015).

### (v) Is nation building already evolving towards the paradigm of 'Algorithmic Nations'?

The previous standpoints lead us to consider diverse degrees of complexity on political regional scenarios by re-scaling nation-states through three drivers: metropolitanization, devolution, and the right to decide. This increasing level of complexity is also altering the main way of building nations. As such, and this is the main argument of this keynote paper, the degree of rationalized dialectic differs substantially between *city-regions* and 'their' constitutive nation-states from context to context. Are nations being built in a rather diverse algorithmic realm? How should we rethink *city-regions* by blending new geo-economic, geo-political, and geo-democratic dynamics driven by increasingly pervasive metropolitan pushes worldwide? How could data science and artificial intelligence (AI) enrich democratic and political decision-making processes? Which data transparency governance schemes should be foreseen, given the complex territorial diversities worldwide? How will stakeholders in such diverse *city-regions* cope with predictive, anticipative, and insightful provisions to their territorially changing trends, politically and democratically speaking?

## DISCUSSION: ARE METROPOLITANIZATION, DEVOLUTION, AND THE RIGHT TO DECIDE THE DRIVERS OF TECHNO-POLITICAL REGIONALISM IN THE BASQUE *CITY-REGION*, 'EUSKAL HIRIA'?

Before elaborating on some of the questions presented at the end of the previous section, this keynote paper argues that three main drivers may be establishing and will set up interdependently the current political regional debate in the Basque *city-region*, 'Euskal Hiria': metropolitanization, devolution, and the right to decide.

In the past, maximalist and 'analogic' interpretations of the potential evolution of 'state-building as a collective action' through remedial, unilateral, and formal secession have been presented as the norm (Zubiaga 2013, Iparhegoa Fundazioa 2012), a fact that should be reinterpreted in light of the recent chaotic outcome in Catalonia. In contrast, current *city-regional* transitions worldwide (Khanna 2016), opposing the global threat of algorithmic monopolies, are claiming for self-determination and independence of cyberspace (Barlow 2014). This suggests that *city-regions* should rethink their nationhood, their nation-building processes, and their (para)diplomacy, given an interdependent connectography throughout the algorithmic revolution, AI, computational thinking, social physics, social machines, data labs, blockchain technologies, and data commons. The consequences of these new artefacts are reflecting upon claims for technological sovereignty rooted in *city-regional locus*, having direct consequences beyond the Westphalian order of nation-states for (i) liquid and digital citizenship and migration schemes (Crichton 2018), (ii) a debate on changing *city-regional* geographies, and (iii) democratic and political governance challenges in data-driven and hyper-connected societies.

#### (i) Metropolitanization

The case of 'Euskal Hiria' makes a claim on strengthening cosmopolitan identities, which in turn can shape the future of the Basque national project through metropolitanization. Urban areas can constitute unique and essential peace-building resources that can be used to transcend ethnic nationalist divides by establishing the seed for a metropolitanized, stateless, civic nationalism, as in the case of the Basque Country (Calzada 2017a).

#### (ii) Devolution

A metropolitan-centric re-scaling of national identity may take on particular forms in small, stateless, *city-region*alized nations; this is accomplished by the Basque Country through its metaphor '*Euskal Hiria*'. Here, the scope for devolution through a greater focus on metropolitan push and bottom-up deliberations (Geller, Rucki, and Fisher 2015, Calzada 2014), rather than state-orchestrated, territorially-based fixity and hierarchical structures, may rest.

#### (iii) Right to Decide

Thus, we reached the *demos* of the *city-region*: How and what do you want to decide? Which is your *polis* (Figure 1)? However, the nation-state's physical border (its territory) no longer coincides with the domain of its authority and the guarantee of rights of its citizens. Can the

*city-region* (as a stateless entity so far) self-organize itself as a new techno-politic assemblage by using decentralized blockchain technologies, thus allowing it to respond to metropolitan challenges and strategic decisions beyond borders but without blurring them?

#### **CONCLUSION: TOWARDS ALGORITHMIC NATIONS?**

According to Sui and Morril (2004, 82), 'no other technological innovation in human history has affected the practice of geography in such a profound way as the computer. It has dramatically transformed both geography as an academic discipline and the geography of the world'.

This statement could be applied to the transformational settings of the current nation-states being fragmented in several *city-regions* through devolution and driven by metropolitanization. Devolution brings us much closer to the optimal scale of *city-regions* than our present political and post-Westphalian order map suggests. There are already small states (such as Estonia, Singapore, Slovenia, Iceland, Uruguay, Malaysia, Switzerland, Israel, United Arab Emirates, Denmark, among others) and small stateless *city-region*alized nations like the Basque Country (Catalonia, Scotland, Quebec, Flanders, Corsica, Brittany, among others), which, despite their small populations and size, thrive in and innovate at the top of the algorithmic curve due to their civic inclusiveness, good governance, and (para)diplomatic connections worldwide.

Particularly, some cross-border *city-regions*, such as Tallinn-Helsinki (Heller 2017), the former Oresund and the latter Greater Copenhagen (Malmö-Copenhagen)(Calzada 2015b), Singapore/Malaysia, or even the Basque Country through '*Euskal Hiria*' (Spain/France)(Hennig and Calzada 2015), are showing the key importance of big data regarding not only the direct effect on digital citizenship but also in the new state configurations ruled by algorithms that may challenge our understanding of a *nation* and how this technopolitical interpretation could shape (and foster) future self-determination claims in experimenting societies (Matias 2017).

In debates on regional studies, the interpretations have primarily stemmed from the fields of political geography and international relations. Given the current context being questioned entirely by dynamic interpretation through *city-regions*, between nation-state re-scaling and economic regional studies, data science research should be blended with interrogations to better examine the changing nature of the regional world. The 5-System framework provided to analyze *city-regions* could be a point of departure in this trans-disciplinary regional research attempt.

This keynote paper concludes with the research and policy agenda around algorithmic nations that sooner than later will be discussed in regional studies to better interpret and intervene strategic pathways in *city-regions*: (i) a *city-regional* networked and systemic territorial understanding; (ii) a cohesive articulation of nations through *city-regional* intensive dynamics in *e-states*; (iii) the *e-state* as a digital political infrastructure and architecture built through

blockchain technologies (JxP 2018, Aguilar 2018); (iii) requirements for models of shared sovereignty between regions, *city-regions*, and nation-states in federal supranational configurations as the EU; (iv) data-driven *city-regions* and policy implications in health, mobility, energy, voting, migration, etc. (Coletta et al. 2017); (v) transparency, accountability, privacy, technological ownership, and data commons claims in the establishment of a more human-centered algorithmic governance in cities and regions; (vi) new bottom-up democratic mechanisms to carry out decentralized and networked decision-making and deliberation processes; (vii) attention to the marginalizing power of big data in regional studies; and (viii) the practical implications of blockchain technology for local authorities and (smart) citizens (Noveck 2015, Jun 2018).

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