

# Mapping Democracy in the Metropolis: Linking Urbanization and Political polarization

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Over the last forty years, metropolises have emerged as the primary form of human settlement. Despite their relatively recent history, researchers and policy-makers agree they represent the most coherent level of analysis to understand the potential and risks of contemporary urbanization trends. In the scientific literature, a metropolitan region refers to cities, towns and localities that form a network of people and places and function as a whole on a daily basis (Sellers et al. 2013). As large and highly complex environments, these regions integrate all types of residential and activity areas, and house numerous and diverse populations: individuals, groups and communities that engage in various forms of cohesion locally and across the entire metropolitan space. Every day, the lives of metropolitan denizens intertwine in social, economic and political activities that span across municipal, regional and national borders. Present across many geographic contexts, this spatial discrepancy, which exists between institutional territories and people's daily activities, is one of the biggest challenges faced by planners and policy-makers who wish to govern the metropolis. This, because such situation is a likely cause of social inequality, unsustainability and injustice among metropolitan denizens. To this end, the governance and management of metropolitan territories are an increasing source of preoccupation—but also of opportunities—for political, economic and social actors. Yet, because of the complexity of metropolitan societies, a poor understanding of social and material dynamics across their regions limits our capacity to create spatial, institutional and cultural solutions to better govern them. Today, new approaches in data collection and analysis offer the possibility to map the ethereal nature of these urban habitats and contribute in finding solutions to metropolitan challenges. In this chapter, we take a step in that direction by mapping the political polarization of local populations across the metropolis. Looking at development of the Swiss territory over the last forty years, we portray the effects of metropolization on democratic institutions using two methodological innovations: *topological analysis* (Koseki 2017) and *differentiated cartograms* (Lévy, Maitre, and Romany 2016). By combining these techniques, we deem to reveal the consequences

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Source: map designed by the Authors

of urbanization on national cohesion, democratic institutions, and political dynamics in the country. From the resulting maps, we build an explicative general framework that points to the possible effects of recent urbanization trends on political behavior and discuss the implication of its hypotheses for urban planners, hinting at possible ways to craft more democratic metropolitan territories.

## MAPPING METROPOLITAN SPACES

Contemporary representations of the metropolis usually concern a large urbanized area in which activities and institutions depend on one or multiple cities (Sellers et al. 2013). Day after day, infrastructure networks carry information, goods and people between center and periphery, and from one part of the metropolis to another. In doing so, the lives of metropolitan inhabitants intertwine in a dense and diverse enmeshment of constant wayfaring that binds distant places, groups and communities. Increasingly, metropolitan commuting extends across localities and regions, and even across national borders. Today, metropolitan lives are in discrepancy with the territorial organization of the political and legal institutions meant to govern individuals—such as municipalities, counties and subnational states—bound to former lifestyles, economic activities and mobility practices. Yet, as formal administrative boundaries can be used to maintain or increase social, political and economic segregation and inequalities, the risk posed by this incoherence is great. And negative consequences on democratic institutions and the population may increase when metropolises grow without planning and territorial reforms.

In this chapter, we are concerned with new forms of governance required to adjust institutions to contemporary metropolitan lives (Vodoz, Thévoz, and Faure 2013). While public administrations and government can offer some solution to make those spaces more democratic, urban planners can also contribute to this common endeavor. Yet, in order to do so, they must develop tools to study the many facets of metropolitan regions. Only by understanding most aspects of contemporary metropolises can we start channeling their material and non-material potential into more sustainable environments. Maps have largely contributed to feeding various attempts to theorize the metropolis as complex spatial systems. Thanks to their capacity to synthesize intricate information and test the coherence of multiple social and material spaces simultaneously, cartographic maps have revealed the importance of the metropolisation phenomenon, and its expansion across the world. Today, those maps afford a departure point for new planning strategies, and changes in the administrative, political and institutional *status quo*.

Without maps, the social conceptualization of metropolitan space would probably have not emerged in the way it did. This, because the very idea of a metropolis comes from seeing the incoherence in the map's layering of governance institutions, material artefacts and social reality. In attempting to portray those territories, cartographic maps produce a knowledge that challenges the deductive argumentation of traditional empirical approaches. Through an analogous

use of geographic space and a coherent display of information, mapping offers an assessment and interpretation of complex social phenomena that are usually unattainable by analytical means (See “Carte” in Lévy and Lussault 2013). Hence, cartographic maps provide an ideal interdisciplinary tool to conceive the territory as both an object of inquiry and the process of a project. In research, cartographic maps complement existing technical languages by imposing a concise, non-linear and plastic heuristics. From an epistemological point of view, they induce an empirical leap-of-faith and shed light on the limitations of the deductive method in science. Their craft makes explicit the need for abductive reasoning in order to erect any inferential arguments. In urban planning, cartographic maps reveal the unforeseeable, the unexpected and the unmastered. Contrary to plans, they highlight what has not been thought through, and unlike verbal accounts, they confront their maker with the metrics of social spaces and the limits of institutionalized boundaries. Such take on complexity makes maps an ideal tool to study the intricate and dynamic enmeshment of social spaces across geographic scales. This also explains why maps prove instrumental in renewing views on the social constructs of dwelling such as nature, landscape, cities and urban networks. In this chapter, we refer to this power of maps to illustrate the dynamic nature of the Swiss metropolis, and the risks associated with its urbanization over the last forty years. For many reasons, Switzerland offers an ideal case to study the impact of metropolization on social cohesion and democratic institutions. Here, maps reveal the frontiers of our current understanding of metropolitan living, and open to new approaches in the planning and governance of these complex social spaces.

## THE SWISS METROPOLIS

Similar to many European countries, the hatch of Swiss cities into metropolitan regions resulted from three urbanization processes: densification and an enlargement of existing mixed-usage urban centers due to transregional and transnational migrations; a sprawl of low-density residential areas around those centers; and a development of housing and activity clusters nearby major road and rail infrastructure (Bassand 2004). The outcome of such process is a dense network of lived places that feeds multiple commutes and many other non-commuting mobility practices. Homemaking, families, work, leisure, social gathering, goods and services bind metropolitan dwellers to various forms of wayfaring and transportation habits from location to location, neighborhood to neighborhood, city to city, region to region. In the Swiss context many factors constrain or boost such commuting. As a confederation, the country is composed of twenty-six relatively autonomous states called “cantons,” which play an important role in daily wayfaring and residential preferences. Still today, Swiss people are often strongly attached to their canton of origin. Evidently, as political, legal and administrative territories, cantons cluster public services and resources aimed specifically at their residents. This is the case for mandatory education, social services and health care. To a smaller extent, a similar logic applies to the many municipal entities that compose cantons, roughly 2300 across the entire country. Other cultural

or symbolic boundaries, such as the divide between the four linguistic communities—German, French, Italian and Romansh—, or the historical divide between Catholic and Protestant cantons may as well impact people’s whereabouts. Outdoor sports and secondary houses in the Alps, cross-border workers in Basel, Lugano and Geneva, and the increasing number of long-distant commuters also characterize how mobility shapes the metropolitan development of the country. As cultural, political and institutional borders become less relevant, the intense social, economic and functional integration of local populations across the national territory reveals a single polycentric metropolis that function throughout Switzerland, and in the neighboring regions of France, Germany, Italy, Austria and Lichtenstein (Dessementet, Kaufmann, and Jamelin 2010). Faced with this new type of societal organization and the lifestyles and habits that spring from the globalization process to which it is akin, we may ask what form of democratic governance metropolization requires, but also, how it affects the existing political landscape. Like in other metropolitan contexts, the production of such local space across administrative, institutional, political, linguistic and topographic borders raises questions on its lasting effects on democratic ideals, spatial justice and inequalities.

Since the mid nineteenth century, the two low-tier institutional levels of governance in Switzerland—municipal and cantonal—have enjoyed a relatively high degree of autonomy vis-à-vis the federal level, which appears to a certain extent as the weakest of the three. Each level integrates two forms of democratic institutions: elected governmental coalitions making the executive and legislative powers representing the people; and the very frequent use of popular votes, by which the concerned population proposes or vetoes changes to the Law and the Constitution<sup>3</sup>. In the past, the local outcomes of federal votes mostly followed the partitioning of cantonal borders, indicating a strong political integration of sub-national populations (Racine and Raffestin 1990). These regional effects were coupled with a strong polarization between linguistic regions, and between Protestants and Catholics on certain matters. Less salient divides between local communities reflected wealth and socioeconomic status or center-periphery oppositions. Because of the localized impact of their implementations, certain laws and amendments to the Federal Constitution also spurred political cleavages between specific regional communities. This is true, especially for votes concerned with regulations and projects that relate to infrastructure and the environment. Finally, recent research suggests an increase importance of urbanization and metropolization political preferences and behaviors during popular votes (Sellers et al. 2013; Caramani 2004; Lévy 2003; Koseki 2017). In some of this research, the use of mapping techniques and related abductive approaches to theory building have provided evidence of the consequences of a single Swiss metropolis on popular votes.

In this chapter, we build on this work and show how mapping political polarization offers insights on urbanization and metropolization in Switzerland. Here, we combine new cartographic and data-analysis techniques to craft hypotheses on the impact of urbanization on political

polarization of local communities. Our aim is to raise awareness among urban planners and policy-makers on the social consequences of metropolitan development on democracy and political institutions. Our proposed cartographic work arises from two recent methodological innovations. First, we rely on the relational analysis of territorial polarization using local outcomes from national votes (Koseki 2017). To this end, the Swiss direct democratic system offers the most precise and massive data set there is with over 300 votes called at the national level since 1981. We use this method to detect how local populations form political communities across metropolitan regions, and to measure how those communities evolve over time. While Graph Theory and Network Analysis hold many inherent tools and metrics to describe the structure and the dynamic nature of networks, we turn to a seemingly simple yet powerful approach to assess the changing polarization of local populations: cartographic mapping. As such, we derive community measures from the networks and “spatialize” them through a new generation of maps called *differentiated cartograms* (Lévy, Maitre, and Romany 2016). Unlike traditional choropleth maps, which are meant to represent projected surface areas, cartograms convey complementary descriptors of geographic units, such as the number of inhabitants. Following this logic, *differentiated cartograms* go a step further in fixing the size on uninhabited areas like larger lakes and mountainous regions, and thereby greatly improve the readability of the choropleth data. We then build exploratory hypotheses from the plots by using a mixture of visual heuristics and geographic expertise. Overall, our general framework suggests that urban renewal and the systematic development of activities outside urban areas have made cities, their suburbs and the countryside increasingly impermeable to one another by fostering single-type mobility practices. Urban and regional planning have discouraged the driving of cars in cities, and wayfaring across suburbs and periurban sites. This pushed individuals to adopt mobility practices that are bound to their place of residence, driving a wedge between local populations across metropolitan regions. To propose such explanation, mapping the political polarization of the last thirty years let us observe the effects of this day-to-day divide on democratic outcomes. Hence, results of this exercise binds to the long-standing hypothesis that urbanization impacts the social fabric, and that such impact plays a certain role in shaping political attitudes. Ultimately, our general framework provides a yet-to-be-tested explanation to the increasing contrast in collective outcomes we see between cities, suburbs and the countryside in many recent referendums and elections across North America and Western Europe.

## MAPPING SWISS VOTES

We develop our investigation around the dynamics of political polarization in the contemporary metropolis. Our objective is to see how mapping the polarization of local populations at the supra-metropolitan geographic level informs an abductive understanding of the effects of current urbanization trends on democratic institutions. In order to theorize on the relationship between urbanization and political polarization, we apply a visual heuristics approach to network analy-

sis and cartographic mapping, and derive a series of hypotheses to be further tested. In order to assess the polarization of local populations over the last thirty years, we turn to *Territorial Topology Analysis* (TTA) (Koseki 2017). Unlike previous approaches aimed at assessing popular political landscapes, TTA relies on fixed measures of political polarization which are then represented into a network structure. This offers many advantages compared to other methods. First, TTA assesses not only political agreement but also disagreement, and provide a clear distinction between low agreement and disagreement. Second, TTA controls for any agreement/disagreement by chance. This is especially important in studying political polarization in the population because the assumption remains that populations are not organized like members of a political party would be. Third, by using a fixed measure of polarization, not only does TTA make it possible to directly compare the degree of polarization between two units, but also to compare the degree of polarization for various vote subsets. Hence, with TTA, one can see if the degree of agreement/disagreement evolves through time, or by any other classification of votes: types, themes, contexts, etc. Yet, unlike dimensionality reduction, TTA is not affected by missing values, or the constitution of data subsets. This means the measure of agreement/disagreement between given units is meaningfully comparable to measures of agreement/disagreement between other units and in other contexts.

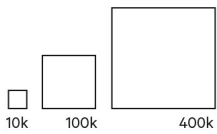
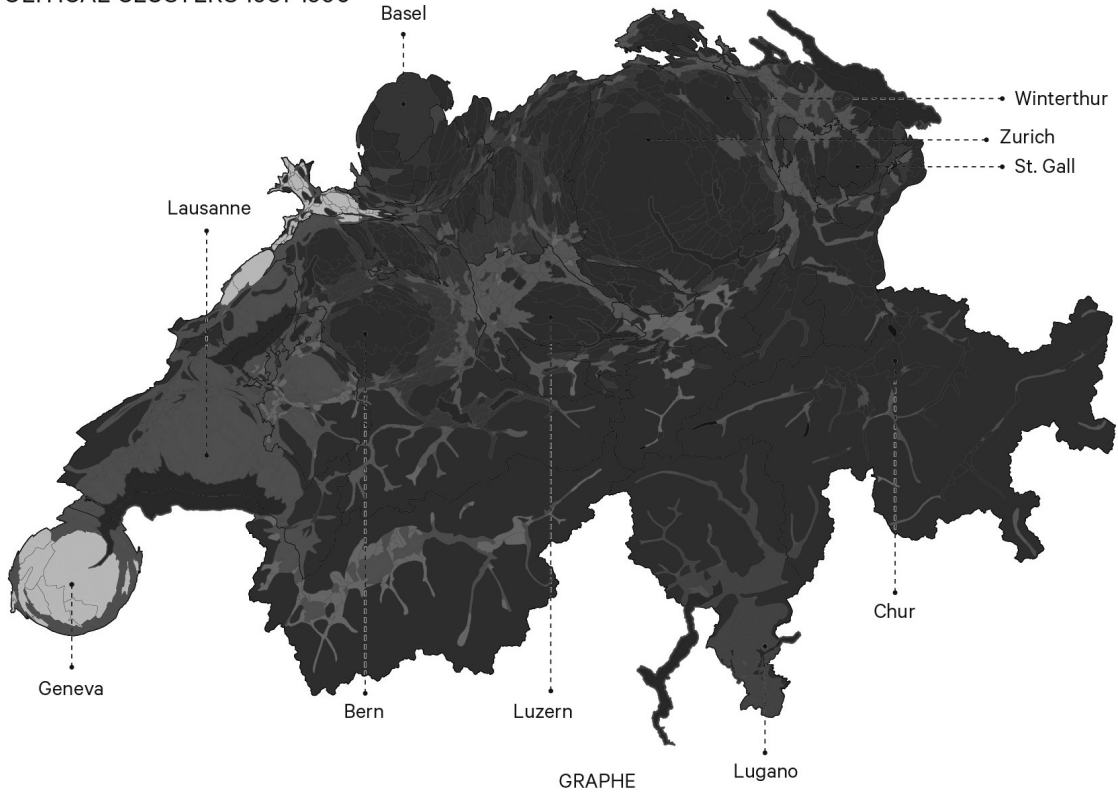
Another advantage of using TTA holds to the way it structures the data into a “graph” where nodes represent municipalities and edges represent the degree of agreement among them. In the present case, this network-like organization of the data allows us to detect how municipalities cluster in ‘political communities,’ and how those communities evolve across time. It is those communities, and their changing nature, that we seek to represent into maps, and that offer us clues on how the urbanization of the last thirty years has affected the political polarization of local communities.

In order to facilitate the visual heuristics analysis of the polarization, we map result onto *differentiated cartograms*, a special category of choropleth maps in which the size of municipalities is proportional to its residing populations, rather than its Euclidian dimensions (Lévy, Maitre, and Romany 2016). In such maps, city territories appear larger than sparsely inhabited village municipalities. Uninhabited areas, such as alpine regions and lakes, keep their Euclidian dimensions. This facilitates the interpretation of the mapping for two reasons: because it reduces the distortion of the overall national territory; and because it affords recognizable landmasses, which then act as points of reference.

## EMERGING CONFIGURATIONS OF POLITICAL DIVIDES

In Fig. 3 to 6 we show the state of Swiss political communities for four consecutive decades since 1981. In the cartograms, municipal populations that belong to the same political community are color-coded accordingly. In addition, colorimetry reflects the proximity between the communities over the political matters brought upon votes during each decade. Against the municipal

DIFFERENTIATED CARTOGRAM  
POLITICAL CLUSTERS 1981-1990



*Differentiated cartogram:  
surfaces proportional  
to municipal denizens  
in 2012.*

- Other components
- Uninhabited areas
- Lakes

**Data, Analyses and Mapping: Shin Alexandre Koseki, ETH Zurich**

Data source: National Bureau of Statistics, Switzerland

Differentiated cartogram basemap: Lévy, Romany, Maitre, EPFL

\*Political communities (colors) based on weighted agreement community detection from leading eigenvector method (Newman, 2006).

and cantonal territories, these *differentiated cartograms* clearly show major Swiss cities of Geneva, Lausanne, Bern, Basel and Zurich; largest lakes (Lake Geneva, Lake Neuchatel, Lake Zurich, Lake Constance and Lake Maggiore); and the alpine and mountainous regions of the country. This particular display of networked data tells us the story of how the Swiss political landscape has evolved over the last forty years. Each mode of representation provides supportive clues on what may have driven agreement and disagreement between local communities, and how such polarization is likely to evolve in the future. **The graphs in Fig. 2 show how agreement between communities has increased over the last three decades. This is confirmed by the mean value of agreement/disagreement in each decade, and the share of disagreement between municipal populations.**

Cartograms show that, in the last decade, local populations formed three political communities: one comprising large cities and linguistic minorities represented by French-, Italian- and Romansch-speaking populations; one comprising suburban German-speaking municipalities; and one comprising remote communities in the countryside and across German-speaking alpine valleys. These geographic divides of those three communities contrast greatly with the local regional clustering of the 1980s and the linguistic grouping of the 1990s. It is in fact in the 2000s that an 'urban-rural' divide—actually central-peripheral urbanity gradients—seems to appear more clearly against other socio-geographic factors. In the next section, we offer an explanation for this observation using an abductive model hinting to a possible effect of urbanization on local vote outcomes. Our hypothesis is simple, yet potentially fruitful for urban planners and policy makers: this most recent form of polarization is due to an increase social and functional impermeabilization between core cities, on the one hand, and suburban and periurban territories, on the other hand.

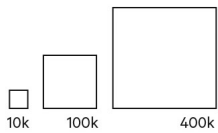
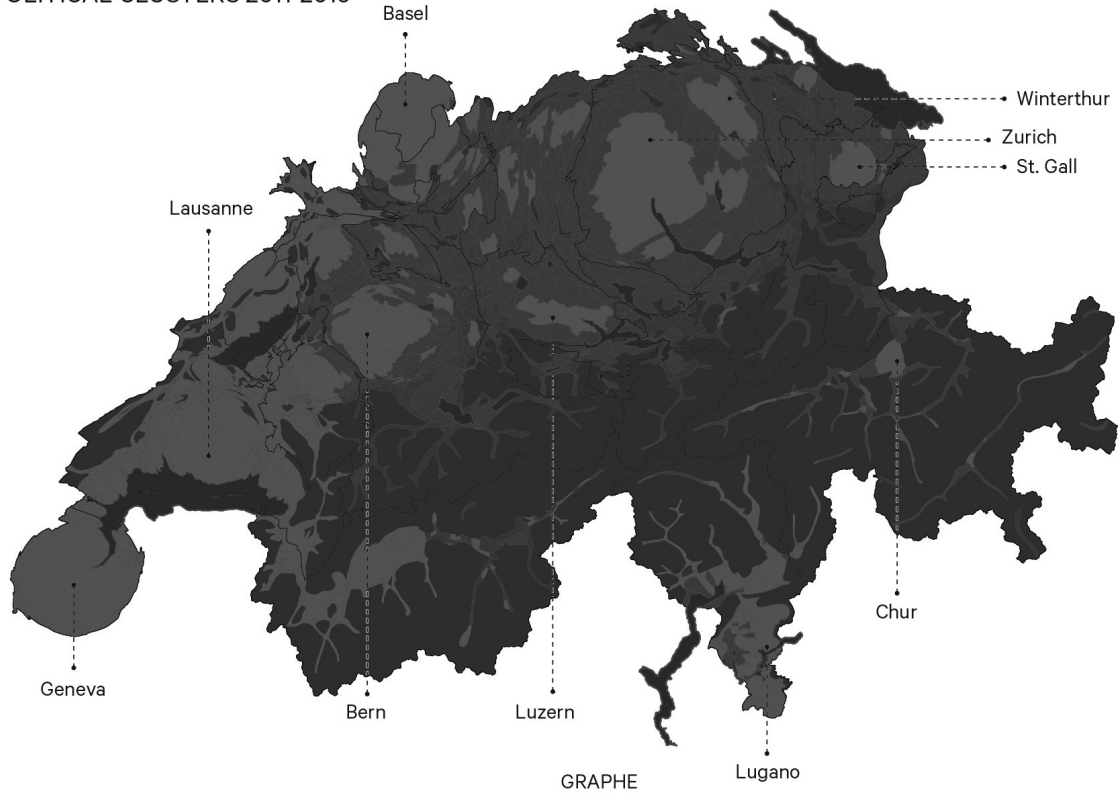
This increase polarization between populations living in city centers, and those in suburban and periurban areas of the country is coherent with observations made upon recent votes across Northern democracies. Although we notice many exceptions to this logic, such as the inclusion of French-speaking and Italian-speaking populations to the same political community, a subclustering analysis of polarization within those populations show a similar partitioning along the city-suburban-periurban continuum. Still, some seemingly remote populations produce similar vote outcomes to those of major cities. This is the case, for example in parts of the Grisons and the Jura. For these exceptions, a good understanding of those populations' history, economy and activities within the country suffice to explain why they tend to adopt urban-like political positions.

## CAN POLARIZATION BE ROOTED IN URBANIZATION?

By combining TTA (Koseki 2017) and *differentiated cartograms* (Lévy, Maitre, and Romany 2016), we are able to observe how Swiss local populations polarized over popular votes since 1981. In this section, we elaborate a general framework that ties those observations to large urbaniza-



DIFFERENTIATED CARTOGRAM  
POLITICAL CLUSTERS 2011-2015



**Differentiated cartogram:**  
surfaces proportional  
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- Other components
- Uninhabited areas
- Lakes

**Data, Analyses and Mapping: Shin Alexandre Koseki, ETH Zurich**

Data source: National Bureau of Statistics, Switzerland

Differentiated cartogram basemap: Lévy, Romany, Maître, EPFL

\*Political communities (colors) based on weighted agreement community detection from leading eigenvector method (Newman, 2006).

tion trends of the last decades. We build on the pragmatic stance according to which individual political attitudes tend to cluster spatially—either locally or across distant places—through the diffusion of information and the formation of subcultural entities. Following a long-standing and recently renewed view in the social science (Granovetter 1973), we take that strong or weak interactions across the metropolis contribute to the diffusion of political information. Cultural and functional contexts, such as a sense of community or anticipated consequences of certain vote outcome on individuals' aspirations, also participate in shaping political attitudes across larger population groups. Thus, our hypotheses link shifts in the political alignment of local communities to the wayfaring of their members across the metropolis and the sense of cultural belonging that result from their daily encounters. Doing so, we highlight the possible effects of individuals' spatial practices on the polarization of local communities and, to some extent, the effect of subcultural clustering in the diffusion of political preferences. In other words, we suggest the increasingly salient political divide between populations in city centers, suburban residents, and peri-urban communities is in part due to an increase segregation of people's lives between these contexts following today's urban transitions.

To ground our hypotheses into the current state of the Swiss metropolis we turn to three trends that characterized its urbanization of the last forty years: 1) an increase in the number and diversity of activities, services and infrastructure across peri-urban areas, which now provide an alternative to those of urban centers; 2) a series of planning strategies put forwards since the 1980s to reduce car accessibility in those centers, thereby contributing to reducing the coming of periurban and even suburban residents in cities; and 3) a decrease of public transport services outside core-urban areas that prompted car dependency for denizens living in the periphery. Together, these three processes made city centers increasingly impermeable to the peri-urban and suburban residents that strongly relied on their car, while those could find—and more easily access—the services, goods and activities they need within peripheral environments.

A first urbanization trend that might have contributed to the clustering of urban populations is the increase offer of activities in peri-urban areas, which enabled those who dwell in the periphery to live urban lives without having to commute to city centers. Today, an abundance of workplaces and leisure activities locate beyond the fringes of urban agglomerations, in the vicinity of motorways. There thrive business development areas, industrial parks, craft workshops, commercial districts with shopping centers, furniture stores, mega-groceries, gardening and home improvement stores and entertainment equipment such as cinemas, amusement parks, zoos, paint ball facilities, and so on. While many of these sites offer an attractive alternative to commercial and business areas in towns and cities, they also showcase activities that may only be funded in such peripheral location. Accessibility for customers, employees as well as providers, lower site and construction costs, and local fiscal regulations are different factors that contribute

to the ongoing development of such places. For these stores and workplaces do not only attract populations living nearby, but a large pool of individuals for whom they are easily accessible. This includes inhabitants across the countryside and peri-urban residential neighborhoods, but also suburban and even urban dwellers who might enjoy the type of accessibility and context offered by these environments, as well as the good, services and activities they provide. The reduction car accessibility in city centers, we discuss next, would have stimulated such choices.

Many European countries such as Switzerland have seen a renewed interest in city-living. Already in the late 1970s, urban planning practitioners and scholars triumphantly announced the phenomenon as the “return to the city.” In the following decades, affluent individuals and families moved back to central neighborhood of cities promoting a series of “urban renewal” projects and policies. Municipal authorities progressively gave priority to mixed usage, housing development, local activities and walkability in central areas, pushing out into the periphery the commercial and industrial activities that generated nuisance to their immediate context. Another key strategy to improve life quality in cities was to reduce the presence of cars in centers and provide better walkability and public transit across commercial and institutional districts. Moreover, by lowering speed limits and the number of parking places, and by closing certain streets to motorized vehicles in these areas, authorities wished to make them safer and more comfortable to the many individuals that lived in these spaces. Yet, although such strategy reduced the presence of cars within city centers, they did not necessarily reduce the use of cars within the metropolis. While urban redevelopments increase accessibility to central activities and services for a large part of the population, they also reduce it for individuals who mostly move around using their car, either by preference or by necessity. Such limitation to these individual aspirations would also largely influence other spatial choices they may have, when choosing where to live, to work and to spend their free time. For those metropolitan denizens, periurban environments represent easier contexts to move around, socialize and function. This is not limited to individuals who already live in the periphery, but also to suburban and urban car drivers. While “cityification” policies may well reinforce the importance of car-accessible locations across the metropolis, the resulting lesser need for public transportation across the outskirts of urban agglomerations provided a third urbanization trends to the clustering of urban lifestyles.

In the 2000s, national and regional public transport services providers reduced their transit in many villages at the periphery of the metropolitan network. Such reduction both resulted from and encouraged car dependency in concerned communities. For peri-urban residents, this means having to use a car in order to commute or to travel to nearby activity centers, villages, towns or cities. The same goes for individuals living in urban centers and the suburbs who want to go outside of agglomerations, provided they have a car. Evidently, the relative reduction of the commute and the wayfaring between centers and periphery does not encourage service pro-

viders to maintain, or to increase public transit accessibility to remote areas of the metropolis. While the effect of this trend may appear marginal in comparison to the two previous processes we describe, it should not be to those for whom public transit is the only transportation mean they can use autonomously, and to those who take care of providing them with alternatives.

## MAPPING POLITICS TO UNDERSTAND SPATIAL DYNAMICS

Beyond the hypotheses we present in this chapter, many alternative models could explain the polarization we observe in the maps. Populations in cities, suburbs and peri-urban environments may differ in terms of occupation, socioeconomic status, cultural identity and family structure. Urban centers are likely to concentrate wealthy and highly educated individuals, but also job-seekers and people from ethnic, cultural or sexual 'minorities.' Voters living in cities have better opportunities to meet and interact with diverse groups and individuals. These may be long-term or temporary residents, such as tourists, expatriates and migrants. While those contrasts across metropolitan communities may as well participate to dynamics of wayfaring, they also provide means for political elites to woo groups of voters. Political cleavages between the 'urban-rural continuum,' core and periphery, or global and local communities are certainly not recent. In fact, the different political attitude of communities within and outside cities was one of the founding inquiries of social science. Yet, our maps show they are—at a macroscopic level—among the most salient source of political polarization in Switzerland today. Hence, the cooccurrence of such divide and the trends in recent urbanization are in any case symptomatic of a common phenomenon: the dissociation of populations in cities, in suburbs and in the peri-urban environments.

The phenomenon we highlight in our maps is, however, not unique to Switzerland. Like for other types of cleavages, this dynamic exists across other democratic states. Local outcomes of recent elections in Austria, the United States, France, Czech Republic as well as the 'Brexit' vote in the United Kingdom and the abortion referendum in Ireland show profound divides between voters located in different *gradients of urbanity*: city centers, suburbs, peri-urban and 'exurban' areas. In each case, a common issue emerges as the pivotal point of divergence between voters: the relation to otherness. 'Otherness' can be a large array of political attitudes concerning religious orientations; non-traditional practices of sexuality, fertility, and domestic partnership; immigration from faraway or from neighboring countries; or the perspective of a supranational European construction. With no exceptions, acceptance and promotion of otherness get a better level of support in stronger urbanity-gradient places, that is to say, more in city centers than in the suburbs, more in the suburbs than in peri-urban areas and more in big cities than in small towns. Thus, electoral maps activate another kind of map, those reflecting the dynamics of inhabited space. In a context where more people have more assets to consciously and efficiently manage, at least partially, the location of their daily life, the coincidence between these two strategic

choices: voting and inhabiting is certainly nothing but accidental. The recurrence and resilience of these topologies are not only a matter of interest for scholars. They have pervasive and lasting effects on democratic institutions in their ability. Yet, the difficulty to isolate or identify the reasons behind those patterns holds to dual complexity of urban environments and democratic processes. The study of spatial political dynamics offers a useful framework to imagine a better functioning of political mechanisms and some insights to make possible a fairer governance, and namely a better spatial justice.

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## NOTES:

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- 3 Since 1848, the Swiss people have voted on over 600 different political projects, half of which since 1980. Those votes concern all aspects of national politics: national security and public policies, infrastructures, energy and the environment, international relations and trade, as well as federal budgets and economic regulations.