Community, Scale, and Regional Governance

A Postfunctionalist Theory of Governance, Volume II

Liesbet Hooghe and Gary Marks
(with Arjan H. Schakel, Sara Niedzwiecki,
Sandra Chapman Osterkatz, and
Sarah Shair-Rosenfield)

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP,
United Kingdom

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide. Oxford is a registered trade mark of
Oxford University Press in the UK and in certain other countries

First Edition published in 2016

Impression: 1

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data
Data available

Library of Congress Control Number: 2016939746

ISBN 978–0–19–876697–1

Printed in Great Britain by
Clays Ltd, St Ives plc

Acknowledgements

The questions that motivate this book took form in Val d'Aran in the Pyrenees some ten years ago. We had driven several hours to traverse just a few linear miles, and we had arrived in a place with distinctive flora and fauna, habits and norms. What, we began to ask, was the effect of geographical isolation? How could political difference be sustained in its absence?

In seeking answers we have been helped by many people. Max Boiten collected data on distinctive regions. Luigi Mendez, Nick Neuteufel and Rick Scholten checked references and formatted text. Sandra Chapman compiled the index. Special thanks to Dawn Brancati, Kent Eaton, Jean-Paul Faguet, Agustina Giraudy, and Michaël Tatham for their extensive feedback on drafts we sent their way.

We owe a large debt of gratitude to many friends and colleagues who helped us along the way. At our two home universities, UNC Chapel Hill and VU Amsterdam, we have been fortunate to have been surrounded by terrific colleagues. In particular, Tom Carsey, Virginia Gray, Jonathan Hartlyn, Hans Keman, and Georg Vanberg have provided helpful comments. Conversations with graduate students at both universities in and out of the classroom have sustained the project in countless ways. Emanuel Coman, Hanna Kleider, Jonathan Kropko, Benjamin Neudorfer, Jan Rovny, and Florian Stoeckel have helped us in matters large and small. Our home universities gave us unqualified support while we were on research assignment.

Extended stays at the Kollegforschungsbereich "Transformative Europe" at the Free University of Berlin, provided us with valuable feedback. Tanja Börzel, Detlef Jahn, David Levi Faur, Markus Jachtenfuchs, Wolfram Kaiser, Juan Díez Medrano, Kiran Patel, and Thomas Risse have been wonderfully generous with comments, advice, and friendship. Nuffield College welcomed us for a Trinity term which allowed us to push the draft into a manuscript. We are also grateful to the Hanse-Wissenschaftskolleg in Delmenhorst for financial and intellectual sustenance. On various occasions we received comments from Ian Bache, Michael Bauer, Jenna Bednar, Arthur Benz, Nicholas Charron, Maria Escobar-Lemmon, Tulia Falleti, Imke Harbers, Charlie Jeffery, Christian Joerges, Ken Kollman, Brigid Laffan, Iván Llamazares, Edina Szöcsik, Pep Vallbé, and Christina Zuber. We owe a special debt to two whose influence

is felt on every page—Stein Rokkan and Elinor Ostrom. We would have loved to send them copies.

We are most fortunate to have had the help of talented co-authors. Sandi Chapman Osterkatz, Sari Niedzwiecki, Arjan Schakel, and Sarah Shair-Rosenfield are equally responsible for producing the regional authority index that provides a foundation for this book and they have been influential in shaping our thinking and suggesting incisive examples.

The project has been financed by Gary Marks' Advanced ERC grant # 249543, "Causes and Consequences of Multilevel Governance" and a grant to Liesbet Hooghe from the European Commission.

We dedicate this book to our parents, Eileen and Bobby, and Cécile and Raf, who showed us how two people can share work as well as love.

Chapel Hill

April 2016

Contents

4

Designing Jurisdictions

The design of general-purpose jurisdictions—their territorial size and their population—is a basic feature of government. Yet we do not know much about the character or incidence of alternative designs. What are the design choices on offer? What variation do we find on the ground, and why would rulers choose one design over another?

Before we can generalize about jurisdictional design, we need to conceptualize the choices that confront rulers. In Chapter One we set out two ways of thinking about governance: one that conceives governance as an instrument for the efficient provision of public goods, and one that conceives government as an expression of community. In this chapter we explain jurisdictional design as a choice between these two conceptions (Table 4.1).

The instrumentalist approach conceives governance as responding to externalities and economies of scale. This approach to government is utilitarian, premised on the idea that a central planner can frame jurisdictions in a rational manner to achieve administrative efficiency taking into account a country's heterogeneity. Its purpose is to provide public goods at the lowest cost to every individual across the country. The result is a ladder of governance reaching from the local to the national level and beyond. It is then the job of the central government to determine the appropriate size and competences of jurisdictions at each level. Scale design avoids ad hoc adjustments. Population and area are optimized to minimize deviation from the median jurisdiction in the tier. If concentrations of population make homogenous units infeasible, jurisdictions with dense populations are made small in area, and those with sparse populations are made large.

The alternative is a bottom-up approach, which responds to local conditions and expresses the desire of those living in different parts of the country to exercise self-rule in their homelands. Jurisdictional design pays less attention to efficiency and more attention to territorial community. Instead of optimizing population and area according to abstract criteria, this approach responds to incremental pressures of geo-history. Instead of conceiving jurisdictions

Table 4.1. Types of jurisdictional design

Scale	Community
Top-down Design implements a central plan.	**Bottom-up** Design accommodates local conditions.
Instrumental Jurisdictions are designed to provide public goods at a particular scale.	**Expressive** Jurisdictions are designed to express community self-rule.
Standardized Jurisdictions are standardized in size and authority.	**Differentiated** Jurisdictions are differentiated in size and authority.

within a standard frame, this approach conceives jurisdictions as intrinsically diverse. The outcome is a differentiated set-up with jurisdictions that vary widely in population and area. Large, populous regions can exist alongside small, less populated regions.

This distinction helps to make sense of the designs that we track over the past sixty years. Some regional tiers closely approximate a scale design. Départements in France and voivodeships in Poland have populations and areas almost as homogenous as the squares on a chess board. By contrast, some regional tiers bear no sign of top-down design. They encompass large, populous regions alongside much smaller, less populated regions. The variation can be prodigious. Andalusia has seventeen times the area of the smallest mainland comunidad in Spain, La Rioja, and twenty-six times the population.

When will jurisdictional reform exhibit scale and when community? Our expectation is that regime change is a setting for scale design. A regime that breaks from the past may wish to stamp a new order on territorial governance. Imposing a consistent national frame of governance may be a step in overcoming parochial interests and centralizing authority. By redrawing boundaries, the reform may disempower established groups that support the old order. By applying the same principle to all parts of a country, the new rulers may cast themselves as national unifiers. Or, less grandiosely, regime change may provide an opportunity to sweep away accumulated anomalies and impose a more efficient, standardized system for the provision of public goods.

In order to compare jurisdictional designs we need to examine newly created tiers that have not been subject to population shifts over time. We observe forty such cases in our dataset. Along with two historical cases—Napoleonic France and Spain—these provide the empirical basis for our analysis. But to make this journey we need a map. How can one comprehend the variation that lies before us? On what dimensions might one summarize jurisdictional design? We begin by taking stock of the sparse literature on the topic and then we survey some ancient and modern examples of jurisdictional design. We next propose a scheme to systematically estimate variation. We conclude by testing a theory of jurisdictional design.

Where to Start

This is a field in which there are country studies, but little comparison.[1] Theory has been drawn from the size of states and the intuition that ethnicity produces smaller jurisdictions (Alesina and Spolaore 1997, 2003; Friedman 1977). However, it is not at all clear that ethnicity works in the same way within countries as it does among them. There is good reason to believe that ethnicity produces diverse, rather than small, jurisdictions.

The key argument in this literature is that of Alesina and his colleagues, who conceive a trade-off between economies of scale and ethnic heterogeneity (Alesina, Baqir, and Hoxby 2004; Alesina and Spolaore 1997, 2003).[2] In their influential model, economies of scale impose costs on small jurisdictions, and ethnic heterogeneity imposes costs on large jurisdictions. People avoid heterogeneity both because they want to avoid interaction with other ethnic groups and because different people prefer different public goods. Since economies of scale and heterogeneity are hypothesized to have opposite effects on jurisdictional size, their relative causal weight can be estimated by counting the number of jurisdictions. More jurisdictions indicate the influence of ethnic heterogeneity; fewer jurisdictions indicate the influence of scale. At the national level Alesina and Spolaore (2003) find that heterogeneity reduces the size of countries, and at the local level they find less consolidation of US school districts in counties that are more diverse (Alesina et al. 2004).

We conceive a tension between economic and communal pressures on jurisdictional design, but our starting point differs in two ways (Hooghe and Marks 2009*b*; Marks 2012; Marks and Hooghe 2000). First, we relax the assumption that larger units are always more cost-effective. The economic factors that bear on jurisdictional design encompass, minimally, the quality of information used in policy making and the costs imposed by spatial decay. Diseconomies of scale may arise if the information necessary for providing good government to people living in a region is difficult to standardize, resistant to batching, and correspondingly expensive to pass up an organizational hierarchy (Hooghe and Marks 2012; Ostrom 2010: 8; Stein 2002). Larger

[1] There are literatures on the size of states (Alesina and Spolaore 1997; Friedman 1977; for empirical tests see Green 2012; Lake and O'Mahony 2004), the location and size distribution of cities (Gabaix and Ioannides 2004; Krugman 1993), local government amalgamation (Freitas Tavares and Camões 2011), the number of subnational jurisdictions (Auffhammer and Carson 2009), and the effects of jurisdictional borders (Alesina, Easterly, and Matuszeski 2011; Englebert, Tarango, and Carter 2002). *OECD Territorial Reviews* provide informative country overviews of jurisdictional design.

[2] We define ethnicity broadly as a "category in which descent-based attributes are necessary for membership" (Chandra and Wilkinson 2008: 517).

jurisdictions may also impose additional costs on access to some public goods, such as elderly care. Informational and spatial costs may produce smaller, not larger, jurisdictions, depending on the public good. Efficient jurisdictional design produces a ladder of governance, ranging from the local to the global.

Second, we wish to revisit the effect of ethnic heterogeneity on jurisdictional design. Does ethnic heterogeneity lead to smaller jurisdictions? Looking at the world of nations, this is a plausible claim. Many states have broken up in ethnic conflict. The resulting states are, of course, smaller than the states from which they emerged. But the situation within states is different. On the one hand, small, culturally distinct groups distant from the center tend to have small jurisdictions. The Faroes, Jeju, and Malacca are, for example, much smaller in population and area than the average jurisdiction in Denmark, South Korea, or Malaysia. On the other hand, jurisdictions claimed by ethnic groups that are less isolated—such as Catalonia, Sarawak, or Scotland—can be considerably larger than the average jurisdiction in their respective state. Perhaps it is only where the living spaces of ethnicities are highly intermixed, as in the United States, that ethnic heterogeneity produces smaller jurisdictions. The generalization that ethnicity produces smaller jurisdictions appears to break down when ethnic minorities are less intermixed. Ethnic minorities that inhabit distinct parts of a country may produce both smaller than average and larger than average jurisdictions.

The idea that ethnic heterogeneity may lead to large jurisdictions comes out of models in which individuals are shaped by those with whom they interact. Axelrod (1997) simulates jurisdictional design among individuals whose chance of interaction is proportional to their cultural similarity. He finds that iterated interaction produces an equilibrium where a small number of large, culturally distinct regions co-habit the same territory but are unlikely to assimilate. The basic idea is that groups which are similar are likely to interact and then become even more similar, and eventually meld into a larger region. Assimilation may produce a single homogenous jurisdiction, but it may also generate more than one cultural region. Over time, the boundaries that differentiate these distinct regions will harden, and the process will settle down to equilibrium.

Karl Deutsch and Stein Rokkan, two giants of political sociology, arrive at exactly the same conclusion by analyzing historical patterns of communication. Deutsch (1953) argues that the capacity of a group to sustain its distinctive norms depends on the ratio of communication among its members relative to communication between its members and those outside. Rokkan and Urwin (1983) argue along parallel lines that a peripheral community must have the resources to resist being swallowed in a national state. These resources include a recognized language and literature, an urban center, and robust economic and political institutions that can survive assimilation.

The core intuition is physical: the larger an object, the smaller its surface in relation to its volume. Individuals in larger groups are more likely to interact with each other than with those outside. Geographical isolation can have the same effect. A group that is isolated on an island or mountain, or in a desert may be able to sustain its culture even if it is small. But a group that is not isolated may have to be large to resist assimilation.

Ethnicity—or more broadly, community—can be expected to produce diverse jurisdictions, depending on the resources of the groups resisting assimilation. A bottom-up design biased towards community can be expected to produce jurisdictions that vary in area and population, whereas one biased towards scale will optimize area and population so that a jurisdiction that is large in one is small in the other.

Jurisdictional Design in History

Carving population in equivalent jurisdictional units according to some abstract design has a long history. Ancient states devised elaborate systems of rule to collect taxes and enforce compliance. The internal structure of the state was organized in tiers reaching down to every individual. A multilevel system emerged as early as 221BC under the Qin dynasty. It consisted of a series of nested tiers for 27 million subjects dispersed over five million km^2 (Chang 2007: 64). Thirty-six commanderies (chün) containing around three-quarters of a million people were divided into prefectures (hsien) responsible for 10,000 to 20,000 families, which in turn were subdivided in a nested hierarchy of counties (hsiang) of 5,000 families, wards (li) of 100 families, shih of ten families, and wu with five families (Chang 2007: 44). The family was the final unit of control. If any of its members committed a crime, the entire family suffered the penalty.

The Qin dynasty anticipated modern efforts to flatten a pre-existing order by standardizing jurisdictions. Feudal aristocratic ranks were abolished. Noble families were dispossessed and forced to move to the capital (Bodde 1986: 142; Chang 2007: 58). More than one million people were resettled and two million soldiers conscripted. Successor regimes added or subtracted units and tiers as the empire grew or contracted.

The Inca empire had a comparably elaborate structure (Rowe 1982). The first tier divided an empire encompassing much of contemporary Peru, Bolivia, Ecuador, and Northern Chile into quarters. The scheme divided each quarter into ten provinces, each province into ten districts until, three further tiers down, an official oversaw ten peasants.

Mapmaking and the census make it possible to imagine rational governance with spatial rather than communal units (Anderson 1991; Biggs 1999; Sahlins 1989). Philosophers and revolutionaries imposed mathematical thinking on

territorial governance with no concession to custom. Inherited muddles of feudal, Escher-like jurisdictions were imagined away by dividing a country into homogenous territorial units. David Hume, usually regarded as an empiricist and a pragmatist, begins his essay, *The Idea of a Perfect Commonwealth* (1742/1987: XVI.7), with a blueprint of logarithmic precision:

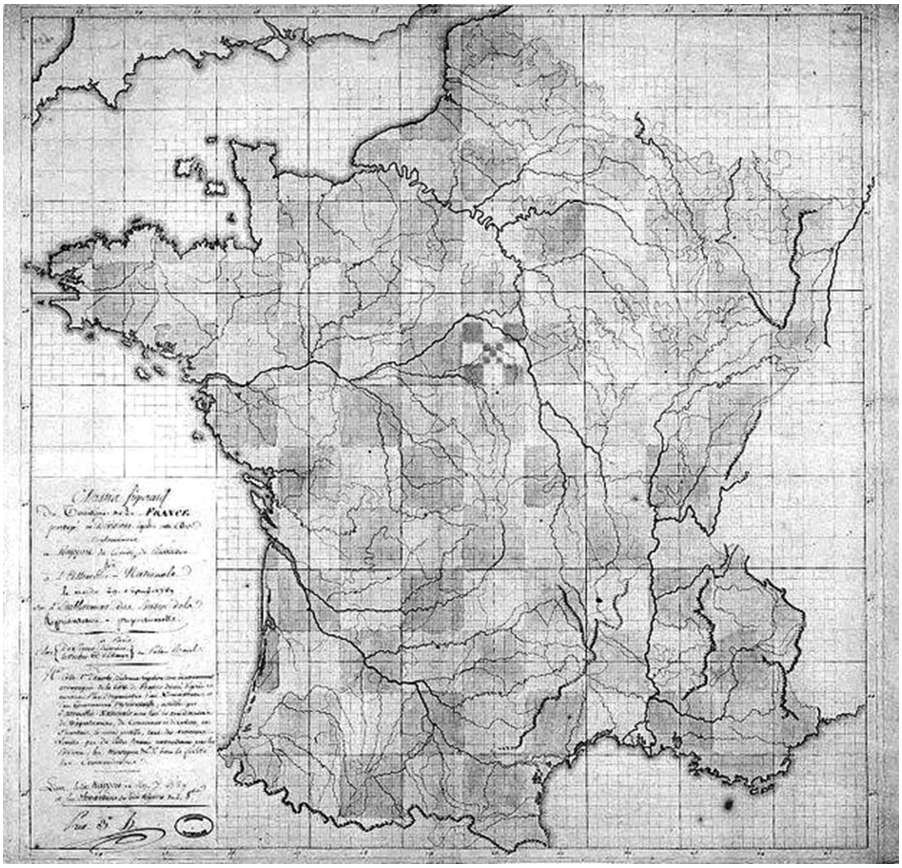
> Let Great Britain and Ireland, or any territory of equal extent, be divided into 100 counties, and each county into 100 parishes, making in all 10,000. If the country, proposed to be erected into a commonwealth be of more narrow extent, we may diminish the number of counties; but never bring them below thirty. If it be of greater extent, it were better to enlarge the parishes, or throw more parishes into a county, than increase the number of counties.

Late eighteenth-century France was a hothouse for such plans, the most influential of which was a map by Robert de Hesseln dividing France into eighty-one districts of 18 by 18 leagues, each of which was subdivided into nine cantons (Map 4.1).[3] The result is a striking geometric design paying no regard to history or geography. It conceives France as a homogenous space composed of equally homogenous units. The *Comité de constitution* of the French Assembly, charged in July 1789 with reshaping French territorial governance, took the map as its point of departure (Biggs 1999; Branch 2013). The committee, stacked with luminaries of the revolution—Talleyrand, Siéyès, Le Chapelier, Rabaut Saint-Etienne, Mirabeau, Condorcet—intended to build a just administration "with perfect equality between all components of the nation." It would end privilege, particularism, and parochialism entrenched in what the *Comité* described as "bizarre and unequal" jurisdictions, "which only habit could render tolerable" (quoted in Biggs 1999: 389). Condorcet (1804: 231) noted that the plan exemplified the egalitarian ideal because it would allow any citizen to travel to his local district, conduct business, and return home in a single day. Siéyès saw the plan as an antidote to local community:

> [I]t would be essential to make a new territorial division based on equal spaces, everywhere, except at the borders of the kingdom . . . It is only by erasing the borders of the provinces that one could destroy all local privileges, effectively reclaimed while we were without constitution, and which will continue to be defended by the provinces, even while they won't present anything more than obstacles to the creation of social unity . . . I know of no means that is more powerful and more prompt to forge, without problems, all parts of France into one body and all the Peoples that divide it, into one Nation.[4]

[3] A league (*lieu*) was the distance (around 4 km) that could be covered by foot in an hour.

[4] E.J. Siéyès, "Délibérations à prendre dans les assemblées de baillages," instructions envoyées par M. le Duc d'Orleans pour les personnes chargées de sa procuration aux assemblés de baillages, relatives aux états généraux, s. 1, 1789, pp. 42–4 (quoted in Ozouf-Marignier 1986: 1194—our translation).



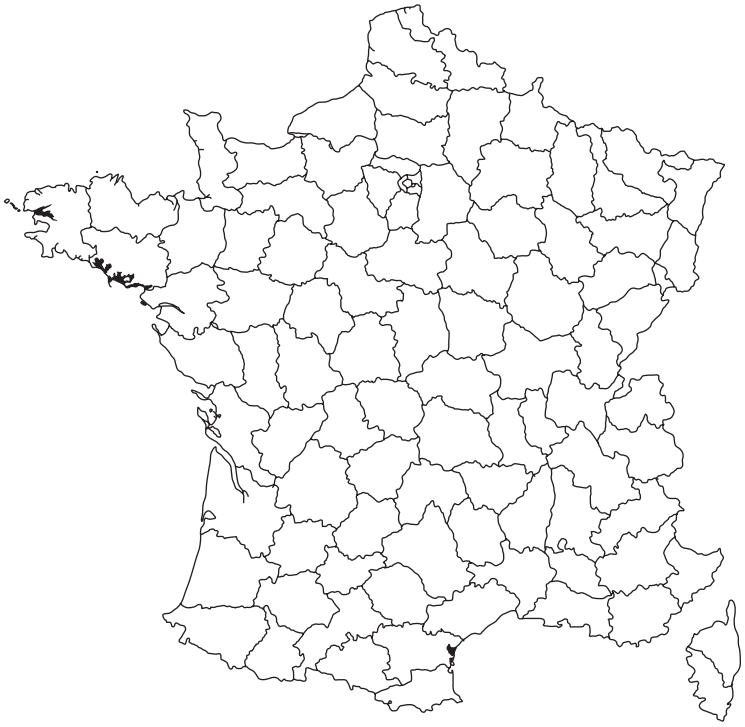
Map 4.1. A geometric design for France (1780)

Note: Map designed by cartographer Robert de Hesseln (1780). Source: Centre historique des Archives nationales (Paris) (copyright: CARAN—service de reprographie. See more at <http://www.histoire-image.org/site/etude_comp/etude_comp_detail.php>).

Mirabeau famously remarked that the plan failed "to reconcile administration with men and things."[5] Edmund Burke (1790/2003 Vol. III: 231–2) objected that it imposed "equality in geometry," whereas "the goodness of the soil, the number of the people, their wealth, and the largeness of their contribution, made . . . infinite variations between square and square. I cannot conceive how any man can have brought himself to that pitch of presumption, to consider his country as nothing but carte blanche, upon which he may scribble whatever he pleases."

[5] "La formation des départements," at <http://www.histoire-image.org/site/etude_comp/etude_comp_detail.php?analyse_id=280>.

As implemented, the reform of 1790 created eighty-three départements of roughly equal area on the model of de Hesseln's map with minimal concession to the landscape. Each département was large enough to support a local court and small enough for a civil servant on horseback to reach any corner within a day's ride. The revolutionaries coolly applied the same Cartesian logic to subdivide each département into four or five arrondissements, each of which contained seven to ten cantons. Thirty-six thousand towns, burgs, parishes, and villages with diverse statutes and rights were replaced by the uniform institutions and competences of the commune (Masson 1984; Ozouf-Marignier 1986). Most départements were named after rivers or geographical landmarks rather than local villages or towns in a deliberate effort to override regional loyalties (Piattoni 2009). The system was consolidated under Napoleon and imposed across his empire. Henceforth, it would be known as the Napoleonic model (Marti-Henneberg 2005*a*: 793; see also Alesina, Easterly, and Matuszeski 2011; Flora et al. 2016). The spirit of the original plan is evident in the contemporary division of France into départements in Map 4.2.



Map 4.2. Départements in France (2015)

Community and Geo-history

An alternative approach is to build jurisdictions on durable patterns of human interaction. The boundaries of social, economic, and political interaction almost never coincide, and most persons consider themselves members of more than one territorial community. So the command: "Build government on community" may mean little or nothing. But there are some circumstances in which distinctive communities can be readily perceived. Many countries have, within them, geographically concentrated groups of people of distinct ethnicity, language, or religion. If such communities serve as building blocks, one can expect a more haphazard jurisdictional design than one based on abstract principles of technical efficiency.

We draw on the work of Stein Rokkan and his conceptualization of *difference*, *distance*, and *dependence* to identify such communities (Dahl-Fitjar 2010; Flora, Kuhnle, and Urwin 1999: 64; Rokkan and Urwin 1983). *Difference* refers to the normative distinctiveness of a community. Rokkan (in Flora et al. 1999: 171) regards language as decisive because it is "a focal point of identity . . . a collective act in which everyone in a territory must share." Communication and community have a single root, the Latin *communis*, "common, public, general, shared by all or many." On similar grounds, Karl Deutsch regards language as a litmus test for the creation of a community because it profoundly affects the breadth and density of communication within a group relative to that between groups: "Membership in a people essentially consists in wide complementarity of social communication. It consists in the ability to communicate more effectively, and over a wider range of subjects, with members of one large group than with outsiders" (Deutsch 1953: 95).

Distance refers to the geographical barriers that impede political, economic, and cultural interaction and which sustain cultural distinctiveness even in the face of a prolonged state strategy to assimilate. The intuition here is that the greater the transaction cost (in time and effort) of communication from a core to a peripheral community, the weaker the pressure of homogenization.

Dependence refers to the economic, political, and cultural reliance of the periphery on the center and the periphery's corresponding vulnerability to homogenization. "They possess some sense of their separate identity, but this is constantly threatened by central agencies" (Flora et al. 1999: 115). To what extent is a region able to sustain its distinctiveness against a centralizing core? Though Rokkan is not explicit about what it takes for a region to be independent, former statehood is clearly a contributing factor. Autonomous states develop institutions for control, mobilization, and protection, and these may leave a durable legacy.

We hypothesize that difference, distance, and dependence underpin jurisdictional architecture in contrasting ways. Communities that are distant from

the center may sustain difference even if they have a small population and no history of independence. Islands are fascinating in this respect because they impede certain kinds of interaction while facilitating others. They facilitate trade because transport of goods by sea is considerably cheaper than transport over land. Hence island trade tends to be more geographically dispersed than that of landlocked regions, and islands are consequently less dependent on trade with a single dominant core. But it is no simple thing for armies or populations to traverse the sea. Islands that do not lie in the lap of a mainland core are not easily conquered or overwhelmed by migration. Islands tend to produce states or strong self-governing regions despite their small population size.[6] In short, islands are not easily absorbed in mainland states and are not easily assimilated in Napoleonic jurisdictional design.

Communities on the mainland within reach of the center are in an entirely different situation. Those that persist tend to be large and resourceful. Their populations face formidable economic, social, and political pressures for assimilation into the larger society. National systems of roads and railways puncture their borders. National labor markets pull their population into the wider economy. National educational systems and media facilitate cultural assimilation. These pressures appeared so strong to Ernest Gellner (1983: 33) that he claimed "sub-units of society are no longer capable of self-reproduction."[7] "Industrialization," he argued, "engenders a mobile and culturally homogeneous society" (72). The functional dictate of modernization is for "a mobile division of labour, and sustained, frequent and precise communication between strangers involving a sharing of explicit meaning, transmitted in a standard idiom and in writing when required." Which groups would succeed in forming nation states? "Size, historicity, reasonably compact territory, a capable and energetic intellectual class: all these will obviously help; but no single one is necessary; and it is doubtful whether any firm predictive generalization can be established in these terms" (45).

In our theory, three of these conditions—size, historicity, and compact territory—are associated with an outcome that Gellner did not anticipate: the jurisdictionalization of a minority community within a state. A large population, a history of independent statehood, and territorial concentration are key assets in resisting assimilation for a minority that has access—and is accessible—to the wider society.

A sufficient population is vital to sustain a language that is different from the official language of the state. David Laitin's tipping model theorizes the

[6] Of 190 islands around the globe with a population greater than 100,000, forty-six lie 30 km or more from their nearest neighbor or mainland. Of these, twenty-five are states with a median population of 849,000. On the continental mainlands there are 170 states with a median population of 9.3 million.

[7] To be fair, Gellner sometimes nuances this conclusion (Meadwell 2015; O'Leary 1997: 215).

incentives that face individuals in choosing which language to speak: "The payoff for an individual linguistic choice depends on how many other individuals make the same choice" (1998: 26). Only if sufficient numbers of others find a reason to use the titular language rather than the official state language as the medium of communication is it rational to resist assimilation. A history of independent statehood can provide a region with a national myth and, more importantly, institutions that sustain its distinctive language and customs. Finally, geographical concentration is important because members of a concentrated group will interact more frequently with colinguals than will members of a dispersed group (Deutsch 1953: 43).

Whereas the rational application of technical efficiency creates equivalently sized jurisdictions or jurisdictions that optimize population and territory, the politics of resistance to assimilation has the opposite effect. Minorities may resist assimilation in isolated jurisdictions which are small in both territory and population or in large and populous jurisdictions nearer the center. If so, the forces that shape jurisdictional design will come to light in the overall pattern of jurisdictions in a country.

Conceptualizing Jurisdictional Design

We are now in a position to conceptualize a jurisdictional design as *a comprehensive plan for the construction of a system of governance*. A jurisdictional design is *comprehensive* in that it encompasses a tier of governance rather than a single jurisdiction, and it is *systemic* in that individual jurisdictions are conceived as part of an interrelated whole. The unit in jurisdictional design is the individual jurisdiction, but to compare jurisdictional designs one must examine how the jurisdictions in a tier fit together.

Figure 4.1 sets out a two-dimensional frame on which one can plot the population and area of jurisdictions in a tier. The reference point at the center is the area of the median jurisdiction on the X-axis and the population of the median jurisdiction on the Y-axis. The jurisdictions in a tier can then be depicted in relation to the median to produce a scatterplot.

Figure 4.2 envisages four distinct designs. Each is an ellipse encompassing the jurisdictions in a particular tier. The two at the top are rationalist designs that apply abstract principles of scale on the population and area of jurisdictions.

At the top left, a Napoleonic model applies principles of uniformity in subnational governance. Jurisdictions are similar in both population and area. They pay little or no attention to history or geography. Next to this at the top right is a more nuanced design that trades off population and area. A Napoleonic design may be impossible if a country has vast open spaces with relatively few inhabitants alongside densely populated urban areas. Rationalist

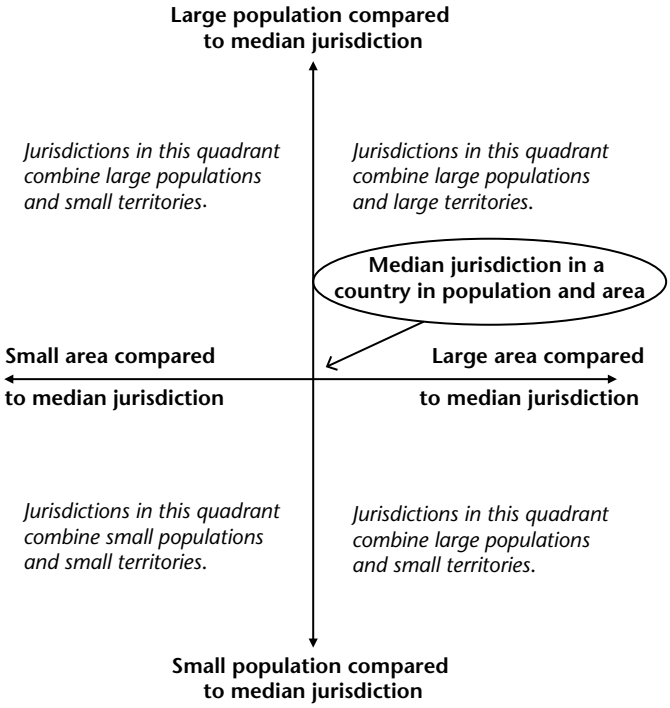


Figure 4.1. An analytical frame for jurisdictional design

design in this case must take the more subtle path of minimizing variance in the combination of area and population. Jurisdictions with low population density have relatively large areas, while jurisdictions with high population density have small territories.

The two designs at the bottom of the figure reflect geo-historical communities that combine jurisdictions with small population/small area and large population/large area. At the bottom left of Figure 4.2 is a design that we call Rokkanian. Whereas the two prior designs apply abstract rationality to governance, this design mirrors communities as they have emerged over time. Its distinctive shape arises because the communities that depart from the median tend to be small in both population and area, or large in both population and area.

At the bottom right is an irregular design comprising jurisdictions in all four quadrants. It attests no abstract principles, but is an adaptation to geo-history and community which produces jurisdictions of widely varying populations and areas.

Can one generalize about the incidence of these alternatives? To do so, we must first propose metrics for comparing jurisdictional designs.

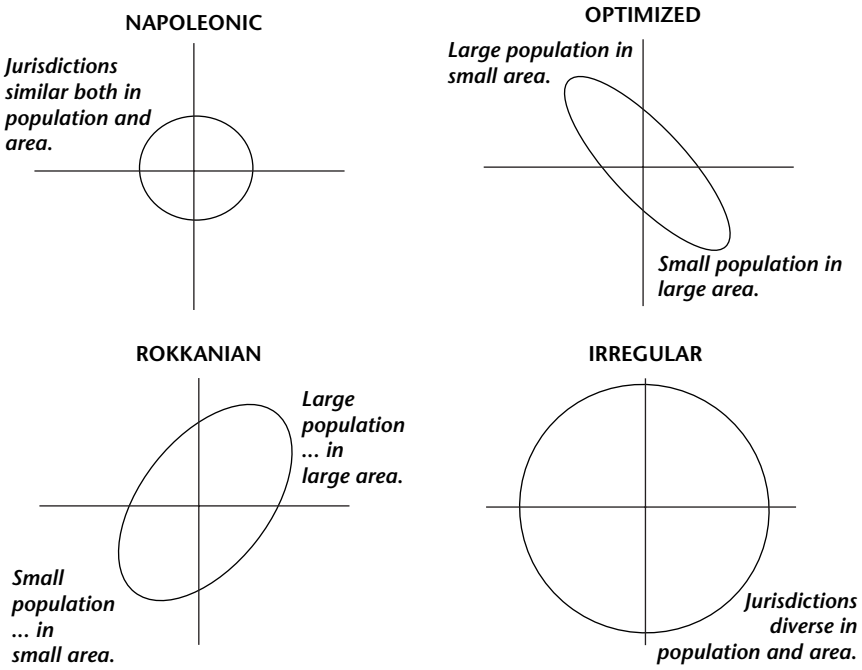


Figure 4.2. Jurisdictional designs

Comparing Jurisdictional Designs

Jurisdictional design is best observed fresh. As a design recedes in time it is concealed by the uneven growth and movement of population across the country. For this reason, we examine jurisdictions at the time they are established, or as near to that time as the data allow. Forty regional tiers were established or comprehensively redesigned in the eighty-one countries in this study between 1950 and 2014, and we match the dates of these with census information on population and area. We also include two famous historical cases—the creation of the French départements in 1790 and Spanish provincias in 1833.

We measure the population of a jurisdiction relative to the median jurisdiction in its tier and, similarly, we measure area relative to the median jurisdiction, using the following formulas:

$$Population\ difference\ (PopDiff)_{ij} = \frac{Population_{ij} - Median\ population_j}{Population_{ij} + Median\ population_j}$$

$$Area\ difference\ (AreaDiff)_{ij} = \frac{Area_{ij} - Median\ area_j}{Area_{ij} + Median\ area_j}$$

Table 4.2. Operationalizing jurisdictional design

σ (sigma)	*std* ($PopDiff_j$) + *std* ($AreaDiff_j$)
ρ (rho)	*corr* ($PopDiff_j$, $AreaDiff_j$)
Napoleonic	$\sigma \leq 0.50$
Optimized	$\sigma > 0.50 \cap \rho < -0.40$
Rokkanian	$\sigma > 0.50 \cap \rho > +0.40$
Irregular	$\sigma > 0.50 \cap -0.40 < \rho < +0.40$

The subscript *i* refers to an individual jurisdiction and *j* refers to the tier. These are standardized measures ranging from −1 to +1, which provide a simple and reliable way to plot jurisdictions. Negative scores indicate units that have a smaller population (area) than the median; positive scores indicate units that have a larger population (area) than the median. A unit with the same population as the median unit scores zero; a unit with a population that is twice the median unit scores +0.33; and a unit with a population that is half that of the median unit scores −0.33. The measure is inverse exponential. A unit that is three times (or one-third) as large as the median unit scores +0.5 (−0.5) and one that is six times (or one-sixth) as large as the median unit scores +0.71 (−0.71). Hence, the measure is most sensitive to values around the median, which is a desirable property given our theory.

Relatively small scores reveal a uniform or *Napoleonic* model. The criterion is that σ (the standard deviation of *PopDiff* plus the standard deviation of *AreaDiff*) is less than or equal to 0.5 (Table 4.2). This would be the case if the standard deviation for *PopDiff* and *AreaDiff* were each 0.25, which would result if the median jurisdiction had a population of 100,000 and an area of 10,000 km^2 and two-thirds of the jurisdictions have a population between 60,000 and 166,666 and two-thirds of the units have an area between 6,000 km^2 and 16,666 km^2.[8] Of the forty-two tiers listed in Table 4.3, fifteen are Napoleonic.

Some designs optimize population and area so that some jurisdictions have larger populations than the median but smaller areas, while others have smaller populations and larger areas. This design is optimized in the specific sense that it minimizes the sum of *PopDiff* and *AreaDiff* for each jurisdiction.[9] We consider a design as falling into this category if the tier does not meet the criterion for a Napoleonic design and if ρ (the association between *PopDiff*

[8] These figures assume a normal distribution. Because the distribution of jurisdictions in most tiers is skewed, with one or two jurisdictions (usually including the capital city) being very much larger than the median, the range of values for two-thirds of the regions is usually smaller than the example in the text.

[9] It is worth noting that whether this produces optimal policy in a general sense is entirely open to question.

Table 4.3. Jurisdictional design in 42 reforms

Scale		
Napoleonic: scale is imposed by minimizing variation in population and area		
Albania 2000; Croatia 1993; Czech Republic 2000; Haiti 1980; Hungary 1999; Latvia 2009; Lithuania 1995; Macedonia 2008; Napoleonic France 1790; Napoleonic Spain 1833; Poland 1975, 1999; Romania 1998; Slovakia 1996; Turkey 2009	Small standard deviation for population + area (average = 0.42)	15 cases
Optimized: scale is imposed by trading off population and area		
Chile 1976; Indonesia 1950; Ireland 1987; Portugal 1979; Russia 2000	Negative association between area and population (average = −0.57)	5 cases
Community		
Rokkanian: community is reflected in a positive association between population and area		
Belgium 1970–80; Finland 1993, 1997; Greece 2011; Italy 1971; Malaysia 1957–63; Serbia 2009; Slovenia 1999; South Korea 1952; Spain 1979–83	Positive association between area and population (average = 0.65)	10 cases
Irregular: community is reflected in diversity and unrelatedness of population and area		
Chile 1974; Cuba 1966, 1976; Denmark 1970, 2007; England 1974; France 1964; Greece 1986; New Zealand 1974, 1989; Peru 1989; UK 1994	Large standard deviation for population + area (average = 0.72); weak association area and population (average = 0.04)	12 cases

and *AreaDiff*) < –0.40. Eight tiers have ρ < –0.40, of which three meet the criterion for a Napoleonic design. The five remaining designs have an average ρ value of –0.57.[10]

Tiers reflecting community contain jurisdictions that are diverse in population and area. The pure form of a community design exhibits a substantial positive association between *PopDiff* and *AreaDiff*. We observe ten such designs with a positive association of 0.65. This leaves twelve irregular designs with jurisdictions that are all over the map on population and area. These have an average standard deviation in population and area of 0.72 and no discernable association between *PopDiff* and *AreaDiff*.

The effect of community on jurisdictional design is sharply evident when one maps the population and size of "Rokkan" regions, i.e. regions that are geographically distant, linguistically distinct, or have a history of political

[10] Regiók (Hungary), planski ryegioni (Macedonia), and planošanas regioni (Latvia) meet the criteria for Napoleonic design and have a negative association greater than 0.40.

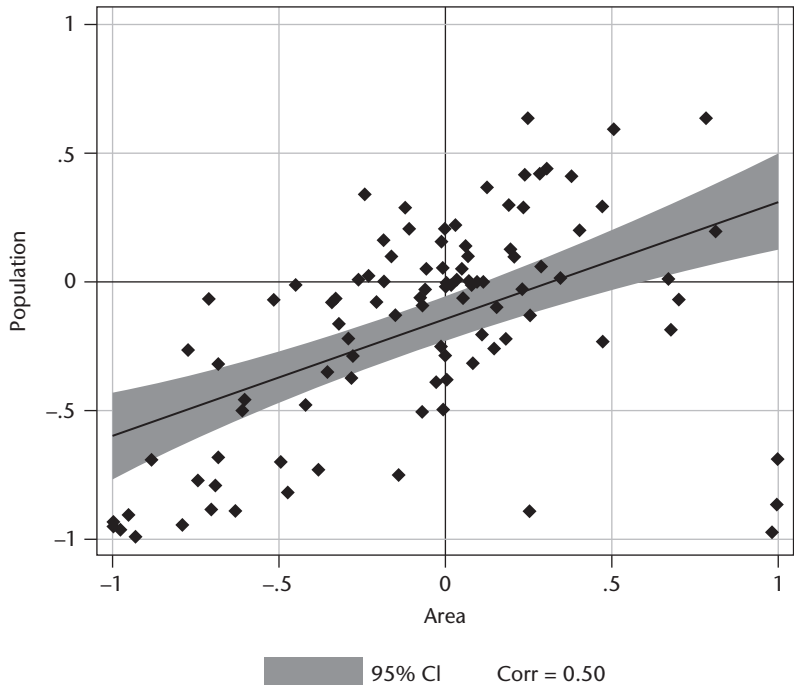


Figure 4.3. Rokkan regions

Note: Population and area size of Rokkan regions relative to the median jurisdiction in their tier following jurisdictional reform. A region is Rokkanian if it has one or more of the following characteristics: island or noncontiguous territory that is at least 30 km from the mainland; a majority that speaks a different language from the main national language; prior statehood. In this dataset 101 of 739 jurisdictions (14 percent) are Rokkan.

independence. When a "Rokkan" region varies from the median jurisdiction in its tier, it tends to be either small or large in both population and area. In Figure 4.3 the positive association between population and area for 101 "Rokkan" regions is 0.5. The three cases in the bottom right-hand corner of the figure are vast, sparsely populated regions: the Antarctic region of Chile (1974) and Greenland, which features twice in Danish reforms (1970; 2007). When these are excluded the association among the remaining ninety-eight cases is 0.71.

Some "Rokkan" regions are assimilated as standard regions within a tier, whereas others are differentiated by having special authority in their homeland. Our expectation is that differentiated "Rokkan" regions—regions that have sustained a distinctive claim for self-rule—are small regions at the geographical edge of the state or large regions that have resisted assimilation without the benefit of isolation. When one compares the absolute scores on

PopDiff + *AreaDiff* for "Rokkan" regions that have special authority ($n=30$) to those that do not ($n=71$) this is precisely what one finds. "Rokkan" regions that have greater formal authority than other regions in their tier have an absolute σ score that on average is twice that of "Rokkan" regions that are standard regions in their tier (1.05 compared to 0.51). The difference is highly significant (ρ = 0.002). A σ score of 1.05 would result if a region had a population that was three times that of the median region in its tier and an area that was three times that of the median population, or if the region had one-third of the median population and one-third of the median area.

What does it take for a territorially concentrated, normatively distinct minority to persist within a state? There appear to be two paths. One is that of the failed center. A region without the fortune or power to sustain an independent state may be strong enough to resist assimilation. Catalonia, Johor, Flanders, and Sicily are examples. These regions tend to be large in relation to their host states. They are swallowed but not digested in the course of geo-political struggle. Remoteness offers an alternative path. A small region with a small population may sustain independence on the fringes of a state. The Åland Islands, Balearic Islands, Easter Island, the Dodecanese, and Jeju are examples.

The Effect of Regime Change

When do rulers choose a scale design, and when a community design? Scale design conceives government as an instrument for the efficient provision of public goods. Community design conceives government as an expression of local self-rule. Scale design imposes rationality on the structure of governance. Community design reflects endogenous historical processes. Scale design is determined at the center. Community design accommodates the status quo in the provinces. Each of these features suggests that scale design is a function of political discontinuity and that community design is a function of path dependence. Our prior is that scale design is most likely following revolution, decolonization, regime transition (e.g. the demise of communism), regime split, and regime amalgamation.

Accession to the European Union is a constitutional shock with domestic repercussions, and we consider it a form of regime change. Beginning in 1988, the EU's cohesion policy required "partnership" among the Commission, national authorities, and regional/local governments in designing, running, and monitoring economic development programs which accounted for about one-third of the EU budget (Hooghe 1996). The desire of candidate countries in Central and Eastern Europe to accede to membership "allowed the EU an unprecedented influence on the restructuring of domestic institutions and

Table 4.4. Logit model for the effect of regime change on jurisdictional design

	Model 1	Model 2	Model 3	Model 4
Regime change	8.58**		9.19**	
	(6.19)		(6.99)	
Regime change excluding EU accession		6.22**		6.05*
		(4.25)		(4.36)
Democracy			0.68	0.78
			(0.54)	(0.61)
Left government			1.26	1.12
			(0.55)	(0.47)
Regional party in government			0.45	0.53
			(0.43)	(0.49)
Constant	*0.27**	*0.38**	*0.24*	*0.40*
	(0.15)	*(0.18)*	*(0.30)*	*(0.47)*
No. of cases	42	42	42	42
AIC	1.23	1.29	1.34	1.42
Likelihood-ratio χ^2	10.31	7.91	11.83	8.69
McFadden's R^2	0.18	0.14	0.21	0.15
McKelvey & Zavoina's R^2	0.26	0.21	0.31	0.23
Efron's R^2	0.23	0.18	0.26	0.20
% correctly predicted	73.81	71.43	71.43	71.43

Note: $n = 42$ cases of jurisdictional design. The dependent variable is dichotomous: scale design = 1; community design = 0. Logit analysis with odds ratios (standard errors). An odds ratio above 1.00 indicates a positive association and one below 1.00 indicates a negative association.
* $p < 0.05$; ** $p < 0.01$.

the entire range of public policies in these countries" (Schimmelfennig and Sedelmeier 2004: 669; Vachudova 2005). In particular, there was substantial pressure to reform domestic governance, including subnational institutions (Bauer and Börzel 2010; Börzel 2002).[11]

The effect of regime change for the mode of jurisdictional design is very strong in bivariate analysis for forty-two cases of jurisdictional reform. Of the twenty-three cases of regime change preceding jurisdictional reform, sixteen are scale designs. By contrast, of the nineteen cases of jurisdictional reform in the absence of regime change, fifteen are community designs. A chi-squared test produces a likelihood ratio of 10.31, significant at $p < .001$.[12]

Table 4.4 confirms that regime change robustly produces scale design under controls both when EU accession is included within *Regime change* (models 1 and 3) and when EU accession is excluded (models 2 and 4). We transform the

[11] In Ireland, Greece, and Portugal, the European Commission made EU funding conditional upon the creation of regional administrations (Laffan 1996). The Commission has followed a similar strategy in Central and Eastern Europe, and more recently in the Balkans and Turkey (Atanasova and Bache 2010; Dellmuth and Stoffel 2012; Ertugal and Dobre 2011; Hughes, Sasse, and Gordon 2004*a*).

[12] If we exclude European accession, a chi-squared test produces a likelihood ratio of 7.91, significant at $p < .005$.

coefficients in these logit models into odds ratios which estimate the relative odds of the two possible outcomes—scale design or community design—resulting from a one-unit change in an independent variable (Long 1996). In the bivariate analysis, regime change is estimated to increase the odds of a scale design by a factor of 8.58 (model 1) or 6.22 (model 2). Models 3 and 4 control for the possibility that democratic regimes and government coalitions which include regional parties are biased against scale design and that left-leaning governments favor scale design.[13] The effect of regime change is consistently large and statistically significant in these specifications. Holding the control variables at their means, the odds of a scale design are estimated to be 9.19 times greater than a community design under *Regime change* and 6.05 times greater under *Regime change excluding EU accession*.

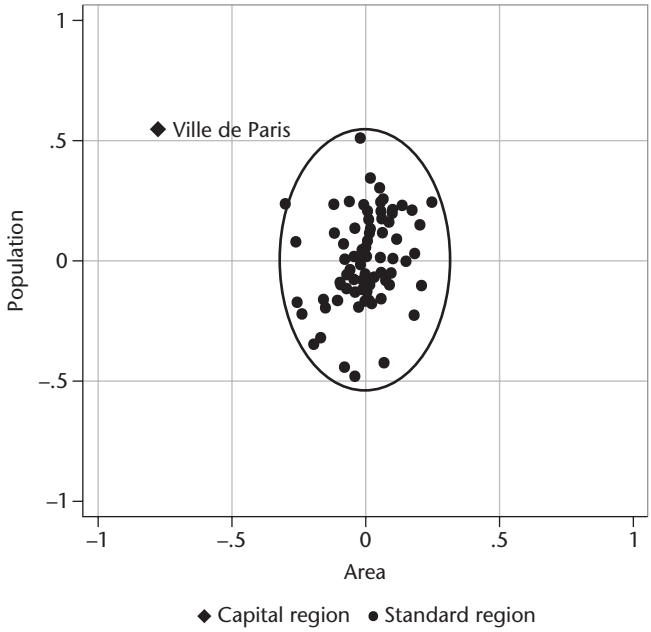
Napoleonic Design

Fifteen cases exhibit a Napoleonic design which minimizes variation among jurisdictions. Figure 4.4(a) represents départements in Napoleonic France using census data from 1851—the earliest reliable information on population. The result is a tight oval which leaves out just one region, Paris. Fifty years after the original design, no département other than Paris had a population less than half or more than twice the median. The areas of départements are even more tightly bunched. The model was extended to countries conquered by Napoleon—Spain, Italy, Belgium, the Netherlands, and Portugal—and it was implanted in most of their colonies (Alesina et al. 2011; Flora et al. 2016; Marti-Henneberg 2005*a*, *b*).[14]

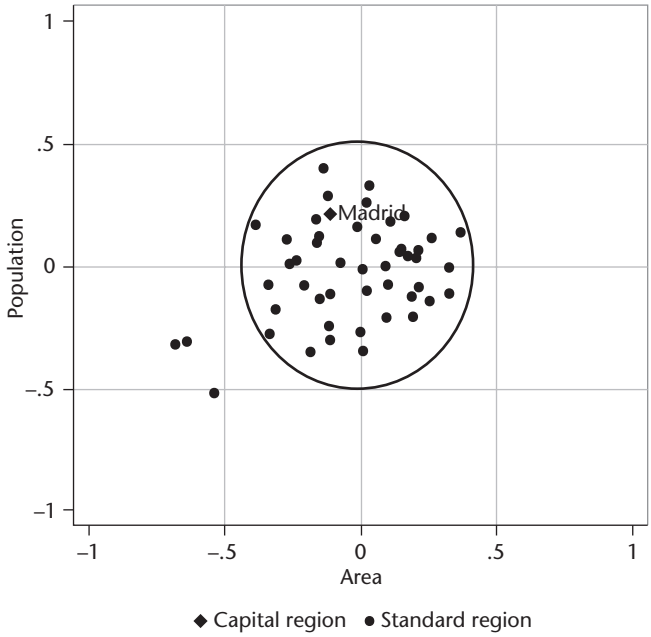
Figure 4.4 (b) plots Spain's forty-nine provinces in 1833, when the design was re-imposed after its short-lived introduction in 1822 by liberal revolutionaries. As in France, it "swept away the rather anarchic and overlapping local jurisdictions and institutions of the Ancien régime, replacing them with two tiers of legally uniform units" (Clegg 1987: 130). The intention was to "build the Spanish nation by applying a unifying program" (Moreno 2001: 45). Provinces were created from scratch; boundaries were redrawn; enclaves eliminated (except for those in the Basque country); and all but four provinces were given new names (Marichal 1977: 53; Pérez 1999: 464). The three outliers in the bottom-left corner are the Basque provinces of Araba, Gipuzkoa, and Bizkaia which, together with Navarra, rebelled to preserve their traditional

[13] These variables are specified in the Appendix to this chapter.

[14] Using GIS technology to map population and boundary changes in subnational jurisdictions in Europe since 1850, Marti-Henneberg (2005*a*: 793) observes that European countries "divided into similar-sized units. [T]he majority of European countries chose units with average sizes between 3,000 and 10,000 km^2."



(a) Départements in Napoleonic France (1790)



(b) Provincias in Napoleonic Spain (1833)

Figure 4.4. Napoleonic designs

rights and territories. These provinces retain *fueros*, special legal and judicial systems, to the present day.

The revolutionary reforms in France and Spain were centralizing as well as uniform. Napoleon imposed central control in départements by prefects: "Your mission . . . reaches all branches of internal administration . . . Your prerogatives embrace everything that concerns the public welfare and national prosperity, for the best interests of those whom you serve."[15] Spanish provinces were headed by governors appointed by the central government who were responsible for maintaining order, controlling trade unions, overseeing the press, allocating public funds, distributing patronage, and implementing central policies (Carr 1983; Clegg 1987: 131; Mény 1987).

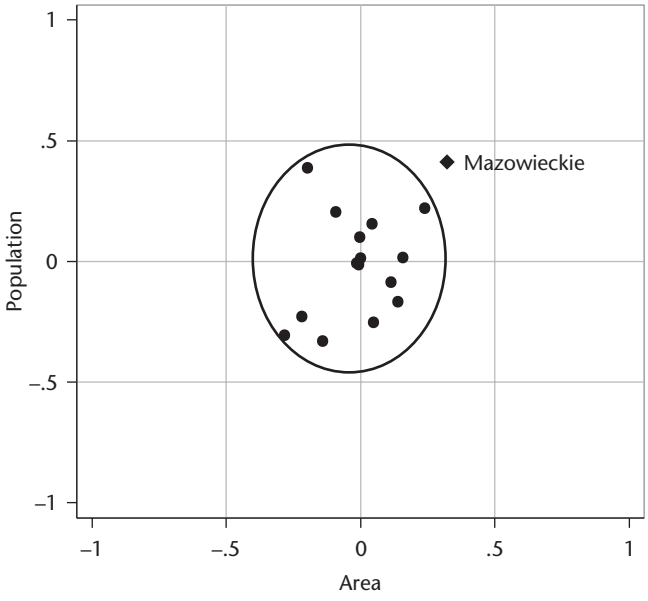
Scale design usually occurs as a break from the past. Regime change provides an opportunity for radical reform as new rulers design a new system of governance. In several Central and Eastern European countries, the demise of communism and transition to democracy created an opportunity for top-down reform that could frame subnational governance on a standardized, presumably more efficient, basis.

Such reform often involves bargaining, which leaves its fingerprints on the outcome. After the transition from communism in Poland, a center-right government led by Jerzy Buzek sought to reduce forty-nine vojvodships, established under communism, to eight or twelve (Hughes et al. 2004*a*: 130). In the end, the reform established more regions than the government wished—sixteen—to accommodate social-democrats who campaigned to reduce the loss of public sector jobs and a small German-speaking minority which resisted merging its vojvodship into adjacent regions (Yoder 2007).

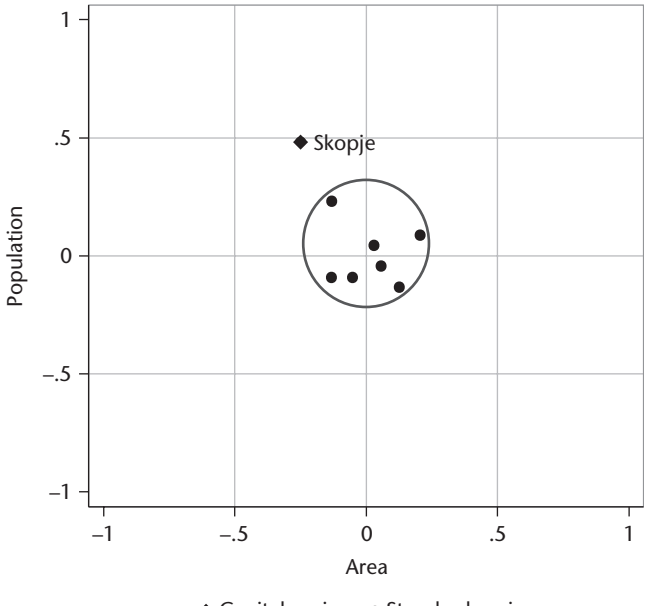
However, the plan retained its scale character, as Figure 4.4(c) reveals. All jurisdictions lie within 0.5 on the population and area axes; $\sigma = 0.41$. The two deviant jurisdictions outside the ellipse are the capital region of Mazowiecki, almost twice as large as the median region, and Opole, which is half the size of the median region. Opole is the region that was hastily conceived to assuage the German-speaking community.

Impending EU membership has provided an impetus for jurisdictional reform (Bruszt 2008; Hughes, Sasse, and Gordon 2004*b*: 542). Entirely new jurisdictional tiers have been set up to negotiate and implement EU cohesion funding. These levels of governance tend to be light in authority and representative institutions. They are the nearest approximation to scale design in which jurisdictions have identically sized territories and populations.

[15] Circular issued 12 March 1800 by the Minister of the Interior. Quoted at <http:www.napoleon.org/histoire-des-2-empires/articles/la-creation-du-corps-prefectoral-en-lan-viii/>.

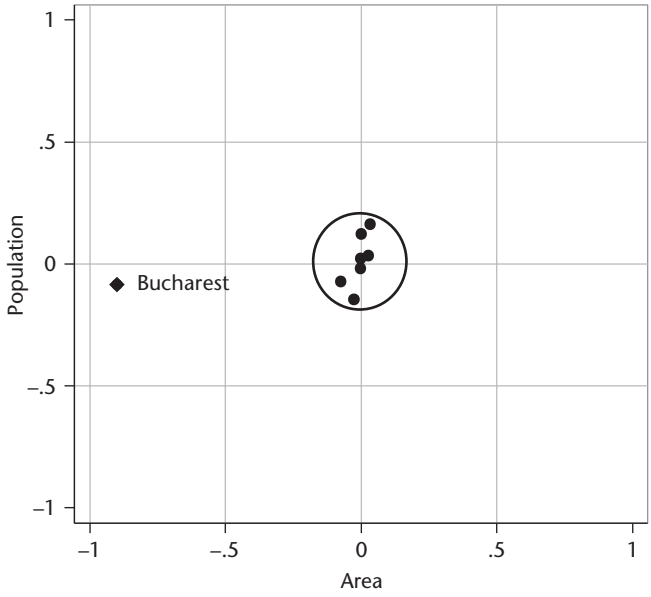


(c) Vojvodships in Poland (1999)

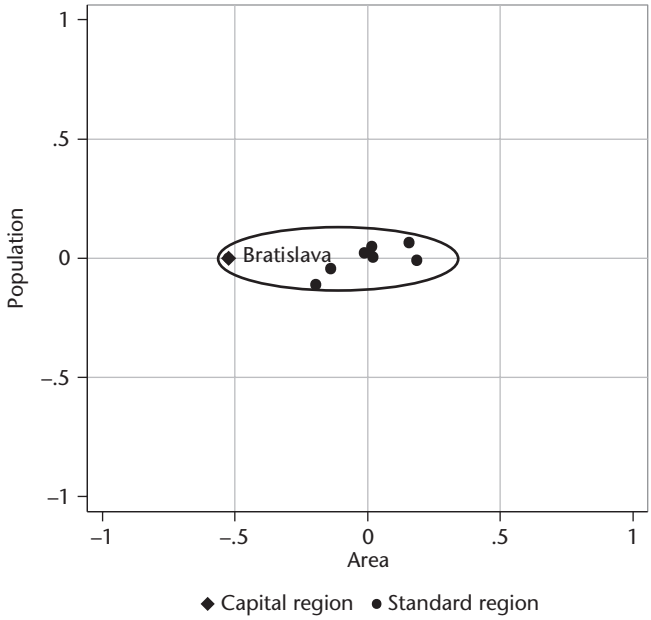


(d) Planski ryegioni in Macedonia (2008)

Figure 4.4. Napoleonic designs (continued)



(e) Regiuni de dezvoltare in Romania (1998)



(f) Kraje in Slovakia (1996)

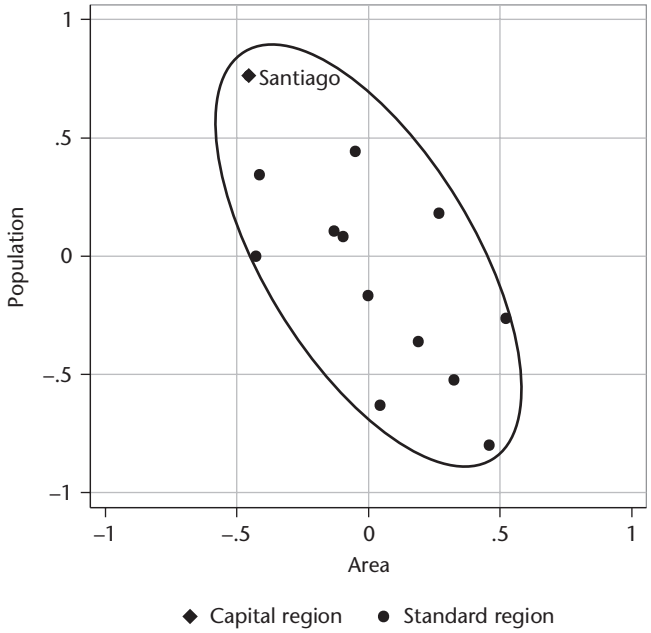
Figure 4.4. Napoleonic designs (continued)

Figure 4.4(d) and (e) depict planning jurisdictions set up from scratch in Macedonia and Romania in prospect of EU membership. Only Skopje and Bucharest, capital regions combining large population with small area, stand out. Slovakia's kraje were created in 1996 in similar fashion and have the lowest σ score at 0.285 among the forty-two reforms we observe. The population of the eight regions ranges from 624,000 to 762,000. To achieve this, the government relaxed territorial uniformity, producing the flattened oval in Figure 4.4(f). Unlike the Polish government, the Slovak government, headed by the nationalist Vladimír Mečiar, did not make concessions to internal diversity. Jurisdictional boundaries "gerrymandered the Hungarian minority, splitting its population across several regions and thus weakening its political presence" (Hughes et al. 2004*a*: 54). Mečiar also refused to set up representative institutions—against the European Union's explicit wish. After Mečiar's electoral defeat in 1998 a pro-European coalition government introduced limited self-government with directly elected councils within the same jurisdictional boundaries (Brusis 2005).

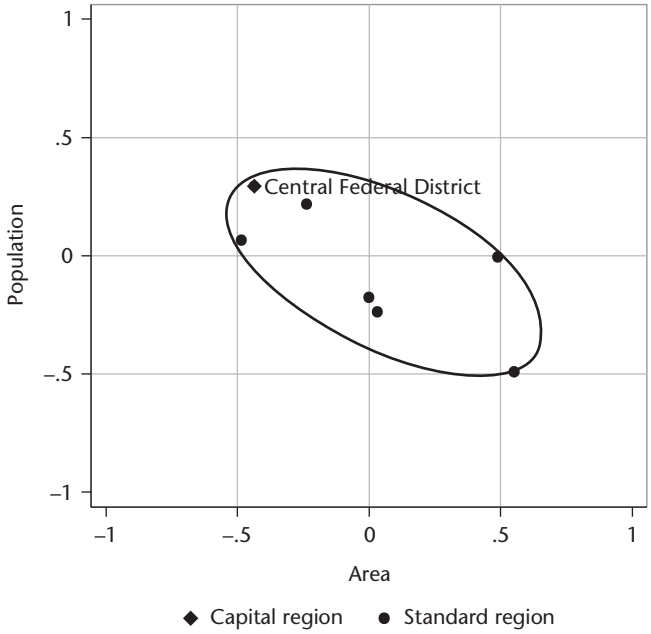
Optimized Design

Jurisdictional design can be standardized by optimizing population and area around the median so that jurisdictions large in area are small in population, and those small in area are large in population. Five designs exhibit a strong negative association between population and area: Chile's regiones, Russia's okruga, Indonesia's provinsi-provinsi, Comissões de cooperação e desenvolvimento in Portugal, and Irish regional authorities. The motives of the designers were diverse. Indonesian provinces were standardized to fulfill a nationalist agenda undercutting regional particularism. Ireland's regions and those of Portugal were created chiefly to orchestrate EU cohesion funding. Reform in Chile and Russia had a bitter partisan edge. However, each of these reforms is a top-down plan optimizing population and area within standardized tiers. All except Indonesian provinces are centralized with no representative institutions. All except Ireland's regions were established by a new regime.

Standardization was explicit in Augusto Pinochet's 1974 reform. Chile's geography made Napoleonic design infeasible, so standardization took the form of designating jurisdictions with Roman numerals in the mold of Roman legions. Thirteen regional administrations were numbered on a north–south axis from Region I in the north to Region XII in the Antarctic south, with Santiago, the capital region, Region XIII. The ellipse in Figure 4.5(a) stretches from Santiago, with a population of 6.7 million and an area of around 15,000 km^2 to Aysén, Region XI, in the Southern Patagonian Ice Field, with a population of 98,000 and an area of 108,000 km^2.



(a) Regiones in Chile (1976)



(b) Federalnyye okruga in Russia (2000)

Figure 4.5. Optimized designs

Pinochet implemented what policy makers had been suggesting for at least a decade: an intermediate tier "untainted by the traditional political practices that the regime was trying to eliminate" (Eaton 2004*c*: 231; Illanes 2000). A centrally appointed intendente ran the administration, assisted by a council of provincial governors and military advisors. This new centralized tier was tasked with privatizing social services in line with the government's neoliberal doctrine (Eaton 2004*a*: 121). At the same time, it empowered conservative, land-owning interests and outflanked the regime's leftist opponents in the provinces and municipalities.

Russia's seven (nine since 2014) federal districts (federalnyye okruga) were set up in 2000 by Vladimir Putin to reign in and standardize the chaotic "parade of sovereignties" that emerged from bilateral treaties between Yeltsin's government and eighty-nine federal regions (Hale 2000) (Figure 4.5(b)). Each super-district is headed by a presidential envoy who coordinates federal agencies in the region, supervises law and order, and determines whether regional law is consistent with Russian law (Petrov 2002, 2010). Their capitals never coincide with the capital of a non-Russian ethnic republic (Kahn, Trochev, and Balayan 2009: 320). Their boundaries correspond precisely with the interior ministry's security regions. Five of the seven initial presidential envoys were former generals. All served at the President's pleasure. And, as one might expect, they are arrayed in population and area along a sliding scale: $\rho = -0.73$.

Rokkanian and Irregular Design

The logic of community is to accommodate territorially concentrated groups in a bottom-up design. These designs tend to be incremental in spirit, endowing geo-historical regions with authoritative self-rule. The population and area of jurisdictions are either irregular or positively associated. The reason for this is that distinctive regions come chiefly in two forms. Remoteness produces jurisdictions that tend to have small populations in small territories. Resistance to assimilation nearer the center produces jurisdictions that tend to have large populations in large territories. Ten tiers exhibit a positive association between population and area, and twelve are irregular.

Figure 4.6(a) plots Malaysia's thirteen negeri at its founding in 1957. The federation was cobbled together by the British from federated and non-federated kingdoms, sultanates, and directly governed colonies (Esman 1972; Harper 1999; Reid 2010*a*, *b*; Shair-Rosenfield, Marks, and Hooghe 2014). The British preferred a unitary state, but Malay resistance led to a looser federal structure. In 1963, Sabah, Sarawak, and Singapore negotiated special status upon entry into the federation. Singapore was ousted two years later, and the remaining jurisdictions are portrayed in Figure 4.6(a). The constituent units

were centuries older than the newly born state. They maintained separate political institutions under the British and have had considerable self-rule following independence (Harper 1999: 18). Eleven of the thirteen negeri meet our criteria for distinctive language, distance, or prior independence and they form a forward-leaning ellipse with $\rho = 0.41$.

Scale design may come to nothing in the face of historical regions. Territorial identities embedded in distinctive cultures are astonishingly durable, especially when rooted in language. Spain provides an example. From Napoleon to Franco, centralizing regimes imposed a top-down, rationalist structure that fragmented linguistic regions into more or less equally sized provinces, a project that was finally broken by the mobilization of regional communities after the transition to democracy (Lecours 2001; Marti-Henneberg 2005*b*).

The jurisdictional design in Figure 4.6(b) breathes community. Spanish *comunidades* created between 1978 and 1983 form a Rokkanian design with the enclaves of Ceuta and Melilla at one extreme and the populous historical communities of Andalusia, Catalonia, and Galicia at the other ($\rho = 0.76$). The outlier on the upper left is Madrid.

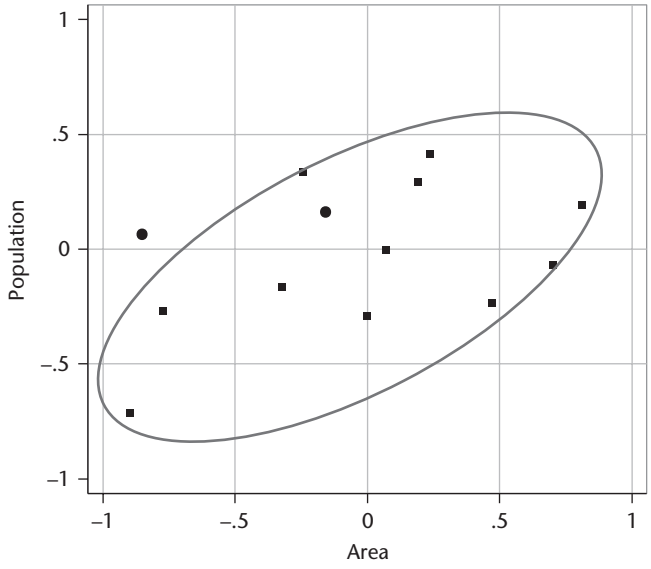
Community design is endorsed in the Spanish constitution of 1978. Regions consisting of "adjacent provinces with common historical, cultural and economic characteristics," "island-territories," and "provinces with an historical regional identity" were invited to form autonomous communities.[16] Catalonia, Galicia, and the Basque country could follow a fast track to autonomy because they had historic claims to self-government.[17] Andalusia, initially not invited, demanded and received access to the fast route, as did the Canary Islands, the Balearic Islands, and Valencia.[18] The principle is expressed in regional constitutions. Article 1 of the Valencian Constitution declares:

> The Valencian People, historically organized as the Kingdom of Valencia, is constituted as an Autonomous Community, within the unity of the Spanish nation, as an expression of its distinct identity as an historical nationality and exercising the right to self-government that the Spanish Constitution recognizes for any nationality, with the name of the Valencian Community.

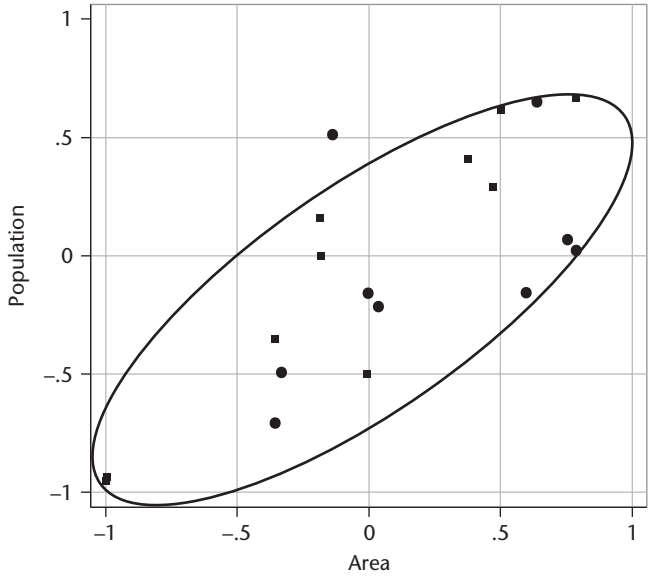
[16] Article 143.1 of the Spanish constitution states: "In exercising the right to autonomy recognized in article 2 of the Constitution, adjacent provinces with common historical, cultural and economic characteristics, remote territories [*territorios insulares*], and provinces with a historical regional identity can accede to self-government and constitute an Autonomous Community" (authors' translation).

[17] The transitional provision DT-2 attached to Article 151.1 of the Constitution reads as follows: "The territories which in the past have, by plebiscite, approved draft Statutes of Autonomy and which at the time of promulgation of this Constitution have provisional autonomy regimes, may proceed immediately in the manner contemplated in paragraph 2 of Article 148, when so decided by an absolute majority of their higher pre-autonomous corporate bodies" (authors' translation).

[18] Some historical claims were contested. For example, the region of León, once an independent kingdom and still the site of a sizable autonomist movement, was merged with Old Castile.

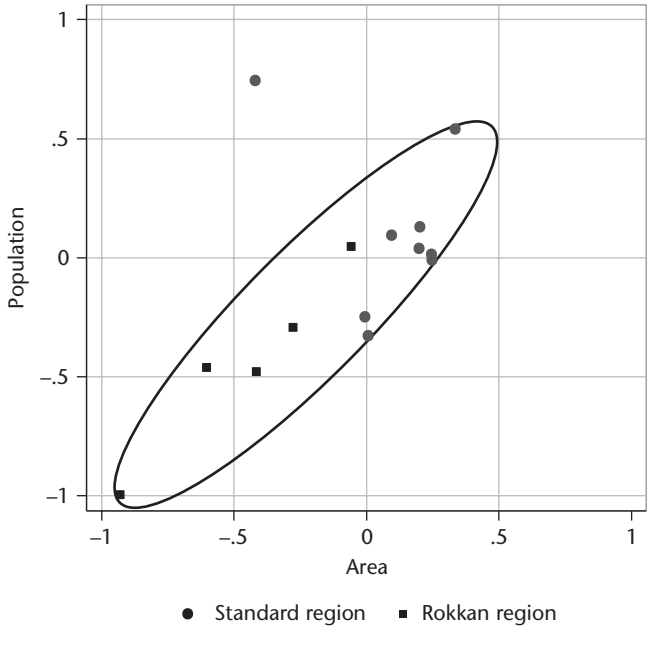


(a) Negeri-negeri in Malaysia (1957–63)

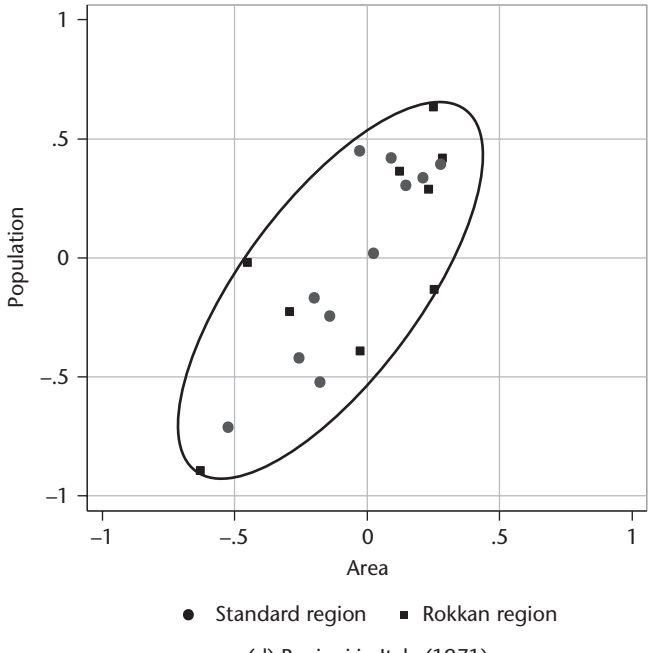


(b) Comunidades in Spain (1979–83)

Figure 4.6. Rokkanian and irregular designs

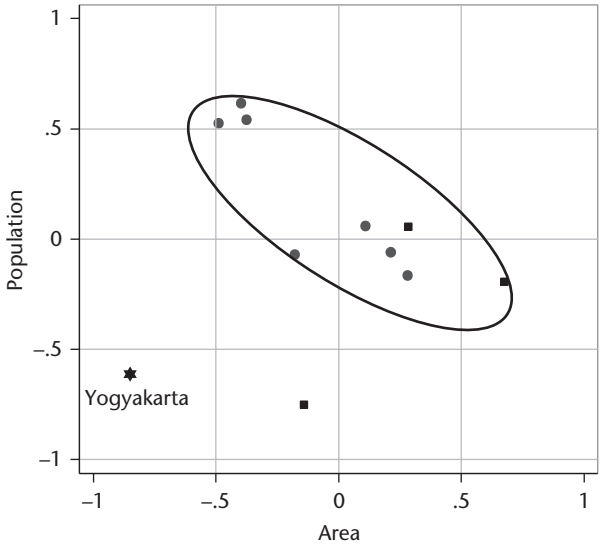


(c) Perifereies in Greece (2011)

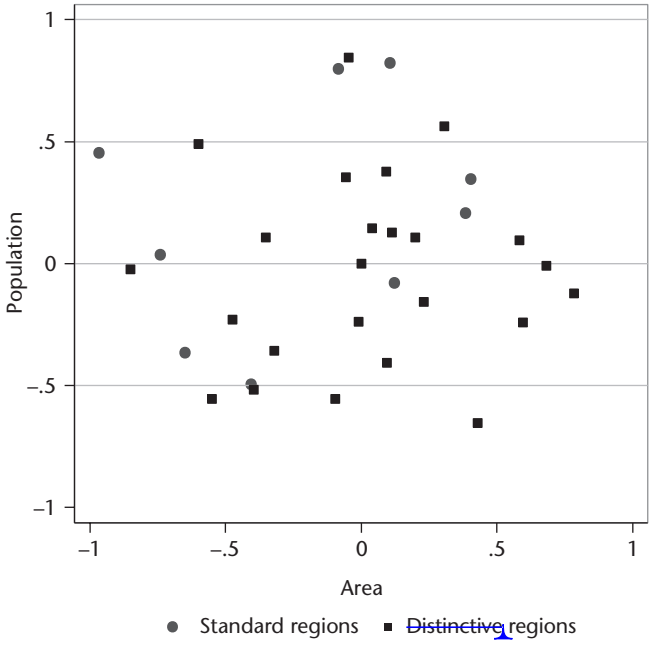


(d) Regioni in Italy (1971)

Figure 4.6. Rokkanian and irregular designs (continued)



(e) Provinsi-provinsi in Indonesia (1950)



(f) Provinsi-provinsi in Indonesia (2010)

Figure 4.6. Rokkanian and irregular designs (continued)

Geography shaped jurisdictional design in Greece (Figure 4.6(c)). Regional administrations (periphereies) set up in 1986 to coordinate EU regional aid were formed around island groups—the Dodecanese, Crete, the Ionian Islands, the Aegean Islands—alongside distinctive mainland regions—Thessaly, Epirus, Attica—producing a ρ value of 0.61. Periphereies were initially deconcentrated administrations but have since gained authority, including directly elected regional governors and councils (Skrinis 2013).

Prior statehood can put a heavy stamp on jurisdictional design. Italy was unified only in the late nineteenth century, and nation building did not have time to grind down distinctive cities and regions (Ziblatt 2006). Regionalization came in two stages. Five regions with distinct languages were granted a special statute in the immediate postwar period. The Italian constitution of 1948 envisaged regionalization for the whole country "to react against the centralization enforced by fascism" (Cassese and Torchia 1993: 95), but this was not implemented until 1971. The ruling Christian democratic party feared it would give the communist opposition local bases, and it was encouraged in its reluctance by the "markedly authoritarian and centralist mentality of bureaucracy" (Cassese and Torchia 1993: 96; Piattoni and Brunazzo 2011; Putnam, Leonardi, and Nanetti 1985). The cultural and political ground shifted in the late 1960s, and in 1971 the rest of the country was finally regionalized, producing a Rokkanian design where $\rho = 0.81$ (Figure 4.6(d)).

Indonesia illustrates how communal pressures can unravel a scale design. Figure 4.6(e) plots the ten provinces created at Indonesian independence in 1950. The provincial boundaries had been provisionally set in 1945 when Indonesia's constitution was drafted under Japanese occupation (Horowitz 2013: 59; Reid 2010*a*: 36–7).[19] The nationalists "were inclined to dismiss the traditional aristocracy through whom the Dutch ruled, with all their culturally specific hierarchies, as an anachronistic and feudal façade" (Reid 2010*a*: 34). The design was rationalist, anti-federalist, and decidedly anti-ethnic. Indonesia's first president, Sukarno, expressed his intent: "We are one nation (*natie*), not three or four, but one *bangsa* Indonesia. There is no *bangsa* Kalimantan, there is no *bangsa* Minangkabau, there is no *bangsa* Java, Bali, Lombok, Sulawesi or any such.[20] We are all *bangsa* Indonesia" (quoted in Reid 2010*a*: 42). The outcome is an optimized design ($\rho = -0.53$) with just two exceptions, the sultanate of Yogyakarta and the remote island group of the Moluccas.

[19] The reform was dominated by politicians from Java, the one culturally and ethnically homogenous Indonesian island.

[20] The original template had eight provinces. In 1950, Sumatra was divided into three provinces, which brought the total to ten.

In subsequent decades the design fell apart. With the exception of East Java, no province remained undivided. In 1951, Yogyakarta on the island of Java was the first to be granted special status. Five provinces harboring claims of jurisdictional and linguistic distinctiveness followed in the decade after independence.[21] Figure 4.6(f) plots the thirty-three provinces that emerged by 2010. So, after six decades the predominantly optimized design of Figure 4.6(f) had become the irregular design of Figure 4.6(d).[22]

Twelve reforms in our dataset exhibit similarly irregular patterns. Reforms producing irregular designs tend to be modest in ambition. Seven redraw boundaries rather than create a new tier, and of the five new tiers, three are deconcentrated and two are designed as a platform for collaboration among existing lower-tier jurisdictions. All but three of these reforms (Cuban provinces in 1966; Chilean provinces in 1974; and Greek perifereies in 1986) took place in the absence of regime change or EU accession.

"An Average is But a Solitary Fact"

The physical characteristics of subnational jurisdictions—their territorial size and population—appear to be the result of conscious design. They exist as blueprints in the mind of the agent before they are constructed. The dimensions of the individual units reflect overarching principles of governance. Yet those principles can be detected only in the design of the whole. The average area or population of a jurisdiction tells one only where a tier is placed in the ladder of governance.[23] But the dispersion of jurisdictions around the central tendency tells one about the motivations and goals of the designers—their conception of governance within the state.

Should governance seek to provide public goods to discrete individuals living in different parts of the country or should it recognize the right of

[21] Borneo was partitioned into four provinces in 1956; Central Sumatra was split in three and North Sumatra in two in 1957; the Lesser Sunda Isles became three in 1958, and Celebes two in 1960.

[22] It is worth noting that the classification of a region as distinctive is particularly complex in Southeast Asia. Both before and under colonialism, statehood was evaluated in terms of feudal bonds and vassal relations rather than in Westphalian categories. Language also operates as a less distinctive marker. Printing, which Benedict Anderson (1991) highlights as the defining feature for linguistic and state standardization in Europe, was introduced very late. Most ethnic groups preferred to use their local language for oral communication, and wrote in Romanized Malay (Reid 2010*b*). After independence, the Indonesian government sought to promote a national lingua franca, but the relationship between local languages and the national language remains less zero-sum than in Europe.

[23] The title of this section is a quotation from Sir Francis Galton (1889: 62–3) who continues, "whereas if a single other fact be added to it, an entire Normal Scheme, which nearly corresponds to the observed one, starts potentially into existence."

territorial communities to govern themselves? Should the central state implement a rational design for the country as a whole or should it adapt to jurisdictional boundaries rooted in the past? Should the design of jurisdictions be oriented to the efficient provision of public goods or should it be oriented to self-rule? To what extent should governance be concerned with the allocation of authority as well as the provision of policies?

Scale design conceives the individual as the unit of jurisdictional design. The inhabitants of a country are interchangeable except for their preferences over different baskets of public goods. Jurisdictions are designed instrumentally to provide public goods to individuals dispersed across the country. The competences, populations, and territorial size of jurisdictions are standardized in line with the policy portfolio and the heterogeneity of policy preferences. Policies with extensive economies of scale and externalities produce larger jurisdictions, while heterogeneity produces smaller jurisdictions. If concentrated populations make it difficult to generate jurisdictions with identical population and area, these can be optimized by creating small jurisdictions where population is dense and large jurisdictions where population is sparse.

Community design conceives the group, not the individual, as the unit of jurisdictional design. Territorial communities exist as historical "facts" that constrain design. This approach differentiates, rather than standardizes, territorial governance. The authority exercised by regions may vary within the territory of the state. And because the presence of a distinctive territorial community is constrained by its capacity to survive national assimilation, the physical characteristics of jurisdictions are neither uniform nor optimized. The outcome is a mix of jurisdictions that are small in area and population alongside jurisdictions that are large in both.

Community design is inductive, bottom-up, and gradualist; scale design is deductive, top-down, and radical. The causal roots of community design lie in slow moving geo-political processes. The proximate condition for this design is the capacity of a territorial community to bargain self-rule within its historical borders. Scale design occurs in relatively homogenous societies or when the regime wishes to undo history by reforming jurisdictions along rational lines. Its ambition is to make governance efficient or overcome regional particularism. This usually requires a definitive break from the past. Revolution (or European accession) may unhinge the status quo and provide an opportunity for *de novo* jurisdictional design.

Community and scale are more than ideal types. They appear as concrete alternatives that enter into the heads of those who carve countries into jurisdictions. In this chapter we have sought to conceptualize, measure, and hypothesize the incidence of these fundamental alternatives. The traditions of political philosophy sketched out in the first

chapter of this book—governance as the provision of public goods and governance as the expression of community—hit the ground, so to speak, in the physical layout of jurisdictions.

Appendix

Table 4.A.1. Jurisdictional tiers and key correlates

Country	Regional tier	Reform year	Domestic regime change	EU accession	Design
Napoleonic France	départements	1790	yes	no	scale
Napoleonic Spain	provincias	1833	yes	no	scale
Indonesia	provinsi-provinsi	1950	yes	no	scale
Chile2	regiones	1976	yes	no	scale
Portugal	comissões regionais	1979	yes	no	scale
Croatia	županije	1993	yes	no	scale
Albania	qarku	2000	yes	no	scale
Russia	okruga	2000	yes	no	scale
Malaysia	negeri-negeri	1957–63	yes	no	community
Spain	comunidades	1978–83	yes	no	community
South Korea	do/gwangyeoksi	1952	yes	no	community
Cuba1	provincias	1966	yes	no	community
Chile1	provincias	1974	yes	no	community
Lithuania	apskritys	1995	yes	yes	scale
Slovakia	kraje	1996	yes	yes	scale
Romania	regiuni dezvoltare	1998	yes	yes	scale
Hungary	regiók	1999	yes	yes	scale
Poland2	województwa	1999	yes	yes	scale
Czech Republic	kraje	2000	yes	yes	scale
Macedonia	planski ryegioni	2008	yes	yes	scale
Turkey	kalkunna ajanslari	2009	yes	yes	scale
Serbia	regionalni saveti	2009	yes	yes	community
Slovenia	regionalne agencije	1999	no	yes	community
Poland1	województwa	1975	no	no	scale
Haiti	départements	1980	no	no	scale
Ireland	development regions	1987	no	no	scale
Latvia	planošanas regioni	2009	no	no	scale
France	régions	1964	no	no	community
Denmark1	amtskommunerne	1970	no	no	community
Belgium	regions/communities	1970–80	no	no	community
Italy	regioni	1971	no	no	community
England	counties	1974	no	no	community
New Zealand1	regions	1974	no	no	community
Cuba2	provincias	1976	no	no	community
Greece1	periphereies	1986	no	no	community
New Zealand2	regions	1989	no	no	community
Peru	regions	1989	no	no	community
Finland1	maakuntien	1993	no	no	community
UK	regions	1994	no	no	community
Finland2	läänit	1997	no	no	community
Denmark2	regioner	2007	no	no	community
Greece2	periphereies	2011	no	no	community

Table 4.A.2. Operationalization: the effect of regime change on jurisdictional design

Variables	Operationalization
Design	1 = scale design, 0 = community design.
Regime change	1 if the reform was within a decade of a revolution, decolonization, communist transition, partition, or shift to or from democracy (criterion ≥ 6 on Polity2) or if the reform occurred while the country was in formal accession negotiations with the European Union.
EU accession	1 if the reform occurred while the country was in formal accession negotiations with the European Union (from the structural funds reform in 1988). Sources: Hooghe (1996); Hughes, et al. (2004*a*, *b*); Yoder (2007); for particular cases, see text.
Regime change excluding EU accession	1 if the reform was within a decade of a revolution, decolonization, communist transition, partition, or shift to or from democracy (criterion ≥ 6 on Polity2).
Democracy	1 if Polity2 is higher than 5 at the time of reform.
Left government	1 = rightwing, 2 = centrist, 3 = leftwing. *Sources*: Worldbank Development Indicators (WDI) for executive (execrlc) or government (gov1rlc, gov2rlc); complemented by the Party Government Dataset (Woldendorp et al. 2000; 2011).
Regional party in government	1 if the government contains a party that has regionalism or decentralization as a key component of its platform at the time of reform. *Sources*: WDI execreg, gov1reg, gov2reg, gov3reg; complemented by Woldendorp, et al. (2000; 2011) and the CHES dataset (Bakker et al. 2015).

Table 4.A.3. Descriptives: the effect of regime change on jurisdictional design

Variable	Obs.	Mean	Std Dev.	Min.	Max.
Design	42	0.48	0.51	0	1
Regime change	42	0.55	0.50	0	1
EU accession	42	0.24	0.69	0	1
Regime change excluding EU accession	42	0.48	0.51	0	1
Democracy	42	0.69	0.47	0	1
Left in government	42	2.19	0.83	1	3
Regional party in government	42	0.19	0.40	0	1