AN ECONOMIC MODEL FOR
CONSTITUTIONAL DESIGNS:
From Nation-States
to an ‘Olympic World System’

Benjamen F. Gussen USQ, Darling Heights*
email: benjamen.gussen@usq.edu.au

SUMMER INSTITUTE IN LAW AND ECONOMICS
COLLOQUIUM SERIES

Abstract

Heartened by Aaron Director’s formation of a law-and-economics cluster at the University of Chicago, this paper proposes a new cluster that shares a post nation-state, city-centered, vision for constitutional organisation. To this end, the paper introduces an economic model to illustrate the role of polycentricity in the stability and prosperity of polities. The model is inspired by Tinbergen’s gravity model of international trade, and two-dimensional lattice models used in theoretical physics. The model suggests that constitutional constructs weave an evolutionary dialectic between different organisational scales (the local, national, and global). This dialectic continues to wreak havoc at the local scale, and can be interrupted only through explicit constitutional constraints on the size of ‘jurisdictional footprints’. Polycentricity is interpreted in the spirit of (non-contiguous) charter cities, and through the scholarship of Baruch Spinoza’s constitutional orders, as exemplified by the Dutch Republic (1581-1795). This rendition of sovereignty is imperative as much for countries facing the strife of civil war (including Libya, Yemen, Syria, Iraq, and the Ukraine) as it is for maturing economies. In a globalizing world that is more and more imbued with nation-state morbidty, there is a pressing need for a city-centric, ‘Olympic world system’. A Chicago cluster bringing together scholars such as Gerald Frug, Paul Romer, Benjamin Barber, Yishai Blank, and Saskia Sassen, could see this vision come to fruition.1

* Benjamen Gussen is a lecturer in law at the University of Southern Queensland, Australia. His research focuses mainly on constitutional economics. Ben’s other areas of research include charter cities and complexity economics. For his research profile visit http://staffprofile.usq.edu.au/Profile/Benjamen-Gussen.
1 The Tom Ginsburg Comparative Constitutions Project may be the anvil on which the proposed cluster could be forged.
# TABLE OF CONTENTS

I. INTRODUCTION .................................................................................................................. 3  

II. POLYCENTRIC CONSTITUTIONAL ORDERS ...................................................................... 8  
   A. The End of the Contiguous Non-Perforated Polity ......................................................... 8  
   B. The Divisibility of Sovereignty and Polycentricity ..................................................... 10  
   C. Renditions of Polycentric Constitutional Orders ....................................................... 11  

III. AN ECONOMIC MODEL OF POLITICAL ORGANISATION ............................................. 13  

IV. TOWARDS AN ‘OLYMPIC’ WORLD SYSTEM .................................................................... 15  
   A. The Legal Personality of Cities ....................................................................................... 15  
   B. Amalgamation and Economic Growth ........................................................................ 20  
   C. The Economic Case for Charter Cities ........................................................................ 22  
   D. Charter Cities and the Democratic Ideal ...................................................................... 25  

V. CASE STUDY: AN ‘OLYMPIC’ MIDDLE EAST .................................................................. 29  
   A. The Tension induced by the Middle East Mosaic .......................................................... 30  
   B. Prophylactic Intervention (1): Continental Differentiation ........................................ 31  
   C. Prophylactic Intervention (2): Sovereignty à la Spinoza ............................................. 32  

VI. CONCLUDING REMARKS: ‘JARLSBERG’ CONSTITUTIONAL DESIGNS .......................... 34  

APPENDIX I: THE MODEL ...................................................................................................... 37  
   A. Wealth Maximization and Polycentricity .................................................................... 39  
   B. On the Creation of Polities ......................................................................................... 40  
   C. On the Rationale for War ............................................................................................ 43  
   D. On the Stability of Polities ......................................................................................... 44  

APPENDIX II: THE PRINCIPLE OF SUBSIDIARITY (HYPOTAXIS) .......................................... 47  
   A. Methodological Individualism ...................................................................................... 47  
   B. Methodological Collectivism (Holism) ....................................................................... 48  
   C. Attempts to Reconcile Individualism and Holism ...................................................... 49  
   D. A Brief Introduction to the Principle of Subsidiarity ................................................... 49  
   E. Subsidiarity’s Economic and Ethical Foundations ...................................................... 56  
   F. Subprinciples of Subsidiarity ....................................................................................... 58  
   G. Subsidiarity as Self-Organisation .............................................................................. 58  
   H. Subsidiarity and the Prisoner’s Dilemma .................................................................... 60  
   I. Subsidiarity and Methodological Collectivism .............................................................. 61  
   J. Subsidiarity and Methodological Individualism ........................................................... 65  

REFERENCES ......................................................................................................................... 68
I. INTRODUCTION

Sovereignty has been a fundamental pillar of the capitalist world-economy, since the sixteenth century. Mercantilism saw the first constitutional rationalization of the exercise of sovereign power as a practice of government. Later, the nation-state, through its legislative monopoly, became indispensable to the conduct of economic enterprise. Probably, the strongest evidence of the link between sovereignty and economics comes from the idea of legal tender and the historical evolution of (national) territorial currencies. The same can be said about the rise of central banks and their influence, through sovereignty, on economic activity. Some would argue that the tendency to grant independence to central banks, and the creation of non-national currencies such as the euro, signifies sovereignty’s increasing irrelevance. A quick glance at the euro crisis (that continues to unfold since 2008) shows why such logic is wanting. In fact, the current drive within the European Union is to ensure that their economic integration (through the euro) is matched with a similar political integration. This if anything suggests a resilient link between economics and politics. Even the analysis of what some theorists perceive as the ‘decline’ of sovereignty is also framed in reference to economic systems, where the ‘decline’ of sovereignty today is seen as a “sign of the acute crisis of capitalism as an historical system”.

The link between economics and sovereignty suggests that the latter should be at the heart of economic analysis. Admittedly, just like most political concepts, sovereignty is intrinsically controversial. The literature provides a plethora of classes and categories, which could make sovereignty difficult to use as an analytical tool. Notwithstanding, sovereignty has a common denominator that makes it a viable explanatory variable. This denominator is seen in a (political) power struggle between three scales: the local, the national, and the global. Within the European context, sovereignty grew from the impulse to independence following protracted tensions between medieval kings and external powers in the form of popes and emperors. From the 16th century and up to the 1920s power was transferred from local to national levels of governance, and then through globalization from national to global governance. The weakening of the role of the nation-state since World War I (WW I) saw a reversal of this transfer.

In this introduction I look at how sovereignty is positioned relative to the analogy between markets and politics and the analogy of the state-as-a-machine. The first analogy is based on two elements (see below): sovereignty per the ‘individual view of the state’, and a ‘common purpose outcome’. In addition

---

2 See Charles A. Beard, The Economic Basis of Politics 16 (George Allen & Unwin 1935); Jeremy A. Rabkin, Law without Nations? Why Constitutional Government Requires Sovereign States 57 (Princeton University Press 2005). Rabkin cites J. Bodin, Les Six Livres De La Republique (1576) IV, 6 trans. M. J. Tookey (Blackwell no date); James A. Dorn, Public Choice and the Constitution: A Madisonian Perspective, in Public Choice and Constitutional Economics 58 ed. James D. Gwartney and Richard E. Wagner (JAI Press 1988). According to Article 1 of the 1933 Montevideo Convention on the Rights and Duties of States: “The state as a person of international law should possess the following qualifications: (a) a permanent population; (b) a defined territory; (c) government; and (d) capacity to enter into relations with the other states”.


6 At 193.

7 At 241.

8 See for example Mark Halleberg, Fiscal Federalism Reforms in the European Union and the Greek Crisis, 12 (1) European Union Politics 127 (2011).

9 Wallerstein, States? Sovereignty? The Dilemma of Capitalists in an Age of Transition 33.

10 The concepts of societas and universitas are central to the arguments developed in this paper. For the key work on these concepts see Michael Oakeshott, On Human Conduct (England Clarendon Press 1975).


to the state-as-a-machine analogy (which I discuss in more detail later in the paper) these elements introduce tension between societas and universitas. Namely, the analogy requires sovereignty (for there to be a power exchange). However, the ‘common purpose’ requirement excludes sovereignty. In Part II I show how this tension is resolved through ‘polycentricity’.

I now clarify what I mean by ‘sovereign’. Etymologically, the word derives from the popular Latin for ‘above’ (superānus), as in ‘more powerful’, suggesting a relational basis between two parties, usually represented as a ruler and ruled. Sovereignty is hence predicated on the concept of the state. However, it would be possible to have a state without sovereignty (under universitas). The state is a system of legitimization through which (political) power (the ability to influence the action of others) is transformed (through the actualization of a constitution) into (a final and absolute) authority where (through public law) a government regulates relationships (between certain people and over a certain territory).

With the above understanding we proceed to ascertain the relevance of sovereignty to economics. In The Calculus of Consent the analysis of the market as an evolutionary selection process was extended to politics, by using an exchange paradigm to describe cooperative interactions. This exchange analogy carries ‘relational’ tones where [both] the economic relation and the political relation represent co-operation on the part of two or more individuals. The market and the State are both devices through which cooperation is organized and made possible … At base, political or collective action under the individualistic view of the State is much the same. Two or more individuals find it mutually advantageous to join forces to accomplish certain common purposes. In a very real sense, they “exchange” inputs in the securing of the commonly shared output … they will find it mutually advantageous to enter into a political “exchange” and devote resources to the construction of the common good. (Emphasis added)

In markets, such relational tones predominate in meso communities, where relationships continue to be multi-dimensional and personal. This suggests a scalar anchor for the analogy to work, which I discuss later in the paper. This formulation of a political power exchange has a Foucauldian overtone, where power is a “certain type of relation between individuals”. Similarly, to bring sovereignty into this exchange process we need a relational definition. We define sovereignty à la Spinoza. Hence

---

15 Hinsely, Sovereignty, at 2 and 30.
17 Hinsely, Sovereignty, at 25 and 131.
18 James A. Buchanan, Public Choice after Socialism, 77 Public Choice 67, 69 (1993). This particular extension is difficult to accommodate with some of Buchanan’s other constructs, especially his rejection of the state as an organism. See below for further discussion.
21 See for example George Silberbauer, Ethics in Small-Scale Societies at 17, in A Companion to Ethics ed. Peter Singer, 14 (Blackwell 1994).
24 Buchanan and Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy at 313. Note however, as a critique of The Calculus of Consent we should continue the above quote where it is stated that: Spinoza’s influence on our own ideas has been limited to his general and indirect effects on the Western intellectual tradition. In a specific sense, we have carefully reviewed Spinoza only after the completion of an initial draft of the main body of this book (The Calculus of Consent). (Emphasis added)
we take sovereignty to be an abstract notion (albeit not ahistorical one) of “the relationship between rulers and ruled for the exercise of political power [and] the independent status of the body politic on the international stage”. Sovereignty represents a ‘dynamic tension’ through which power is shared. Under this understanding, sovereignty “is not a substantive quality to be possessed but rather a condition of political interactions, embedded in [relations] that ground association”. Here sovereignty becomes the exchange process taking place at the input to the state transformation of power into authority. It is the source from which the state makes binding law in a particular territory. While primarily involving a duality of ‘ruler’ and ‘ruled’, sovereignty inevitably faces the intervention of other parties through integration processes such as globalization.

Under ‘the individualistic view of the State’, the state is understood as a societas. The problem with this understanding is that the market analogy envisages power exchange to result in a ‘common good’, which suggests a universitas understanding of the state. The stability of the tension inherent in this ‘hybrid’ understanding of the state is achieved through a ‘polycentric’ constitutional order (see Part II).

Historically there have been two prominent conceptions of the state: the state as a societas, and as a universitas. These conceptions are dialectical. Nevertheless, as I discuss below, there are epochs where societas dominates. This in turn means that sovereignty has a staccato existence. It experiences long periods of ‘occultation’ due to the emergence (under universitas) of higher levels of political organisation. From the perspective of sovereignty as a power exchange, this pattern would indicate pathologies in the nature of market failure due to liquidity issues (market depth). However, this pattern is also necessary for the stability of polities as I discuss in Part III.

The first conception, societas, is a civil condition, a contractarian form of association where the state is analogous to a partnership. A state understood as a societas is the product of “a formal relationship in terms of rules, not a substantive relationship in terms of common action”. Moreover, “what is intrinsic to this mode of association is not the choice to be related but the recognition of understood terms of relationships”. Societas is seen to represent political relationships under democratic conditions.

Universitas, or a corporation, is where individuals are associated in “a partnership of persons which is itself a Person”. Universitas was advanced by the creation and extension of a central apparatus of ruling which was “totally indifferent to the constitution of a government … Nor is related to [sovereignty]”. A universitas is distinguished from a societas also in its identification of a common purpose and a substantive end. This common purpose leads to policies of integration as for example

---

26 See Oakeshott, On Human Conduct at 200. There are other topologies which could be used to enrich the analysis of different forms of the state. For example, Hayek’s distinction between teleocratic and nomocratic ordering, and Habermas’ account of system integration and social integration. See Martin Loughlin, Foundations of Public Law at 204 (Oxford University Press, 2010), and The Idea of Public Law at 13-19. Oakeshott’s topology, however, furnishes a historical account that better explains the issues surrounding sovereignty.
30 Oakeshott, On Human Conduct at 201.
31 At 202.
33 Oakeshott, On Human Conduct at 200.
34 At 203.
35 At 267.
36 At 205.
in medieval Europe. In contrast to a societas, choice is intrinsic to membership of a universitas, although not when the state itself is understood as a universitas.

Sovereignty’s theories from the sixteenth century to this day are variations on the theme of power exchange between the dualism of ruler and ruled. From the sixteenth to the eighteenth centuries, the “individualistic, contractualistic” approach, adopted by Buchanan and Tullock for the power exchange analogy, dominates. This approach is influenced by the societas view of the state. In the seventeenth and eighteenth centuries, as a reaction to the revolutionary tendencies that emanated from earlier theories of sovereignty, the state was perceived in its historical context, either as a product of tradition and custom, or as a natural evolutionary necessity, or as a patrimonial source of authority. Now the state was seen as an organism imposed on the people, capable of action beyond that taken by its constituent members. This organic-state tradition is orthogonal to the contractarian approach.

Sometimes, the state is understood as a mechanism that cannot be larger than the sum of its (individual-based) parts. This understanding chimes, for example, with the Roman idea of the state, and the Wicksellian approach. The mechanistic view negates the possibility of treating the state as a legal person and hence closes the door on the jurisprudential dimension of the state as a universitas.

All theories of sovereignty, however, can be reconciled with the idea of power transfer. Later theories (of the seventeenth and eighteenth centuries) envisage a power transfer in an ‘original position’ that never dissipates. The quantum originally transferred enables the state to continue to function indefinitely. On the other hand, early (sixteenth century) theories anticipated the legal instruments to become blunt, unable to neither stop unwanted activities nor deliver wanted ones. This loss of effectiveness was seen as due to power ‘dissipation’ which required new transfers between ruler and ruled.

So far, one point provides a common thread throughout sovereignty’s classifications: the state is perceived as a societas rather than a universitas. Sovereignty is largely built on the idea of consensual authority (at least outside times of crisis). Universitas on the other hand, as exemplified in empire or ‘global governance’, “rests on the quite different premise that legislative consent to law is not so important to the authority of the law … [under universitas] there is no great choices left to make”. For sovereignty to arise, a society must have already been established as separate from the state. The existence of such a societ, while a necessary condition, is not enough for sovereignty to emerge. There also needs to be an exchange of power through what came to be known as the ‘social contract’.

Sovereignty has a scalar anchor. Together with the idea of constitutionality (and its inherent consensual nature), sovereignty is not possible on a global scale. Sovereignty “evolved from a judicial concept focusing on the fight to make laws domestically to a political-science definition focusing on

---

41 At 281. 42 O’Sullivan, Michael Oakeshott on European Political History at 144; Archer, Oakeshott on Politics at 162. See Oakeshott, On Human Conduct at 157-158.
44 Oakeshott, On Human Conduct at 251.
45 Merriam, History of the Theory of Sovereignty since Rousseau at 391.
46 At 393.
47 At 395.
48 At 393.
53 Oakeshott, On Human Conduct at 251-252.
55 Himsely, Sovereignty at 32.
56 At 131.
power and a state’s independence from outside actors”\(^57\) (emphasis added). Sovereignty “imply[s] a community that can regulate itself without the approval or direction of higher powers outside the community”\(^58\) (emphasis added). Sovereignty pertains to a scale above the individual but one which has other scales above it. This justifies the need for ‘independence from outside actors’. Sovereignty can be at sub-national or national scales but cannot be global. This suggests that the genesis of sovereignty lies in local autonomy from where claims of sovereignty later migrated to the national scale. Sovereignty is therefore the essence of the ‘meso’ scale.

At scales beyond the national, instead of sovereignty, we find subsidiarity.\(^59\) The state \textit{qua universitas} replaces sovereignty with subsidiarity. Sovereignty was developed to furnish justification for ‘who’ holds supreme power. Subsidiarity focuses instead on ‘how’ that supreme power is distributed. While some theorists trace the origin of this principle to ancient Greece,\(^60\) others suggest it has evolved within federal governmental regimes.\(^61\) Yet others argue subsidiarity derive from \textit{methodological individualism},\(^62\) suggesting a bottom up legitimization of authority.\(^63\) A detailed analysis of the principle of subsidiarity can be found in Appendix II.

Regardless of its origin or rational basis, subsidiarity poses a threat to sovereignty,\(^64\) mainly via its association with human rights.\(^65\) Subsidiarity “does not reconstitute the sovereign state as the object of its concern. It explicitly contemplates intervention and assistance for the purpose of protecting human dignity”.\(^66\) A nexus with human rights means that the principle is not contractarian. Furthermore, today the principle does not make any normative claims on the structure of political or economic organization.\(^67\) There is a strong version of subsidiarity which intermediates between \textit{universitas} and secession where “[the nation-state] must defend its legitimacy against claims from communities demanding greater control over decision making”.\(^68\) Subsidiarity remains paradoxical in that it limits the state, but also empowers and justifies it. It reduces the relationship between the national and the local scales to a one-dimensional functional exchange.\(^69\)

The closest that economics comes to dealing directly with the structure of the state as \textit{universitas} (and its tension with sovereignty) is through analysis of a right to exit or secede.\(^70\) Such possibilities are of constitutional relevance,\(^71\) and “function so as to reduce redistributive conflicts and make welfare-increasing transactions possible”.\(^72\) Under such exit option, reputation and trust “will be important and result in cooperative behavior by individuals”.\(^73\) Buchanan suggests that the option to exit is also implied in the US Constitution,\(^74\) although after the Civil War, secession was no more an option to the States.

---


\(^{58}\) Rabkin, \textit{Law without Nations? Why Constitutional Government Requires Sovereign States at 51}.

\(^{59}\) At 43.


\(^{63}\) Macdonald and Nielsson, \textit{Linkages between the Concepts of 'Subsidiarity' and Sovereignty: The New Debate over Allocation of Authority in the European Union}.


\(^{66}\) Carozza, \textit{Subsidiarity as a Structural Principle of International Human Rights Law} at 58.

\(^{67}\) At 44.


\(^{70}\) For an introduction to secession, see Alexander Pavkovic and Peter Radan, eds., \textit{Secession} (Ashgate 2011).

\(^{71}\) Ludwig von Mises, \textit{The Free and Prosperous Commonwealth} at 109 (Van Nostrand 1962).


\(^{73}\) At 140.

Without proper constitutional constraints (à la Spinoza) there will always be a cyclical dynamic that underlines the struggle between societias and universitas. This tension results in extended periods where the power exchange underlying sovereignty is frozen.

II. POLYCENTRIC CONSTITUTIONAL ORDERS

The nation-state is obsolete. It is no more the optimal unit for organizing economic activity. A new form of ‘universitas’ is attacking sovereignty not from within the (nation) state, but by attacking the state itself. Moreover, there is now a decoupling of the democratic process from the bulk of the working population. These gyrations are summed up by Gianni De Micheli, a former foreign minister of Italy, as follows: “We are witnessing the explosion of a long-obsolete model of liberal democracy that can no longer accommodate our dynamic, complex societies with their sophisticated electorate of vast diversity and highly differentiated interest”. More recently, the European Union president, in a speech to mark the 21st anniversary of the fall of the Berlin Wall, has declared that “the time of the homogenous nation-state is over”.

A. The End of the Contiguous Non-Perforated Polity

A new conception of the nation-state has emerged: the state as a network, which “signals the end of … sovereignty based on a territorial unit”. The link between sovereignty and territoriality is being replaced by arrangements where state jurisdiction is punctured by multi-level governance. The empirical and theoretical developments of the late twentieth century have “led to a more fundamental questioning of how national boarders themselves have been conceptualized”. Similarly, in the European context, one can identify two constitutional revolutions since the end of World War II (WWII). The first is resulting in the more visible creation of pan-European institutions. The second is the counter-unitary-state revolution that started in the 1920s, but reached its height in the decades after WWII. There is now evidence of the emergence of ‘polycentric states’. Sovereignty is hence targeted by ‘the unravelling of territoriality’, which is a constitutive element of the state. A prime example of this is the disappearance of “territorially homogenous and exclusive” currencies that “accompanied the emergence of the ‘nation’ state,” and the challenge seen in the growth of ‘local currencies’.

79 At 56.
80 At 60.
85 Scale at 201-202.
The effect of universitas (qua economic integration through the modality of globalization) on sovereignty is part of a cyclical process indigenous to capital accumulation, where the pendulum swings between the polar positions of universitas and societas. The last five centuries have seen emphasis on universitas, first in the European context, and later on globally through instruments of international law.87 The scale of the present wave of economic integration suggests a continuing crescendo of this universitas.88 I use a five-hundred-year cycle as a stylized indicator from which we can glean the oscillation between societas and universitas. This can be seen by tracing the local autonomy of European cities for the last 2000 years.89 Up to the fifth century, in Western Europe, the collapse of the Roman Empire was accompanied by population and economic decay that resulted in the demise of many towns.90 The breakdown of central authority would nevertheless provide impetus for a form of societas that continued until the fifth century. The medieval universitas remained the norm until the sixteenth century when the Italian Renaissance (through the rise of city-states) and the German Reformation (through the drive for political authority over religious matters) started to undermine its dominance. From the fifth to the tenth centuries, there was a form of religious universitas resulting from the spread of Christianity and Islam. We can trace a form of societas developing at the end of the tenth century when local autonomy was granted by charters such as in Italy, when “Genoa claimed its first charter in 958, Mantua in 1014, Brescia in 1038, and Ferrara in 1055”.91 This trend of local autonomy spread to other parts of Europe and continued until the sixteenth century, thanks to “the growing success of town governments in managing their finances”.92 By the end of the fifteenth century, there were around five hundred independent political units.93 The demise of these polities, however, could be traced to the fourteenth century when “leading cities extended their hinterlands and control over smaller cities”.94

By the time of the Renaissance and the French Revolution we see the loose city networks that formed the societas between 1000 and 1500 AD become consolidated across the continent in forms of ‘nation-building’ that “saw a general diminution in the local independence of local communities”95 through the “widespread interference of the state …”96 This migration of sovereignty to the national level reached its zenith with the signing of the Peace of Westphalia in 1648, which later ushered a new form of universitas based on international instruments such as the Universal Declaration of Human Rights of 1948.97 The sixteenth century is the historical origin of the modern capitalist world-economy,98 and in this sense, is the genesis of a new form of universitas (qua economic integration). This universitas was transferred to outside the continent in how European states governed their imperial possessions. As a response, another form of universitas came to prominence: federalism especially as illustrated by the United States of America. Other forms of universitas were registered in the nineteenth and twentieth centuries under failed French (Napoleon) and German (Hitler) campaigns. In the early twenty-first century, especially as the Euro zone crisis continues to unfold, we see further attempts towards universitas, in the form of the European Union.

87 Giovanni Arrighi, Globalization, State Sovereignty, and the ’Endless’ Accumulation of Capital.
88 At 55.
89 See generally Peter Clark, European Cities and Towns 400-2000 (Oxford University Press 2009).
90 At 103.
91 At 91.
92 At 101.
94 Clark, European Cities and Towns 400-2000 at 97.
95 At 202.
96 At 208.
97 Some theorists suggest that the effect of the Peace of Westphalia is largely mythical. See Prokhovnik, Sovereignties: Contemporary Theory and Practice at 60. The use the treaty is still useful for a demarcation of a new era of universitas.
98 Wallerstein, States? Sovereignty? The Dilemma of Capitalists in an Age of Transition.
B. The Divisibility of Sovereignty and Polycentricity

The analogy between markets and politics imports a third dimension in addition to the *homo economicus* and the exchange process, namely competition. In order for markets to function properly (i.e. to be Pareto efficient) one needs to ensure a level of competition in the provision of goods and services. An analogy with politics would see this competition reflected in the provision of goods of public nature, through competing jurisdictions, or what came to be known as systems competition.  

After the Hobbesian *Leviathan*, a sovereign state was conceived of as a territorial jurisdiction: “the territorial limits within which state authority may be exercised on an exclusive basis” (emphasis added). Today, however, “[e]merging forms of ‘complex sovereignty’ break down the internal structural coherence of the state”. Today’s jurisprudence “became the jurisprudence of a fracturing state, characterized by polycentric centers of power”.

These polycentric centers of power are an extension of the idea of divisibility of sovereignty which could be traced back to ancient Greece. However, the divisibility of sovereignty did not re-emerge until 1756 when John Locke revived the idea of the *Social Contract*, paving the way for the rise of federal states as exemplified by the United States (US 1789 constitution), and the Swiss federation (in the 1848, 1874, and 1999 constitutions).  

The divisibility of sovereignty registers particularly through endorsement of the scholarship of Spinoza. Spinoza separates the constitutional and operational levels of collective decision-making, hence allowing for the possibility of a divided sovereignty. This is the approach followed in constitutional economics. For Spinoza, who allied himself with the Dutch republican movement, sovereignty is not repugnant to principles of provincial autonomy. It could be in fact argued that the purpose of Spinoza’s sovereignty is “to check the development of centralized government, not to promote it”.

However, divided sovereignty was expected to still operate from within the state. Since the signing of the Peace of Westphalia in 1648, and especially in the post-Napoleonic era (after 1815), “a prominent operating principle regulating the size and shape of states has indeed been that *states should be contiguous and non-perforated*” (emphasis added). This should be understood in relation to the observation that “the Westphalian State is … bound symbiotically to the ideology of nationalism”.

The relationship between sovereignty and territory is captured by the principle of *uti possidetis juris* “according to which existing [state] boundaries are the pre-emptive basis for determining territorial jurisdictions in the absence of mutual agreement to do otherwise”. In particular, this principle

---

102 At 372.
105 For example Art 3 of the 1999 Constitution.
111 Robert Jackson, *Sovereignty in World Politics: A Glance at the Conceptual and Historical Landscape* at 19.
subordinated the principle of self-determination to boundaries decided by colonial power: juridical-territories trumped sociological-territories.\textsuperscript{112}

The ‘modern state ideal’ is described as that where “a political economy would very much seem to be that of a geographically circumscribed area within which exists a more or less fixed political hierarchy, which includes all individuals and all political institutions, and whose physical extension is contiguous and non-perforated”.\textsuperscript{113} It could be argued that the collapse of the gold standard, the emergence of Keynesian economics, and European decolonization had the combined effect that in the mid-twentieth century the world increasingly came to be “pictured in the form of nation-states, with each state marking the boundary of a distinct economy”.\textsuperscript{114} The nation-state (since the eighteenth century) remains the principal territorial unit. Nations result from a process of production of scale that is enforced on a given territory. France is a prime example of this process.\textsuperscript{115} Critique of this national scale and the contiguous non-porous nation-state is relatively rare in the (constitutional) political economy literature, notwithstanding the now widely accepted claim that a decentralized political community would better meet heterogeneous individual preferences.\textsuperscript{116} Keeping in mind of course that decentralization would obtain only under the auspices of the nation-state.

C. Renditions of Polycentric Constitutional Orders

Today, the contiguous-and-non-perforated-state principle is being challenged by new conceptions of the state as well as its sovereignty.\textsuperscript{117} However, while there is an on-going shift towards seeing the state as constituted on non-contiguous basis, using the analogy with the idea of a ‘polycentric’ legal order (implying a multiplicity of independent centers of decisionmaking),\textsuperscript{118} there is no extensive (economic) evaluation of the need for, or merit of, an analogous ‘polycentric’ constitutional order.\textsuperscript{119} Here the emphasis would be on maximizing constitutional options rather than deciding among constraints per se. Instead, the assumption is usually made that “there is a state or a commonwealth, without exploring the question of which domain [a scalar construct] this commonwealth or state should actually occupy, and in relation to what other public bodies”\textsuperscript{120}.

There are however some attempts in this direction. For example, the work by Bruno Frey and Reiner Eichenberger on what they call functionally overlapping competing jurisdictions (FOCJ).\textsuperscript{121} To inhibit the overextension of government, others also suggest separate jurisdictions with some protected powers within a constitutional federation.\textsuperscript{122} Where migration is facilitated between such separate jurisdictions, there are tangents with the Tiebout model in relation to sorting individuals according to their preferences.\textsuperscript{123} A more promising scholarship is that of Vincent Ostrom,\textsuperscript{124} For Ostrom, ‘polycentric’

\begin{thebibliography}{99}
\bibitem{112} At 15.
\bibitem{113} Kornil-Klitgaard, Opting-Out: The Constitutional Economics of Exit at 124.
\bibitem{114} Timothy Mitchell, Fixing the Economy, 12 (1) Cultural Studies 82, 90 (1998).
\bibitem{115} Hopkins, Devolution in Context: Regional, Federal and Devolved Government in the European Union at 8.
\bibitem{116} See for example Buchanan and Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy.
\bibitem{117} Kornil-Klitgaard, Opting-Out: The Constitutional Economics of Exit at 146.
\bibitem{120} Jürgen G. Backhaus, Subsidiarity at 137, in The Elgar Companion to Law and Economics 136, ed. Jürgen G. Backhaus (Edward Elgar 1999).
\bibitem{121} Bruno S. Frey and Reiner Eichenberger, The New Democratic Federalism for Europe: Functional, Overlapping and Competing Jurisdictions (Edward Elgar 1999).
\end{thebibliography}
“connotes many centers of decision-making which are formally independent of each other … [but] may be said to function as a ‘system’”. However, his polycentricity has a strong functional ‘taste’ largely divorced from the power calculus at the heart of divided sovereignty.

Such non-contiguous states are at the center of Spinoza’s discourse. Buchanan echoes Spinoza when he explains his idea of federalism as “diversity among separate co-operative communities, of shared sovereignty, of effective devolution of political authority and, perhaps most importantly, of the limits on such authority” (emphasis in the original). Buchanan envisaged a “federal union within which members of separate units cooperate …” and share sovereignty, where constitutional requirements guarantee free trade, and with a monetary constitution based on competing national currencies.

Spinozistic sovereignty provides a model:

in which powers are shared between sovereign bodies … which reaffirm their separateness …

In federal systems such as the United States or in Australia, legislative, judicial and executive powers are distributed between federal and different state governments … under [Spinozistic sovereignty], however, ‘confederal’ powers … were extremely closely restricted … Rather than attempting to harmonize differences … [it upholds] the constructiveness of difference …

In summary, one can trace the logic of limiting the ‘jurisdictional footprints’ of states within a polycentric constitutional set up back to Aristotle and Spinoza. Some pronouncements from constitutional economics seem to strongly echo the same ideas. It is conceded that “Spinoza’s notion of sovereignty could not be ‘applied’ to contemporary Europe in some easy fashion as a simple solution”.

However, there has not yet been much emphasis on this aspect of the analysis when it comes to normative constitutional design. It is submitted that such emphasis would see countries with a footprint as large as Russia and China, and even the United States, questioned as to constitutional viability.


127 Buchanan, Europe’s Constitutional Future at 3-4.

128 At 18.

129 Prokhovnik, Sovereignties: Contemporary Theory and Practice at 228.

130 At 231.
III. AN ECONOMIC MODEL OF POLITICAL ORGANISATION

In this part I model the dynamics of power exchange and their impact on sovereignty. The details of the model and its mathematical expression can be found in the Appendix. The model explains the oscillation between societas and universitas and suggests polycentricity is the only stable governance structure. I assume sovereign polities are distributed into quartets on a two-dimensional lattice as shown in Figure 3.1. Quartets are assumed to be distributed randomly over the entire lattice.

![Figure 3.1: Top view of the original distribution of sovereign polities](image)

Lattice sites could be either occupied or vacant. When occupied, they have sovereign polities represented by spheres with equal mass (m). The mass is a proxy for each polity’s land and population endowment, and hence cannot grow indefinitely given the limits on the land resource, and by implication on population. We refer to this mass as the socio-political mass. We assume the lattice to be frictionless such that the cost incurred by polities for drifting from one site to another is de minimis.

Polities occupy vortices of squares of side length d. The distance between sovereign polities represents a proxy for “relational distance” rather than a physical distance per se. The longer the distance, the less is the interaction between polities. When the distance is zero, the polity transfers all of its sovereignty to a union with another polity which takes over the decision making process. Sovereignty is maximized when the distance between polities is infinite.

In this model wealth is generated through trade with other polities. The trade flow is analogous to that given by the Tinbergen gravitational model.\(^\text{131}\) Sovereignty and wealth are hence inversely proportional. Political power arises from relative rather than absolute wealth. Relative wealth can then be transformed into other forms of power such as coercion and knowledge.\(^\text{132}\) The existence of relative wealth indicates a transfer of sovereignty from one polity to another.

Wealth distribution is proportional to the socio-political masses. Larger polities obtain a larger share of the trade. Hence if a polity of mass 2m trades with a polity of mass m over one trade channel, the larger polity takes two-thirds the wealth from trade.

Moreover, we assume the ruler-ruled relationship in polities formed through fusion (nation-states or the universitas) to be benevolent. In other words, the wealth generated from trade is shared equally between polities constituting the political union.

Each polity has the objective of increasing its total wealth (W). This is done through a mixed strategy of rearranging the original square formation (short-term strategy), and by acquiring power (P)


which could then be used to generate more wealth (long-term strategy). Power results from (territorial) fusion which represents the evolution of nation-states towards a *universitas* that subsumes the sovereignty of its constituent polities. Given the historical oscillation between *societas* and *universitas*, we assume the expected power to average out over time. A polity with zero or negative power would prefer to drift to another lattice site if it believes its expected power from doing so to be non-negative.

Nation-states would be stable as long as the transfer of sovereignty to the nation-state is paid for by a wealth differential (power over the other polities outside the nation). The decision by each polity to join a political union depends on the power it secures in exchange for its sovereignty. If the power differential disappears, the fusion becomes unstable and, overtime, political (territorial) fission ensues and polities drift away from the quartet.

In order to maximize wealth, the quartet moves from the two-dimensional square formation where all polities occupy sites on the lattice to a three dimensional hierarchy—a pyramid arrangement. I interpret as representative of polycentricity. The pyramid arrangement embodies the power exchange idea as stated by Buchanan and Tullock.\(^{133}\)

I now analyze the rationale for the creation of nation-states and *universitas*. Instead of the original square arrangement, polity A could negotiate a social contract where polity B exchanges its sovereignty through a total fusion. This arrangement is analogous to a federal arrangement rather than a unitary state. Polities within the federal state are still able to trade directly with polities outside the union. The resulting negative power suggests the created nation-state is unstable, and that the configuration of a federal state is untenable. By opting for a unitary nation rather than a federal state, the nation polities of A and B will have power over polity C but not polity D. The resulting unitary nation has power over both C and D. This would go to explain why federal systems become more centralized over time.

At this juncture, it is useful to point out how war, either for the objective of acquiring another sovereign polity or for keeping it in an existing union, would increase the power of the resulting nation-state. When war is waged on a polity, that polity is not only ‘lifted off’ the lattice, but its identity is erased to the effect that power is now calculated from the perspective of the resulting nation. The cost of war is seen in the lost trade channels by the polities involved. This explains the incentives for political fusion associated with war on polities outside the union, or by civil war. An example of this approach can be seen in the United States both through the American War of Independence (1775 to 1783) and the American Civil War (1861 to 1865).

Why then do we see relatively stable nation-states (and *universitas*)? I have already eluded to war as stabilizing fusion. Another stabilization strategy emerges from how the nation-state externalizes the cost of fusing its socio-political mass. This stabilization is interpreted as a perpetual need to increase trade with polities outside the original quartet, which echoes the neo-liberal emphasis on economic growth. Per this model, economic growth is seen as a stabilization mechanism. However, the Achilles heel of cost externalization is that drifting polities would not be available *ad infinitum*. The socio-political mass is constrained by the land resource. There are only a finite number of polities on the lattice. In the limit, the flow of drifting polities dries up, with the consequence of political fission. This dynamic explains the historical oscillation I have stylized earlier between *societas* and *universitas*.

The stability of polycentricity arises from its ability to generate power internally. It does not need trade with external entities to generate neither wealth nor power. The power is generated by rotating the task of coordinating internal trade, for which an entity can obtain a wealth differential over the other polities in the pyramid. Given the expectation of zero power on the long-run (for all polities in the lattice), polities in the polycentric configuration would be happy to rotate the task of coordination.

However, if polycentric political structures are the most stable, how do we explain their scarcity historically? Due to the stability of polycentric structure, they tend to reduce the population of drifting polities, which, as discussed earlier, are essential for the stability of nation-states and universitas. Put differently, the ability of a polycentric union to generate all the wealth and power it needs internally means that its constituent polities would not be available for union with other polities. Moreover, a polycentric structure would be easier to attack by nation-states given the higher degree of sovereignty afforded to its members. This would suggest that while polycentricity is internally stable, it would still need constitutional guarantees to be sustainable.

IV. TOWARDS AN ‘OLYMPIC’ WORLD SYSTEM

The world needs to move to an Olympic future, as opposed to its current ‘World Cup’ (nation-state) model. In an Olympics, for example the upcoming Rio 2016, one city hosts a multitude of games. All games happening in one place, under the auspices of one city. The city becomes a showcase for the whole world. In a ‘World Cup’ instead, a whole nation organizes games for one sport across its geographic extent. In the case of the 2015 World Cup, England hosted the tournament in no less than eleven cities. The ‘World Cup’ model showcases a nation rather than a particular city. This future is largely predicated on the legal personality of cities.

A. The Legal Personality of Cities

In this section I take a closer look at the legal personality of cities throughout the past, up to the present day, and further beyond. By legal personality I mean the “device by which the law creates or recognizes units to which it ascribes certain powers and capacities”\(^{134}\). Such units could either be natural human beings or artificial entities. In common law a legal person can include a body politic and a body corporate. The assertion in this section is that throughout history, cities oscillated between strong and weak personalities. The strong personalities dominated when higher orders of political organisation were undergoing crises, while the weak personalities dominated under the reverse conditions. To understand these different personalities better we need to take a detour to introduce, if only briefly, the legal theories behind them. These theories are usually discussed in the context of corporations, but apply equally to cities, especially in an analysis of international legal personality, as the latter continues to be understood as body corporate.\(^{135}\) Some theories focus on the question of the reality of city legal personality, while others focus on the source of legal personality. For our purposes the former theories are of particular interest, and two theories among these are most pertinent.

Under the positivist ‘fiction theory’, championed by Friedrich Carl von Savigny, John Salmond, Edward Coke, and William Blackstone, the legal personality of the city is fictional. Nevertheless this personality is different from that of its inhabitants, which means that changes in the population would not alter the legal personality of the city. The property of the city is not in law the property of its


inhabitants. On the other hand, the ‘Realist Theory’, a natural rights theory that found favor with Johannes Althusius and Otto von Gierke, asserts that cities are ‘social organisms’ with real (psychological rather than physical) existence separate from its inhabitants. This later came to be known as the “Cooley-Eaton-McQuillin thesis” which denied “the existence of absolute state supremacy over cities”. The ‘realist’ theory accounts for the possibility of cities’ strong personality, while the ‘fiction’ theory suggests a weaker version.

To give the analysis some informative structure, the status of cities is mapped along a two dimensional continuum of (1) economic independence, and (2) political independence. Together, economic and political independence represent a proxy for jurisdiction, i.e. “a government’s general power to exercise authority over all persons and things within its territory; especially, a state’s power to create interests that will be recognized under common-law principles as valid in other states.” Hence cities are distinguished from towns and villages not by their size, but by possessing privileges of self-governance, nor did the size of a given city have any bearing on its importance or influence. The city in essence participates consciously in the making of history.

To simplify the analysis further, without any loss of generality, the continuum is digitized into three models: the territorial city, the charter city, and the sovereign (fully autonomous) city. This analytical framework is shown in Figure 4.1. The success of cities under all three models depends more or less upon their ability to exercise control over their economic surplus.

Cities could either be trade sites, for example Troyes and Provins historically, and Singapore and Hong Kong in our time; or become powerful industrial exporters, for example the textile towns of Flanders, or today the oil-rich emirates of the Persian Gulf; or function as commercial shippers transferring goods between different markets, for example Genoa and Venice.

---

139 At 124.
In a clear departure from the historical trend where cities were created not by governments but by their own citizens, most legal systems today treat cities as creatures of state and statute (the Dillon doctrine); as implementation agencies of national and supra-national agendas. In most legal frameworks today, cities do not have any ‘natural’ or ‘inherent’ powers. They are governed more as bureaucracies than democracies. For example, in the United States cities are treated as administrative subdivisions of their states. Unlike states, they are not “general lawmaking [sic] bodies”. Even though there has been attempts in the nineteenth and twentieth century to model American cities after European ‘free’ cities; when large American cities faced an urban crisis driven by unprecedented growth, they looked to the old continent for inspiration. Comparative analysis of the legal frameworks governing cities in the US and Europe resulted in constitutional amendments where many states granted their cities ‘home rule’, although denied them planning powers commensurate to those seen in Europe, and hence the ‘home rule’ given to American cities did not alleviate the powerlessness of American cities. The most liberal plans for home rule reserved to the state power that would be most injurious to the city, such as police power and the power to regulate elections and local finances.

Throughout the 1980s and 1990s, in many jurisdictions but most notably in the United Kingdom and New Zealand, there was another central government intervention that saw local governments, especially metropolitan authorities, become even more powerless. Any political devolution focused almost exclusively on regional autonomy, such as in the case of Scotland. In Australia, local governments were reduced to property servicing functions, although economic pressures saw larger units of government through amalgamation. The same mega city amalgamations can also be seen in Canada and New Zealand.

Current local government law envisages state administrative control over city-regions regardless of their varying capacities and competencies. For example, local government law in the United States

---

145 Frug, *The City as a Legal Concept* at 1062-63.
147 Frug, *The City as a Legal Concept* at 1065.
simply decentralizes power by moving its location without reshaping the nature of the relationship between central and local governments.\textsuperscript{152} To be precise, there has been real limits to local (financial) autonomy as evidenced by increasing fiscal dependence on central governments and less policy discretion over resources.\textsuperscript{153} The legal conception today is that “cities are governmental bodies with delegated powers created and limited by the authority of state governments”.\textsuperscript{154} Cities have only powers delegated to them by state governments, and even these powers have traditionally been severely limited by the courts. In fact the US Supreme Court has excessively emphasized the absolute power states have over cities. The rationale for this approach stems from two main arguments. The first enlists the complexity of today’s world, with its large scale organizations, to evidence the impossibility of decentralizing power to cities. A related second argument sets up the sovereign city as a selfish entity that cannot be trusted to exercise unsupervised power. City power is feared for it strangles capitalism by a maze of local regulations and frustrates national political objectives by parochial agendas. City discretion invokes images of corruption and even foolishness. Both arguments allude to a necessity of the powerlessness of cities—a necessity whom Toqueville, Marx and Hegel identified as a cornerstone of government policies in the democratic era.\textsuperscript{155}

Both of these arguments are flawed. The first for misunderstanding the nature of complexity.\textsuperscript{156} The second for conflating the concept of legal empowerment (as a form of bounded autonomy) with that of sovereignty.\textsuperscript{157} Increasing people’s control over their lives is not tantamount to prohibiting interference from other stakeholders. This conflation harks back to an already archaic formulation of sovereignty where it only exhibits an abstract absolute, or to a formulation that envisages only a division of sovereignty (as under federalism), rather than a sharing of sovereignty (as under subsidiarity). As I discuss elsewhere,\textsuperscript{158} sovereignty is a relational construct that envisages sharing sovereignty, which in turn imports organizing jurisdictions on a small scale. On the other hand, ensuring city-regions are the primary unit of political organisation also forces cities to take regional considerations into account.

It was liberalism that brought about the current powerlessness of cities. Liberalism, with its model of the world as dualities, saw participatory democracy on a small scale like the city-region as unworkable. Cities with real power were intermediate structures between the state and the individual. Through legal doctrine, liberalism proceeded to eliminate this intermediate structure and replace it with powerless, coercive instruments of the state.\textsuperscript{159}

The archipelago analogy applies not only to countries such as Australia,\textsuperscript{160} but more generally to all ‘world systems’, where ‘world cities’ (privileged cities that have a global economic status driven by innovation) steer political and economic processes on a global scale.\textsuperscript{161} World systems theory is a multidisciplinary approach where the analysis of economic, social and political change is based on an archipelago of ‘world cities’ rather than the nation-states existing at any given time.\textsuperscript{162} The ‘world cities’ hypothesis was introduced by John Friedmann in the 1980s where he argued that cities articulate larger

\textsuperscript{152} Frug, City Making: Building Communities without Building Walls at 10.
\textsuperscript{153} Caulfield and Larsen, Local Government at the Millenium.
\textsuperscript{154} Frug, The City as a Legal Concept.
\textsuperscript{159} Frug, The City as a Legal Concept at 1074-80.
\textsuperscript{160} Asher Judah, The Australian Century (Ballan Connor Court 2014).
\textsuperscript{161} Paul L. Knox, World Cities in a World System at 6, in World Cities in a World System 3 ed. Paul L. Knox and Peter J. Taylor (University Press Cambridge 1995).
regional, national, and international economies. The hypothesis represents the political economy of the global urban system. World cities are large, urbanized regions that are defined by dense patterns of interaction rather than by political-administrative boundaries. The ‘connectivity’ we see today between ‘world cities’ under processes of globalization has been the norm under ‘world systems’ throughout history. For example, the world system that existed between 1250 and 1350 was an archipelago of ‘world cities’. An earlier example at the beginning of the Common Era was the system where cities in the Roman Empire, the Han Empire, and India dominated world commerce, although this system had a much lower level of interaction between these constituent parts. An important insight from this world system archipelago is its cyclical emergence and collapse, largely through fluctuations in population levels (due to pandemics, wars, or even ‘social engineering’) where emphasis swings between rural and urban centers, or between immigrant and indigenous populations. World systems rise when economic integration increases, sometimes driven by military might, and collapse when connections along older pathways increase, although collapse does not necessarily return the world to the status quo ante.

In 1915 one scholar commenting on the unsatisfactory governance structures for cities within US states was inspired by the German federal system to ask the following question: “Why should we not look forward to the entire separation of metropolitan cities such as New York, Chicago, and Philadelphia from state ties, and their erection into free city commonwealths within our federal system?” adding that “Hamburg, Bremen and Lübeck … are splendid examples of municipal progress and self-development in freedom”. While his proposal would have been deemed unconstitutional if only because it would have been perceived to advocate secession, the real issue—not addressed by this scholar, is how to design a governance structure that would pave the way to such a reality.

City power is again on the ascendency. Today we can discern a move towards empowering cities on two fronts: one is domestic where there is constitutional recognition, under cooperative models of federalism, of the local governments of city-regions as co-equal to federal and state governments, and the development of what is known as the ‘doctrine of usurpation of jurisdiction’. The approach does not emphasize political autonomy but rather the idea of subsidiarity where general competence powers are extended to city-regions. The second front is international, where there is an emerging field of law that acknowledges city-regions as independent international actors. To be sure, international law has long had an indirect impact on cities, but now we see an emerging trend where cities are becoming distinct international actors almost co-equal to their nation-states. International law is enlarging the nation-state club that dominated its institutions since their emergence, to admit sub-national governance structures, most notably city-regions, mainly through regulating the relationship between cities and their nation-states.

The traditional approach for creating legal frameworks to govern city-regions, namely local government law, has been through domestic instruments. The main objective of such rules, under the classic doctrine of state responsibility, was to prevent exposing (sovereign) nation-states to liability under international law for the conduct of their sub-national governments that are not directly obligated to comply with international law. Traditionally, international law bestowed a legal personality only on sovereign nation-states (with a few exceptions). A key requirement for recognition being that the

166 Brooks, Metropolitan Free Cities at 230-31.
168 Caulfield and Larsen, Local Government at the Millenium.
political entity has no government above it. This resulted in strict domestic regulation of sub-national governments.\textsuperscript{169}

The traditional approach where local government is simply an administrative division of the state is now being replaced by an approach, driven largely by globalization (as a modality of economic integration), where international institutions redefine the scope of domestic frameworks. This has come to be known as ‘International Local Government Law’, a hitherto uncodified interdisciplinary field that draws on comparative urban governance (which focuses on domestic rules) as well as on the ‘world cities’ hypothesis which highlights the impact of economic forces in shaping ‘world systems’.\textsuperscript{170} Unlike these other disciplines, however, international local government law emphasizes the dual legal nature of city-regions as both sub-national governments and as independent international actors. This emerging field would determine both, who should regulate the legal framework for city-regions, and the nature of that framework. Examples of this approach include decisions by international arbitration tribunals regulating cities’ land use. This international framework envisages (at least tentatively) empowering cities “principally as a mechanism for promoting private economic development”.\textsuperscript{171}

International instruments such as the United Nations International Covenant on Civil and Political Rights (ICCPR) and the International Convention on Economic, Social and Cultural Rights (ICESCR), inter alia, are altering the relationship between cities and nation-states. City-regions are becoming “nodal points for radically distinct governance projects that have their common goal to transform cities from mere subdivisions of sovereign states into legally empowered entities, able to advance goals and values that are different from their states”.\textsuperscript{172}

B. Amalgamation and Economic Growth

A stepping stone for understanding the correlation between economic growth and city governance structures generally, is amalgamation. Quigley discusses the economic factors provided by cities.\textsuperscript{173} These could be divided into scale economies (e.g. larger plant sizes and larger parks and libraries), shared inputs (e.g. legal and accounting services and recreational facilities including theatres and restaurants), transaction costs (e.g. matching in labor markets, and in large shopping malls), and statistical economies (e.g. lower unemployment and lower inventory levels). The seminal work by Fujita \textit{et al} identifies both centripetal and centrifugal forces of economic activity arising from agglomeration,\textsuperscript{174} and work by David Maré distinguishing between the effects of localization which refers to congregations of similar firms, and urbanization which refers to diversity (congregations of different firms).\textsuperscript{175} These effects however could and usually do work simultaneously in a given locale.

While amalgamation does not necessarily lead to innovation, there is a large body of literature that looks specifically at the role of cities in innovation. Notwithstanding, a relatively recent review concludes that the literature is not definitive, in particular due to definitional issues around cities and innovation.\textsuperscript{176} Such problems could be attenuated by focusing on a subset of cities, i.e. charter cities. Focusing on subsets of innovation could also be informative. The difficulty is that charter cities are an

\begin{itemize}
\item \textsuperscript{169} Frug and Baron, \textit{International Local Government Law} at 18.
\item \textsuperscript{170} \textit{Id}. at 4.
\item \textsuperscript{171} Yishai Blank, \textit{The City and the World}, 44 Columbia Journal of Transnational Law 868, 899 (2005-2006).
\item \textsuperscript{173} M Fujita, P Krugman, and A J Venables, \textit{The Spacial Economy: Cities, Regions, and Interantional Trade} (MIT Press 2001).
\end{itemize}
‘ideal type’. However, we can use a proxy construct, namely polycentricity,\(^{177}\) as it applies to existing levels of governance, and extrapolate its effect on innovation to that of charter cities. For example, in the context of the United States, Derek Kauneckis shown that an increasingly proactive role for the states in setting the research agenda (as opposed to being implementation instruments of a national research agenda) is having positive effects on innovation.\(^{178}\)

More broadly, we need to invoke an analogy between charter cities and competitive markets. The latter, as Adam Smith reminds us, align the interests of private and public agents. In particular, charter cities allows for the creation of competing legal systems. Under this analogy, we find evidence of innovation being enhanced by the existence of competitive markets (inter-charter cities). For example, Elinor Ostrom, citing W. Ross Ashby, argues that “any governance system that is designed to regulate complex biological systems [such as cities] must have as much variety in the actions that it can take as there exists in the systems being regulated.”\(^{179}\) Ostrom elaborates that “[a]mong the institutions that humans utilize for generating highly desirable future goods are open, competitive markets. [These markets] … create incentives for innovation and entrepreneurship.”\(^{180}\) This competition becomes more difficult when public goods are offered, but not impossible. Provided voters have perfect mobility and perfect information, they will move from one city (local community) to another which maximizes their personal utility.\(^{181}\) Allowing cities to differentiate their public good bundles allows not only for efficiency gains, but also for innovation to attract more residents.

Besides governance structures, there are other factors affecting the economic performance of cities. The scholarship of Michael Storper is useful here.\(^{182}\) Storper identifies institutions as such factors. While institutions include legal systems, they go beyond. They include firms, markets, and social conventions. Michael porter joins in the emphasis on innovation, in particular in the performance of regions (mainly 172 Economic Areas as defined by the US Bureau of Economic Analysis). He also emphasizes the role of (trade industry) clusters.\(^{183}\) This chimes with Putnam who emphasizes culture as a predictor of economic development (Putnam, Leonardi & Nonetti 1994; Putnam 2000).\(^{184}\) Putnam made the conjecture that social capital is a function of autonomous governance at the local level, especially as exemplified by free city-states in the Middle Ages.\(^{185}\)

Another insight comes from the literature on the resilience of regional and local economies to recessions. For example, Martin et al suggest a complex array of factors.\(^{186}\) These include industrial and business structure (e.g. firm size and ownership, debt structure and financial strength, supply chains), financial arrangements with national governments, equity market conditions, and labor market conditions (e.g. skill profiles, gender profile, mobility). Martin et al also identify governance structures as one of the factors of resilience, including national and local policies, and international regulatory arrangements.

\(^{177}\) Paul Aligica and Vlad Tarko, Polycentricity: From Polanyi to Ostrom, and Beyond, 25 (2) Governance 237 (2012).

\(^{178}\) Derek Kauneckis, The Polycentricity of Innovation: Explaining Variation in the New Role of the States in Science and Technology Policy, in Workshop on the Workshop (WOW4) (University of Nevada 2009).


\(^{180}\) Elinor Ostrom, Scales, Polycentricity, and Incentives: Designing Complexity at 150.

\(^{181}\) Charles M Tiebout, A Pure Theory of Local Expenditures, 1956 The journal of political economy 416.


C. The Economic Case for Charter Cities

Economic rationale plays a major part in informing our federal designs. To get the choices right, we need to mull over, if only briefly, the basis of this economic rationale. The following propositions are intended to achieve the same:

(1) Richest countries are economically more complex: Economic prosperity is related to economic complexity, especially as measured by the Economic Complexity Index (ECI). In this ranking, Australia came in at 79 out of 86 ranked countries, below Chile and above Zimbabwe.187 The United Kingdom was ranked at 11, the United States at 13, Canada at 41, and New Zealand at 48. Even countries that are perceived to be completely dependent on fossil fuels were ranked higher than Australia. Norway for example came in at 33, while Saudi Arabia at 68.188

It is submitted that ‘fixing the federalism’ requires a federal design that enables the creation of competitive products and services. This leads directly to the primacy of innovation.

(2) Complex economies require ‘world cities’: World cities are the nuclei of innovation worldwide.189 The Innovation Cities Global Index (ICGI) measures the potential of cities as innovation economies, and ranks 500 cities worldwide on innovation.190 In the 2014 version, the top five cities were (in descending order): San Francisco, New York, London, Boston, and Paris. The top five complex economies (from the ECI) had the following cities in the top 100: Japan (Tokyo 15, Kyoto 34, Osaka 37, Kobe 61, and Fukuoka 88); Germany (Munich 7, Berlin 13, Hamburg 18, Stuttgart 22, Frankfurt 30, Leipzig 33, Düsseldorf 43, Cologne 53, Dresden 72, Karlsruhe 75, Hannover 79); Switzerland (Zürich 59, Geneva 73); Sweden (Stockholm 16); and Austria (Vienna 6). In the 2015 version, the top five cities were London, San Francisco, Vienna, Boston and Seoul. The top five complex economies had the following cities: Japan (Tokyo 10, Osaka 32, Kyoto 36, Kobe 66, and Fukuoka 106); Germany (Munich 12, Berlin 14, Stuttgart 24, Hamburg 31, Leipzig 34, Frankfurt 37, Düsseldorf 55, Cologne 59, Karlsruhe 80, Dresden 89, Hannover 92); Switzerland (Zürich 72, Geneva 82); Sweden (Stockholm 17); and Austria (Vienna 3).

These indicators point to the fact that constitutional designs need to produce the type of cities that can take the lead on innovation.

(3) Empowering cities leads to ‘world city’ status: Constitutional designs need to: (1) empower existing cities, and (2) create new (charter) cities. The best definition of empowerment is provided by (3) constitutional designs need to produce the type of cities that can take the lead on innovation.

---

188 See the UN Statistics Division, National Accounts Main Aggregates Database <http://unstats.un.org/unsd/snaama/selbasicFast.asp>
193 John Friedmann, Where We Stand: A Decade of World City Research at 25. The term ‘world city’ or ‘weltstadt’ can in fact be traced back to the Johann Wolfgang von Goethe who used it to refer to the cultural eminence of Paris and Rome. See Anthony D. King, Re-presenting World Cities: Cultural Theory/Social Practice at 219, in World Cities in a World-System 215 ed. P. L. Knox and P. J. Taylor (Cambridge University Press 1995).
interaction between people, goods, and information. Such cities are linked in a single network, sometimes referred to as a ‘world system’, which sharpens the competition between them. The spatial dispersion of economic activities and global integration has contributed to the strategic role of these cities in the current world system.

The Globalization and World Cities Research (GaWC) Network provides one of the oldest rankings of such cities. Looking at the United Kingdom we find London (Alpha ++), Manchester (Beta), Birmingham and Edinburgh (Beta -), Bristol (Gamma +), and Glasgow and Belfast (Gamma). On the other hand, the United States has New York City (Alpha ++), Chicago and Los Angeles (Alpha), San Francisco, Washington DC, Miami, Boston, and Atlanta (Alpha -), Dallas, Philadelphia and Houston (Beta +), Minneapolis, Cleveland, Seattle, Detroit, Denver, San Diego (Beta -), Baltimore, St Louis, Charlotte, Tampa (Gamma +), San Juan, Raleigh, San Jose, Cincinnati, Milwaukee (Gamma), and Columbus, Orlando, Kansas City, and Portland (Gamma -). Canada however fairs even worse than Australia with only three cities making the rankings: Toronto (Alpha), Montreal (Beta +), and Calgary (Beta -).

The diagnosis is probably more persuasive when we compare the United States to China. The two countries have relatively the same total area, which is of continental proportions, but China has three times the population in the US. Notwithstanding, China has only two Alpha + cities (Shanghai and Beijing), one Beta + (Guangzhou), one Beta – (Shenzhen), and one Gamma – (Tianjin). We can also add Hong Kong (Alpha +). In total the United States has thirty cities ranked Gamma and above, to China’s six (including Hong Kong). This is the main indicator of the relative power between the US and China. In a nutshell, “The main phases in the economic development of the United States are clearly reflected in the growth of its great cities”.

At first glance there seems to be very little in common between ‘Alpha’ cities. This requires a delineation of how the GaWC model ranks cities. The model is a city-centric flow model, as opposed to one based on the boundaries of nation-states. It ranks cities based on their ‘advanced producer services’, using an interlocking network model. These ‘advanced producer services’ include accounting, advertising, finance, insurance, and law applied in transnational contexts. In particular, the model interprets cities as being nodes, but not as primary actors. The model evaluates the presence of ‘advanced producer service’ firms in cities, and this size of this presence.

In the words of Saskia Sassen, these cities have “a particular component in their economic base” which gives them a ‘specific role in the current phase of the world economy’. The model uses indirect measures of flows to compute a city’s network connectivity, which is a measure of a city’s integration into the world city network. These connectivity measures are then used to classify cities into levels of world city network integration, as follows:

- **Alpha++ cities** stand out as clearly more integrated than all other cities and constitute their own high level of integration.
- **Alpha+ cities** are highly integrated cities that complement Alpha ++ cities, largely filling in advanced service needs for the Pacific Asia.

---

195 David A. Smith and Michael Timberlake, *Cities in Global Matrices: Toward Mapping the World-System’s City System* at 80, 88, in *World Cities in a World-System* 79 ed. Paul L. Knox and Peter J. Taylor (Cambridge University press 1995). A network is a system of nodes with connecting links. The network that cities form has a particular type of topology called ‘scale-free topology’ which refers to the principle the distribution principle of how many links there are per any given node in the network. These networks follow a power law distribution and hence are scale invariant. See J. M. Ottino, *Complex Systems*, 49 (2) American Institute of Chemical Engineers Journal (AIChE Journal) 292, 296 (2003).
196 Friedman, *Where We Stand: A Decade of World City Research*; Immanuel Wallerstein, *Historical Capitalism* (Verso 1983).
197 Saskia Sassen, *On Concentration and Centrality in the Global City*.
199 Robert E. Dickinson, *City, Region and Regionalism at 205* (Routledge 2007 [1947]).
• Alpha & alpha-cities are very important world cities that link major economic regions and states into the world economy.

There are also Beta level cities, which are instrumental in linking their region or state into the world economy, and Gamma cities that either link smaller regions or states into the world economy, or world cities whose major global capacity is not in advanced producer services.

But Alpha cities function within national jurisdiction frameworks. Why would we require charter cities? From a historical perspective, nation-states are not necessary for the creation of Alpha cities. Probably, the Hanseatic League is the quintessential example. Historically, territorial states were the League's nemesis. From the sixteenth century, and the ascendency of the Westphalian model of sovereignty, leading to the Peace of Westphalia in 1648, the League succumbed to the political authority of ‘national’ states. The last formal meeting of the League taking place in 1669.

Second, Alpha cities used to function within national jurisdiction frameworks. This is no more the case. The contemporary city is no more ‘installed’ in a territory. The city is diverging from its historical model as part of a larger ‘national’ framework. Today, cities are about the flows (of activities made in the world and hence perennially on the move, of non-resident, migrant population) that seem to be exponentially growing in all directions. Paolo Perulli illustrates the point with statistics on the number of migrants worldwide, and how they concentrate in global cities. Global cities are transcending the limitations imposed by the nation-state and its constructs of citizenship and sovereignty. Ideas such as the ‘fatherland’ and ‘our county’ are being replaced by consideration almost exclusively of economic nature.

Third, cities such as Singapore and Hong Kong are classified as Alpha + cities, and share a specific characteristic. They did not need to go through the long evolutionary path of other Alpha + cities like Paris and Beijing. They achieved their status within one or maybe two generations. Notwithstanding, all Alpha + cities enjoyed (and some continue to enjoy) a clear privileged position: that of the capital city. Both Sydney and Dubai are capitals of their states. A key fact to highlight from the GaWC ranking is the very high scores that many city-states have achieved: Hong Kong, Singapore, and Dubai (Alpha +). In the next proposition, this is analyzed further to ascertain the type of empowerment that could lead to global cities.

(4) The principle of subsidiarity empowers cities: In 2013, Benjamin Barber, an eminent American political scientist, argued that cities can save the world from a deepening crisis of democracy where the nation-state is failing to perform both on the local and global scales. He advocates a world where “cities, the most networked and interconnected of our political associations, defined above all by collaboration and pragmatism, by creativity and multiculturalism, do what states cannot” (Barber 2013, p. 4). Barber’s vision is being advocated by global organizations such as the United Cities and Local Governments network, which in 2010 called for cities to be self-governed (UCLG 2010); and the Cities Alliance, launched in 1999 by the World Bank and the United Nations Human Settlements Program (UN-Habitat) as a global partnership to promote the role of cities in sustainable development.

The principle of subsidiarity could provide the mechanism to fulfil the vision shared by Barber, the UCLG, and the Cities Alliance. The approach is not too remote from the one espoused on charter cities,

206 Benjamin Barber, If Mayors Ruled the World: Dysfunctional Nations, Rising Cities (Yale University Press 2013).
207 Id.
nor does it fall far from what was proposed by Baruch Spinoza in the seventeenth century in his analysis of the Dutch Federation that existed between 1581 and 1795.\textsuperscript{210}

In 2009, Paul Romer promoted the idea of creating charter cities in developing countries.\textsuperscript{211} The idea is inspired by cities such as Hong Kong and Shenzhen.\textsuperscript{212} This Charter Cities Initiative is currently part of the NYU Urbanization Project.\textsuperscript{213} According to Romer, a charter city is a special type of ‘special zone’. In particular,\textsuperscript{214}

First, a Charter City has to be big. Viable cities will have millions of residents, so a zone has to be big to accommodate them. Second, it should be a Reform Zone, not a Concession Zone. Most zones are created to offer concessions to firms, not to implement reforms. The goal of a Charter City is reform, not giving out concessions, so in this sense, the motivation for a Charter City is totally different from the motivation behind most special zones.

Here are my two tests for whether a policy is a reform or a concession: Would you be happy if this policy lasts forever? Would you be happy if this policy spread to the entire country? If the answer to both questions is yes, it is a reform. If not, it is almost surely a concession, a gift to some special interest. A reform zone is a zone that implements one or more fundamental reforms.

So to summarize, a Charter City is a city-scale reform zone where a startup city could emerge.

Romer also suggests charter cities for the United States:\textsuperscript{215}

Take the United States, for example. If someone wanted to start a Charter City there, what might they do? One possibility might be to develop a new city that from the beginning requires that every vehicle be autonomous, that is computer-controlled … You could also use software to prioritize emergency service vehicles instead of sirens. This sounds like a small advantage, but in New York City, the number one complaint on the city’s 311 line is noise. Noise pollution seriously reduces the quality of modern life. It may even have important effects on health. It is the kind of problem that we tend to accept as being inevitable, but which the right kind of innovation could address. But the kind of innovation that is required might not be possible for an individual firm. For something like emergency service vehicles, it might take innovation at the level of the entire city.

D. Charter Cities and the Democratic Ideal

Next, I continue my analysis by investigating the link between the size of polities and democracy.

The most important output that democracy produces is evolutionary fitness where democratic societies are more effective in dealing with their problems and more able to adapt to the environment.

\begin{thebibliography}{9}
\bibitem{210} Gussen, On the Problem of Scale: Spinozistic Sovereignty as the Logical Foundation of Constitutional Economics.
\bibitem{212}Romer, Paul. Interview with iMoney magazine, Interview on Urbanization, Charter Cities and Growth Theory (29 April, 2015). Retrieved from https://paulromer.net/tag/charter-cities/.
\bibitem{213}Id.
\bibitem{214}Id.
\bibitem{215}Id.
\end{thebibliography}
The Greek city-states survival for thousands of years is a testament to this proposition. When we interpret democracy as an evolutionary fitness trait, it becomes synonymous with voluntary cooperation. It is a short distance from that position to where we can see that democracy favors small scale organization. Voluntary cooperation is linked to the idea of political trust. Political trust is a complex concept which is “a form of fiduciary trust between society and government … which is inherently different from mutual trust between people”.216 In the context of municipal government there is empirical evidence that “trust in local officeholders is typically and often considerably higher than trust in national politicians” and that the “size of a municipality has a modest negative effect on political trust”.217

We can see this link between democracy and evolutionary fitness in Dahl and Tufte (albeit indirectly) where they suggest that in the two traditions of locating democracy in the city-state and in the nation-state the ideal polity would satisfy at least the following two dimensions (of democracy):218 the dimension of “citizen effectiveness” and the dimension of “system capacity”. On citizen effectiveness, Dahl and Tufte conclude that there is a trade-off between two different aspects of effectiveness: the cost of participation and the cost of dissent. They present the conclusion in a figure which we reproduce with minor modifications as Figure 4.2 below.219

![Figure 4.2: Trade-off on citizen effectiveness as presented by Dahl and Tufte](image)

However, Dahl and Tufte do not suggest the existence of an optimal size. This is due to the demands of the other dimension of democracy (in the ideal polity), namely “system capacity”. They argue that “the criterion of system capacity makes small systems too costly for many purposes and thus leads to the need for many systems … the criterion of system capacity implies that in the present world there is no single optimum size for democratic policies”.220

The reason why Dahl and Tufte were not able to see an optimal scale is the use of “system capacity” as a second dimension independent of citizens’ effectiveness. In order for us to see why this approach muddies the scale calculus involved, we turn to what is known in biology as the Allee Effect after the “Chicago school” ecologist Warder Clyde Allee who recognized a positive correlation between

---

219 At 108.
220 At 109.
population size and the mean individual fitness of a population or species. More generally, “group size effects, sometimes called group augmentation, can promote the evolution of helping and other forms of complex cooperation, in some circumstances in the absence of relatedness”. The Allee Effect can be depicted as shown in Figure 4.3.

For example, vigilance as an individual evolutionary trait would give rise to the component effect (in Figure 4.3). Other examples of component effects are cooperative hunting and the ability to find mates more easily. At low population density, these component effects produce an overall demographic effect. The demographic effect however depends on negative density-dependent effects such as interference and depletion. As population density becomes high, negative density dependence depletes the demographic effect by offsetting the component effects e.g. through resource competition. In other words, as the size (population) increases there will often be a reduction in the fitness of individuals. However, “[a]t low numbers or densities, the benefits from the addition of each successive individual outweigh the costs, such that there is a net gain in individual fitness, and fitness is highest at intermediate numbers of densities”.

Figure 4.3: Trade-off between component and demographic effects in the Allee Effect

The similarity between Figures 4.2 and 4.3 should be clear. The component effect corresponds to the cost of dissent while the demographic effect corresponds to the cost of participation (thinking of evolutionary fitness as a benefit equal to one minus the cost). We can reasonably conclude that democracy’s citizens’ effectiveness dimension corresponds to the evolutionary fitness trade-off as illustrated in the Allee Effect. This does not however give any indication as to the role of the second dimension of democracy as identified by Dahl and Tufte, namely “system capacity”. Although from this evolutionary perspective, we can interpret Dahl and Tufte’s “system capacity” dimension, which represents a polity’s ability to “manipulate and to adapt to its environment”, as corresponding to the resultant evolutionary fitness from the trade-off inherent in the Allee Effect. To further illuminate this

---

222 At 37.
226 Dahl and Tufte, *Size and Democracy* at 110.
proposition, the next step is to look at how this democracy has been implemented in societies other than human ones.

A primary candidate for such analogy would be social insects. Social insects happen to “exhibit the ultimate superorganism states, where inter-individual conflict within the colony is minimal or non-existent”.227 Linking this to Dahl and Tufte observation that conflict is much less frequent in smaller systems,228 we can start to see why the evolutionary aspect of democracy would favor smaller polities. However, this observation also finds support from the implication of the idea of superorganism, in particular the ramifications of the concept of self-organization which produces the organisation seen in social insects (and other complex [adaptive] systems).229 This self-organization is based on the principle of unconscious cooperation which “is one of the basic principles of biology”.230 Note the resemblance of the self-organization concept to Dahl and Tufte’s second dimension of democracy, “system capacity”, where the polity is able solve its problems and to adopt and adapt to its environment. In particular, it is the observation that self-organization favors decentralization that we want to better understand. Self-organization does not require a “leader” that has to assimilate all available information before making a decision. Self-organization makes the decision making process reliant on actions taken by agents locally.231

It is the idea of division of labor that explains why self-organization does not need centralization. Division of labor is based on the idea of cooperation where members of a given group divide their labor such that they all become dependent on one another for their survival. In particular, division of labor allows for the creation of more complex, and hence larger group sizes. In social insects, the most socially sophisticated groups are correlated with the largest colony sizes.232 In fact, Dahl and Tufte find evidence that the larger the country, the more decentralized its government.233 They measure centralization as the relative size of central government to all governments. Such proliferation of subunits would lead to higher complexity in the policy-making process. Decentralization is linked to the very nature of complexity, where the non-linearity of interactions leads to non-predictability that necessitates self-organization, where local interactions produce global behavior.234

In the complex polity, the ability to respond to citizens’ preferences is a function of the interrelatedness or connectivity of the units constituting the complex polity. It follows that these units would not be fully autonomous. Sovereignty is shared by these units in the complex polity, as envisaged by polycentricity (subsidiarity).

On the other hand, the understanding of democracy as evolutionary fitness brings sustainability into the picture. The question of democracy and size becomes a query about the sustainability of complex societies.235 Joseph Tainter finds that historically increasing complexity has limited the “system capacity” of societies to resolve their problems and to adapt to their environment.236 This is an argument of diminishing returns to complexity. For Tainter “[w]hat is perhaps most intriguing in the evolution of human societies is the regularity with which the pattern of increasing complexity is interrupted by

---

228 Dahl and Tufte, Size and Democracy at 92.
229 Hölldobler and Wilson, The Superorganism at 7.
233 Dahl and Tufte, Size and Democracy at 37.
234 Heylighen, Complexity and Self-Organization.
235 This complexity is different from that applied to our analysis of global cities and complex economies. The latter is a proxy to the innovation that persists in a given society. The former, what Tainter talks about, is instead about scale distortions. See Benjamin F. Gussen, On the Problem of Scale: Hayek, Kohr, Jacobs and the Re-invention of the Political State, 24 (1) Constitutional Political Economy 19 (2013).
collapse—by episodes when societies change rapidly to a lower level of complexity”. In other words, "the society ‘decomposes’ as people pursue their own immediate goals rather than the long-term goals of the society’s leaders”. This is essence of self-organizing as discussed above. Although Tainter does not use the term self-organizing, he correctly identifies higher complexity with self-organization and the ensuing decentralization of decision making.

Tainter’s depiction of complex societies is one where there is either resistance to self-organization, which leads to collapse (Tainter provides the example of the Roman Empire for this outcome), or where self-organization is enabled (which Tainter sees as leading to simplification), hence evading potential collapse (Tainter gives the example of Byzantine Empire for this outcome). A better way to understand the difference is to think of two types of complexity: one based on hierarchical organization, the other based on rhizomatical organization. Rhizomatical causality is not chronological and does not look at the origin of things (inputs) but rather at their conclusions (outputs). In relation to democracy, rhizomatical causality would look at outputs such as happiness, rule of law, and economic growth, rather than the inputs of electoral processes and civil rights. A rhizomatical interpretation of polities favors a non-hierarchical polity based on non-linear self-organization and decentralization.

Growing degrees of economic integration (globalization) and the ensuing modulation of local-global power relations is putting more emphasis than ever before on clarifying our understanding of the democratic ideal and its operation from within the nation-state. In fact, some argue that “globalization is the self-organizing process of constructing a world socio-economic community”.

This level of economic integration is resulting from a paradigm shift away from the “international model” and to a “transnational model”.

We know today that to cope with increasing environmental complexity, there needs to be a move away from pure hierarchical organization, and towards growing degrees of self-organization. The above excerpt provides one way of looking at the transition. Another way of explaining the same transition is the concept of the Rhizome (introduce above) where there is a move away from hierarchical organization and into network structures that are again based on self-organization and decentralization.

V. CASE STUDY: AN ‘OLYMPIC’ MIDDLE EAST

The Middle East as a geopolitical, or even an analytical, ‘concept’ has become too problematic. The so-called ‘Arab Spring’, the on-going civil wars in Syria, Iraq, Yemen, and Libya, the on-going conflict between Israel and the Palestinians, the Sunni-Shiite conflict, and the conflict between Turkey and the Kurds, attest to this proposition. The historical annals all the way back to Ur, can only furnish further affirmation. Propylactic constitutional orders in the spirit of Spinoza’s understanding of sovereignty are therefore proposed as an alternative. This vision necessitates international treaties to underwrite charter cities as the dominant governance structure. Sovereignty, as envisaged by Spinoza, is the key proposition for peace in the Middle East, given this sovereignty’s subsidiarity between different organisational scales (the local, national, and global). The Middle East is composed of a rich mosaic of religions and ethnicities that is especially amenable to such orders. A lasting peace in the Middle East
requires relinquishing the nation-state model in favor of small, non-contiguous, jurisdictions connected in loose confederal structures. Syria and Iraq are ideal for implementing this new subsidiarity approach.

In a place like the Middle East, with its rich mosaic of cultures, religions and ethnicities, the nation model will always be problematic, even if at a scale similar to that of Bahrain (less than 1000 square kilometers). I hence argue for governance structures based on autonomous cities.

Next I briefly discuss the mosaic nature of the Middle East and outline the proposed strategies. Later, I delineate these strategies, especially the introducing the principle of subsidiarity and the concept of charter cities.

A. The Tension induced by the Middle East Mosaic

Culturally, the Middle East is one of the richest regions in the world. This cradle of civilization continues to be home to ethnicities as diverse as Arabs, Armenians, Assyrians, Azeris, Circassians, Copts, Druze, Jews, Persians, Kurds, Maronites, Turks, and other denominations form less significant minorities. The region is also home to many religions, including Judaism, Christianity, Islam, and smaller religions such as the Baha’i Faith, Druze, Yezidism, and Zoroastrianism. This does not mean that the region cannot be analyzed as a “cultural area”, but accentuates the complexity inherent therein. This beautiful diversity, the signifier of evolution over millennia, is however consistently under threat due to geopolitical frictions, most notably from the large polities in the regions, and/or the relatively small size of many of these ethnicities and religions. The norm in this region is for such diversity to be grouped into political states, dominated by the largest ethnicities and religions, which in turn results in tensions that threaten the stability of the region.

We have seen a trend towards relieving some of this tension since WW I, more often than not unsuccessfully, as seen in Lebanon and its consociational system. There, the distribution of power based on the 1932 religion consensus was not able to provide a sustainable solution. Another case in point is Turkey, which went through a process of ‘sorting’ though the Turkish War of Liberation (1919 to 1922), and the Treaties of Sèvres and Lausanne. The mosaic of different nationalities that existed in the Ottoman Empire, and acknowledged by the Treaty of Sèvres of August 20, 1920, was now being replaced by a combination of community annihilation or expulsion. The Treaty of Lausanne of July 24, 1923 formalizes this approach. While The Treaty of Sèvres was described by one author as “fragile as the porcelain of that name, though lacking its charm”, this treaty was more sensitive to the mosaic makeup of the Middle East at the time. The main issue for Turkey with the Treaty of Sèvres was the system of Capitulations, which was abolished by the Turks in 1914, but re-imposed under the Treaty of Sèvres. This system removed Turkey’s jurisdiction over foreigners living within its borders.

242 See Faleh A. Jabar, Tribes and Power: Nationalism and Ethnicity in the Middle East (Saqi Books 2002), and Milton J. Esman and Ihamar Rabinovich, Ethnicity, Pluralism, and the State in the Middle East (Cornell University 1988).
243 See Gerard Russell, Heirs to Forgotten Kingdoms: Journeys Into the Disappearing Religions of the Middle East (Basic Books 2015), and also Bernard Lewis, A Middle East Mosaic: Fragments of Life, Letters and History (Modern Library 2000); Bernard Lewis, The Middle East: A Brief History of the Last 2,000 Years (Scribner 1995).
244 See for example Gary S. Gregg, The Middle East: A Cultural Psychology (Oxford University Press 2005).
The Middle East continues to be a cultural mosaic, which in turn continues to cause tensions. The recent execution of Shia Sheikh al-Nimr in Saudi Arabia makes the ongoing civil wars in Syria, Yemen and Iraq only the tip of the iceberg representing this tension.247

B. Prophylactic Intervention (1): Continental Differentiation

The first proposed strategy is to ensure a ‘détente’ in the Middle East by systematically reorient the cultural, social and political compass of some parts of the Middle East towards Africa. This creates a continental ‘envelope’, a *universitas*, where we can establish free charter cities. The idea is to establish charter cities across this ‘greater Africa’ as the architectural foundation for a loose confederation or confederations across the continent. In order for charter cities to thrive, they need to trade with each other. Providing a ‘continental envelope’ not only allows for this cooperation, but also for viable defense mechanisms given the large number of cities involved.

For my purposes I adopt a traditional definition of the Middle East, where there are six subregions: (1) Asia minor (Turkey and Cyprus), (2) Persia (Iran), (3) the Levant (Syria, Lebanon, Israel, Palestine, and Jordan), (4) Mesopotamia (Iraq), (5) the Arabian Peninsula (Saudi Arabia, Yemen, Kuwait, Bahrain, Qatar, UAE, and Oman), and (5) Egypt. The proposition is to reclassify these subregions as parts of three different continents, and by doing so ‘dissolve’ the Middle East, at least as an analytical framework, into three parts: (I) the European part: Asia Minor, (II) the Asian part: Persia, (III) the African part: Egypt, the Levant, Mesopotamia, and the Arabian Peninsula. Hence, in contrast to the current classification that sees the Levant, Mesopotamia and the Arabian Peninsula as part of South-West Asia, these parts become incorporated into North-East Africa.

The proposition is that the Levant, Mesopotamia, and the Arabian Peninsula would benefit from a reorientation away from Asia. As a long-term strategy, this would see a drifting away from the influences exerted by Turkey and Iran on these countries. It would be of course naïve to believe that Turkey and Iran would cease to interfere in the affairs of these countries simply because they are classified as African rather than European or Asian. But the argument is an evolutionary one. The proposition is that over time Africa would become more important to the political and economic strategies of these countries, where African heavyweights such as South Africa, Egypt and Nigeria counterbalance the influences exerted by Turkey and Iran.

This approach is no stranger to the long history of these countries. Both Hebrews and Arabs have strong ties with North and East Africa. The story of the Exodus is in one sense an affirmation of the influences flowing between the Levant and Egypt.248 Even the nascent religion of Islam provides insights into the first point of secure for the Arabian Peninsula. To be precise, it was Ethiopia that was the first port of call for Prophet Mohammed and his followers.249

This strategy would virtually see a ‘dissolution’ of the Middle East as an analytical entity. Now there would be three different platforms for analysis: the European platform with issues relating to Turkey and its integration into the European Union, the Asian platform where Iran becomes part of a “greater Indian subcontinent” (which also includes Afghanistan). The third platform would see the rest of the Middle East joining north-east Africa.

---


This ‘neuausrichtung’ would see these parts of the Middle East join African organizations ranging from political organizations such as the African Union, to cultural and sports organizations such as the Confederation of African Football. The forging of these formal ties with Africa would provide a symbiosis in labor markets where supply and demand for labor are matched through immigration and direct foreign investment. More importantly, Africa provides a huge military depth, both in numbers (for example from Nigeria) and know-how (especially from South Africa), beyond the role played by Egypt.

C. Prophylactic Intervention (2): Sovereignty à la Spinoza

My relational definition of sovereignty imports a small scale organisation of the state. Without any constitutional safeguards in place, this relational basis continues to fray as sovereignty, predominantly through its economic rationale, amplifies the jurisdictional footprint of the state. As has been outlined earlier, historically, sovereignty succumbed to the concept of ‘nation’ through the pedigree of political economy and the economic basis thereof. This national sovereignty entailed that any economic problems at sub-national levels (regional, urban) needed to be addressed within the larger context of the national scale. Such aggregation resulted in policies biased in favor of stronger regions or cities within the nation-state. Any economic affinities that sub-national communities have outside the nation-state would not obtain unless channeled through that nation-state’s institutions.

This resulted in sovereignty being conceived of as a one-dimensional possibility: a nation-state either has it or it does not. It became an absolute (rather than what it is today, a relative) quality. Sovereignty as understood today is “a right of membership, historically determined, in what amounts to a very exclusive political club” (Emphasis added). This club, the societas of states is “the most exclusive political club in the world and has been so for several centuries”. The club metaphor of course imports a local scale intonation as propounded by Buchanan. Either way, whether seen as anchored in the national or local scales, a sovereign state is conceived of as a territorial jurisdiction “within which state authority may be exercised on an exclusive basis” (emphasis added). It was not until the rise of federal states exemplified by the United States that we see a shift in the analysis towards the possible divisibility of sovereignty were states “co-exist and interact on a foundation of formal equality and a corresponding right of non-intervention”.

Towns with autonomous political status have been amongst the most dynamic forces in the Western civilization. We find them in the Greek polis, and the Roman ‘civilization’ rooted in the concept of man as a citizen (civis) living in a city or civitas. In medieval Germany, ‘Stadluft macht frei’ became a legal maxim, and after a year and a day of breathing it, a serf could not be returned to bondage. The town was the antithesis of the manor, and stood for the supremacy of the law rather than the supremacy of the will. In the twelfth and thirteen centuries, a great league of cities, the Hausa, had begun to establish its own networks of diplomacy and defense, and its own body of law, making it virtually a federal state. Later, the unusual close relationship of republican politics and civic culture imparted to the Renaissance one of its most fundamental and original features, especially as seen in the evolution of Venice since the Middle Ages.

---

250 The reader is referred to the works by Jane Jacobs for a detailed discussion of this dynamic. See, for example, Jane Jacobs, The Nature of Economies (The Modern Library 2000).
251 Jackson, Sovereignty in World Politics: A Glance at the Conceptual and Historical Landscape at 21.
252 Id.
255 At 6.
The early modern period witnessed the demise of the autonomous city and its style of politics, and the rise of the modern sovereign state. Warfare played a crucial role in this demise. The sixteenth and seventeenth century saw a massive increase in the scale, duration and cost of warfare. Cities could not mobilize the massive forces that were now required to wage war. This fact had a drastic (and negative) impact on the autonomy of cities. 257

However, this ‘problem of scale’ was not insurmountable, at least intermittently. The Dutch Republic (1581-1795) was a successful example of a federation of cities that balanced the trade-off between economic integration and small-scale production. Similarly, the autonomy of southern German towns persisted through self-sufficient economies and self-contained social structures. Today, we see city-states such as Hamburg and Bremen form part of the German Federation, and continue to prosper in a globalizing world. Further afield, we see cities such as Hong Kong, Macau and Singapore relaying a similar story.

But the genesis of this city-centric governance comes from the Middle East. Sumerian cities such as Ur were city-states as early as 4000 BC. This tradition of city autonomy was swept away over millennia of economic and political integration, mostly through warfare. Today however, especially given the ongoing process of globalization, and the increasingly important role played by supra-national organizations such as the United Nations, there is potential for this tradition to hold the key to a lasting peace in the Middle East. Imagine a region dominated by autonomous cities within a loose confederal structure. Each city protected by an international treaty, and having the complete freedom of participating in the international community as an independent nation. These global cities would then coordinate with not only other cities in the region, but on a global scale.

It is submitted that the Middle East, given its rich cultural mosaic, is a prime candidate for empowering cities as polities. To be precise, countries like Syria and Iraq (inter alia) would be best constituted as confederations of charter cities. For example, in Syria, the largest cities (Aleppo, Damascus, Homs, Latakia, Hama, Ar-Raqqah, Deir ez-Zor, Al-Hasakah, Qamishli, and Sayyidah Zaynab) would be reconstituted as charter cities under the protection of international treaties under the United Nations. These charter cities would have a level of autonomy similar to that seen in cities such as Hong Kong and Macau. They are ruled by their own populations under their own ‘basic law’. They share natural resources that are managed by international corporations, based on geographic proximity. Territories outside these cities would be governed by international instruments that allow for these cities to form loose confederations for this purpose. A similar approach would move Iraq away from its current federal system (based on provinces), and towards a confederal arrangement bringing together charter cities that are largely autonomous. A similar approach could also be implemented in Israel instead of one- or two-state solutions. Over time, ‘greater Africa’ becomes studded with charter cities that cooperate with each other, as much as with charter cities across the globe.

---

VI. CONCLUDING REMARKS: ‘JARLSBERG’ CONSTITUTIONAL DESIGNS

Today we see a tension in how sovereignty is shared between the local and global scales, post the nation-state. There are now two lines of attack on sovereignty. One proceeds through the idea of universitas. The other attacks the territoriality of the Westphalian contiguous-and-non-perforated state itself. A nuanced reading of the concept of sovereignty suggests that there are decisive economic arguments militating against the existence of colossal countries—at least as contiguous and exclusive jurisdictions. While some literature touches on the structure of the state and its relation to the economy, in the final analysis, there is only an anemic treatment of what should be at the crux of constitutional designs. This clinging to the idea of the nation-state, even when moderated by decentralization, is anachronistic. It is imperative to understand that the issue is no longer the role of the nation-state. The concept of the hard-bordered nation-state is itself flawed. Not because of the ‘hard-border’ as much as the national scale.

As discussed in this paper, hard-borders could very well be still needed, but cannot function properly beyond the city-region scale (a city and its hinterland). The nation-state is moribund. It is becoming irrelevant, especially to economic activity. What is gaining ground is a new paradigm of ‘glocalization’ where the global and local scales are effacing the need for national coagulations.

The paper suggests the existence of a coherent school of analysis. You can see it in the writings of an eclectic group of scholars. They eschew scale invariance in their analysis. They are careful to identify how changes in the dimensions of space and time (space-time), inter alia, affect all analyses, be it legal, economic, political or philosophical. This group include Aristotle, Baruch Spinoza, Leopold Kohr, Ernst F. Schumacher, Jane Jacobs, and even Peter Kropotkin. Elsewhere I have elaborated on the key features of this school, still without giving it a proper name. Not a bad thing per se when reflecting on the vagaries of labels, especially in a post-modern world. But I suppose if I were to furnish one, it would be the ‘Lefebvrean School’, after Henri Lefebvre, a renowned French philosopher and sociologist. While others have touched on the essence of this school, namely the effects of scale (through proxies such as space, size, density or acceleration) on natural and human phenomena, it was Lefebvre who wrote explicitly about the concept of ‘space’ with its natural and social production. Lefebvre analyzed the nexus between capitalism and space production. He however offered a Marxist critique of how space production is controlled by certain classes. I instead emphasize allowing communities their own (constitutional) space—their own ‘jurisdictional footprints’.

As has been outlined in the paper, historically, sovereignty succumbed to the concept of ‘nation’ through the pedigree of political economy and the economic basis thereof. This national sovereignty entailed that any economic problems at sub-national levels (regional, urban) needed to be addressed within the larger context of the national scale. Such aggregation resulted in policies biased in favor of stronger regions or cities within the nation-state. Any economic affinities that sub-national communities have outside the nation-state would not obtain unless channeled through that nation-state’s institutions. Constitutional economics (as a discipline) would not pass muster unless it is understood that the golden principle for constitutional design is the need to maintain polities at their ‘optimal scale’. While this is a shifting post that increases with, inter alia, technological progress, the ability to meet

258 Instances of this tension can be seen in such independence movements as in Catalonia and Scotland.
259 Although some commentators argue that the issue is in fact that hard-borders don’t work. See for example Hopkins, Devolution in Context: Regional, Federal and Devolved Government in the European Union at 15.
261 The reader is referred to the works by Jane Jacobs for a detailed discussion of this dynamic. See, for example, Jacobs, The Nature of Economics.
such a requirement leads into an inquiry of how states can be engineered as non-contiguous, perforated entities, reminiscent of a cross-section from a wheel of Jarlsberg cheese if you will, which expand or shrink around the optimal scale.\textsuperscript{262} The ‘wholes’ or ‘eyes’ in these polities represent free charter cities that redefines the ‘body politic’ on a global scale. There is a second order issue in relation to the way constitutional economics approaches the reinvention of states: the ‘choice among constraints’ does not explain where the total set of available constraints arises in the first place. Constitutional economics seems to treat these constraints as belonging to a predetermined ‘fixed basket’, something easily accommodated if we do not look at sovereignty \textit{per se}. The ability to distinguish between different scales (form the global to the local) goes a long way toward explaining how options are limited (and hence constraints created). This in turn results in a dynamic set of constraints to choose from. This however is available only where the state is the subject of analysis. In particular, when questioning the national scale as the default level of analysis, we can see emerge a very different set of constraints.

Unfortunately, even when sovereignty is engaged in constitutional economics, there is still a lingering taste of ‘Westphalian sovereignty’ and its emphasis on the contiguous-and-non-perforated (nation) state. In constitutional economics, while sovereignty and jurisdiction are not usually treated explicitly,\textsuperscript{263} they can be gleaned from the assumptions typically made. The central feature here is still the same as that since the beginning of political economy discourse, which in fact is the same impetus underlying most theories of sovereignty: legitimization of the nation-state. Even when scalar differentiation is engaged, it is never in relation to the state, but to government—leaving other elements of the state, especially territory and population, beyond systematic inquiry. Hence, we find discourse on the optimal size of government, but not on the optimal size of states, where government is understood as only one element of the state, distinct from the latter’s territory. There has even been a tendency to treat ‘government’ and ‘state’ interchangeably, further disguising the essential issue of territoriality and the ensuing possibilities of divided sovereignty.\textsuperscript{264}

I end this article by reiterating my call for a Chicago cluster that picks up the mantel of what I refer to as the Lefebvrouis School. Earlier in the paper I have introduced some of the scholars that could today be considered as part of this School. These include Gerald Frug, Paul Romer, Benjamin Barber, Yishai Blank, Joseph Tainter and Saskia Sassen.\textsuperscript{265} Chicago can enrich the channels of cooperation between these scholars. By doing so, it can be the driving force behind a new world system. One based on charter cities rather than nation-states.

\textsuperscript{262} See Leopold Kohr, \textit{The Overdeveloped Nations: The Diseconomies of Scale}, especially Chapter 2 (Schoken Books 1978).
\textsuperscript{263} By jurisdiction we mean all three types: legislative, executive, and judicial.
\textsuperscript{265} There are many others that are working in this field. These include Yaneer Bar-Yam, John Breuilly, Robin Dunbar, Peter Turchin, Ian Morris, Andreas Osiander, Siniša Maleševic, Benedict Anderson, Brian Slattery, Jennifer Neal, Jan Zielonka, Anne-Marie Slaughter, Ian Goldin, and Dani Rodrik. For a synopsis of their ideas, see Debora MacKenzie, \textit{Imagine There’s No Countries ...}, 223 (2985) The New Scientist 31(2014).
APPENDICES
APPENDIX I: THE MODEL

In this appendix I elaborate on the model introduced in section III. I assume sovereign polities are distributed into quartets on a two-dimensional lattice as shown in Figure AI.1. This assumption allows for analyzing the interaction between polities without making the analysis too difficult to follow.

![Figure AI.1: Top view of the original distribution of sovereign polities](image)

Quartets are assumed to be distributed randomly over the entire lattice. This assumption makes the model more realistic given the historical distribution of polities in any given world system.²⁶⁶

Lattice sites could be either occupied or vacant. When occupied, they have sovereign polities represented by spheres with mass ($m$). For simplicity, I assume that these masses are equal in the ‘original position’. The mass is a proxy for each polity’s land and population endowment, and hence cannot grow indefinitely given the limits on the land resource, and by implication on population. I refer to this mass as the socio-political mass. I assume the lattice to be frictionless where lattice sites are empty, such that the cost incurred by polities for drifting from one empty site to another is *de minimis*.

Polities occupy vortices of squares of side length $d$. The distance between sovereign polities represents a proxy for ‘relational distance’ rather than a physical distance *per se*. The longer the distance, the less is the interaction between polities. When the distance is zero, the polity transfers all of its sovereignty to a union with another polity that takes over the decision making process. Sovereignty is maximized when the distance between polities is infinite.

In order to generate wealth, polities coagulate in quartets, which we designate (clockwise) as A, B, C, and D, as shown in Figures AI.2. Each quartet is assumed to be far from other quartets as to ignore any effect arising from interaction with other formations.

![Figure AI.2: Original two-dimensional square formation](image)

In this model wealth is generated through trade with other polities. The trade flow is analogous to that given by the Tinbergen gravitational model.\textsuperscript{267} Sovereignty and wealth are hence inversely proportional.\textsuperscript{268} Political power arises from relative rather than absolute wealth. Relative wealth can then be transformed into other forms of power such as coercion and knowledge.\textsuperscript{269} The existence of relative wealth indicates a transfer of sovereignty from one polity to another.

Wealth distribution is proportional to the socio-political mass. Larger polities obtain a larger share of the trade. Hence if a polity of mass $2m$ trades with a polity of mass $m$ over one trade channel, the larger polity takes two-thirds the wealth from trade.

Moreover, we assume the ruler-ruled relationship in polities formed through fusion (nation-states or the universitas) to be benevolent. In other words, the wealth generated from trade is shared equally between polities constituting the political union.

Each polity has the objective of increasing its total wealth ($W$). This is done through a mixed strategy of rearranging the original square formation (short-term strategy), and by acquiring power ($P$) which could then be used to generate more wealth (long-term strategy). Power results from (territorial) fusion which represents the evolution of nation-states towards a universitas that subsumes the sovereignty of its constituent polities. Given the historical oscillation between societas and universitas, we assume the expected power to average out over time. Furthermore, given the homogeneity of the polities in the original position, and the random distribution of quartets, we assume that the total number of polities in the original position ($N$) is such that:

$$\sum_{t=0}^{\infty} P_X(t) = 0$$

(1a)

$$\forall X \in \{A, B, C, D\}$$

The expected power therefore equals zero in the limit:

$$\lim_{t \to \infty} E(P_X) = 0$$

(1b)

A polity with zero or negative power would prefer to drift to another lattice site if it believes its expected power from doing so to be non-negative.\textsuperscript{270}

Nation-states would be stable as long as the transfer of sovereignty to the nation-state is paid for by a wealth differential (power over the other polities outside the nation). The decision by each polity to join a political union depends on the power it secures in exchange for its sovereignty. If the power differential disappears, the fusion becomes unstable and, overtime, political (territorial) fission ensues and polities drift away from the quartet.

The total wealth of the quartet is equal to the sum of the trade between the four polities (six channels of trade):

\textsuperscript{267} Tinbergen, \textit{Shaping the World Economy: Suggestions for an International Economic Policy}.

\textsuperscript{268} This assumption accounts for the effects of globalisation and a world system dominated by free trade. Further discussion of this point can be found in sections II and IV.

\textsuperscript{269} See Toffler, \textit{Powershift: Knowledge, Wealth, and Violence at the Edge of the 21st Century}.

\textsuperscript{270} In physics, unlike energy, power can be negative. Hence, power is defined as the change of energy over time: $P = \frac{dE}{dt}$. Where energy is decreasing, power is negative. I interpret negative power as a proxy for increasing debt or deficit.
\[ W = \sum_{i=1}^{4} \sum_{j=i+1}^{4} \left( \frac{m_im_j}{d_{ij}} \right) \] (2)

For the original square formation in figure A1.2, \( W_{Total} = 5 \left( \frac{m^2}{d^2} \right) \), and each sovereign polity gets an equal share of \( W_i = \left( \frac{5}{4} \right) \left( \frac{m^2}{d^2} \right) \).

A. Wealth Maximization and Polycentricity

In the next stage, each quartet attempts to maximize its wealth by maximizing the total wealth of the quartet. This would require satisfying the following condition: 271

\[ m_im_j = 2 \ln d_{ij} \quad i \neq j \] (3)

And given our assumption that all polities have the same socio-political mass, we have:

\[ d = \exp\left( \frac{m^2}{2} \right) \] (4)

Maximized wealth would hence have the form \( W = 6 \ln \left( \frac{1}{\beta} \right) \), were \( \beta = d^2 \).

In order to satisfy this maximization condition, the quartet moves from the two-dimensional square formation where all polities occupy sites on the lattice to a three-dimensional hierarchy—a pyramid arrangement as shown in Figure A.3.

![Figure A.3: Top-view of the inverted pyramid for maximizing total wealth](image)

One likely formation is where three of the polities are “lifted off” the lattice (a form of partial fusion), while one polity remains in its original position (on the lattice). I interpret this inverted pyramid as representative of polycentricity “in which powers are shared between sovereign bodies … which reaffirm their separateness”. 272 Under this configuration, total

271 Taking the total derivative of wealth and setting it to zero we get:

\[
\delta W = \sum [\delta m_i, m_j, (d_{ij})^{-2} + \delta m_j, m_i, (d_{ij})^{-2} - 2 (d_{ij})^{-2} \delta (d_{ij})] = 0 \\
\delta W = \sum [(d_{ij})^{-2} [\delta (m_i m_j) - 2 \delta (\ln (d_{ij}))]] = 0
\]

272 Prokhovnik, Spinoza’s Conception of Sovereignty at 300-301. To be precise, the arrangement is most likely to be in the spirit of subsidiarity, given the enduring effect of pre-existing social hierarchies. The model is an ideal-type of this outcome.
wealth is increased to $W = 6 \left( \frac{m^2}{d^2} \right)$. Assuming the same distance $d \left(= \exp\left(\frac{m^2}{2} \right)\right)$ represents the dimensions of the original square arrangement, the wealth of each sovereign polity is now increased by $\left(\frac{1}{4}\right)\left( \frac{m^2}{d^2} \right)$. Power under polycentricity arises from the wealth differential relative to the square arrangement. Because all polities in this polycentric arrangement are identical, nothing turns on which one stays on the grid. A rotation strategy would also be envisaged.

The pyramid arrangement embodies the power exchange idea as stated by Buchanan and Tullock.\(^{273}\) Part of each polity’s sovereignty is shared with the other polities in the pyramid. Given that the objective of each polity is to maximize its own wealth rather than that of the quartet, and given polities do so through cooperation toward a common objective, this configuration represents the hybrid between societas and universitas as envisaged in The Calculus of Consent.

B. On the Creation of Polities

I now analyze the rational for the creation of nation-states and universitas. Instead of the original square arrangement, polity A could negotiate a social contract where polity B exchanges its sovereignty through a total fusion as shown in Figure A.4(a).

![Figure A.4: (a) Polity B decides to give up its sovereignty to polity A (b) The fusion occurs between A and C (c) The fusion occurs after the creation of a polycentric configuration](image)

The double lines indicate the existence of two trade channels between the entities, one of which is a modification of the channel between B and C under the square configuration. This arrangement is hence analogous to a federal arrangement rather than a unitary state. Polities within the federal state keep their trade channels, and are still able to trade directly with polities outside the union.

The wealth of the nation composed of A and B in Figure A.4(a) is equal to:

$$W_{\text{Nation A and B}} = 2 \left[ \left( \frac{1}{2} \right) \left( \frac{m^2}{\sqrt{2}d^2} \right) \right] + 2 \left[ \left( \frac{1}{2} \right) \left( \frac{m^2}{(d^2)^2} \right) \right] = \left( \frac{3}{2} \right) \left( \frac{m^2}{d^2} \right)$$

(5)

The individual wealth of polity A and polity B is now \( \left( \frac{3}{4} \right) \left( \frac{m^2}{d^2} \right) \). This is a decrease in their individual wealth from \( \left( \frac{5}{4} \right) \left( \frac{m^2}{d^2} \right) \) under the square formation, by an amount of \( \left( \frac{1}{2} \right) \left( \frac{m^2}{d^2} \right) \). The decrease, which represents the cost of fusion between polities A and B, makes their political union unstable.

The wealth of the other polities is given by:

$$W_C = 2 \left[ \left( \frac{1}{2} \right) \left( \frac{m^2}{\sqrt{2}d^2} \right) \right] + \left( \frac{1}{2} \right) \left( \frac{m^2}{(d^2)^2} \right) = \left( \frac{m^2}{d^2} \right)$$

(6)

$$W_D = 2 \left[ \left( \frac{1}{2} \right) \left( \frac{m^2}{(d^2)^2} \right) \right] + \left( \frac{1}{2} \right) \left( \frac{m^2}{d^2} \right) = \left( \frac{3}{2} \right) \left( \frac{m^2}{d^2} \right)$$

(7)

The power of Polities A and B (individually) relative to polity C is given by:

$$P_A | C = P_B | C = \left( \frac{3}{4} \right) \left( \frac{m^3}{d^2} \right) - \left( \frac{m^3}{d^2} \right) = \left( -\frac{1}{4} \right) \left( \frac{m^3}{d^2} \right)$$

(8)

Similarly, the power of A and B relative to D is equal to \( \left( \frac{-3}{4} \right) \left( \frac{m^3}{d^2} \right) \). The negative power suggests that the created nation-state would face a trade deficit and increasing debts. The configuration of a federal state under Figure A.4(a) is therefore untenable.

If polity A unites with B through a unitary state (rather than a federal state), the trade lines that B had before the fusion would all disappear. Polity B would be ‘lifted off’ the lattice, but the outcome is very different from under polycentricity. This leaves only single lines of trade in Figure A.4(a). The wealth of the unitary nation-state and the other polities is now equal to:

$$\tilde{W}_{\text{Unitary Nation A and B}} = \left[ \left( \frac{2}{3} \right) \left( \frac{2m^2}{(\sqrt{2}d)^2} \right) \right] + \left[ \left( \frac{2}{3} \right) \left( \frac{2m^2}{(d^2)^2} \right) \right] = 2 \left( \frac{m^2}{d^2} \right)$$

(9)

Each polity in the nation now has wealth equal to \( \left( \frac{m^2}{d^2} \right) \). The wealth of the other polities is equal to:

$$\tilde{W}_C = \left[ \left( \frac{1}{3} \right) \left( \frac{2m^2}{(\sqrt{2}d)^2} \right) \right] + \left( \frac{1}{2} \right) \left( \frac{m^2}{(d^2)^2} \right) = \left( \frac{5}{6} \right) \left( \frac{m^2}{d^2} \right)$$

$$\tilde{W}_D = \left[ \left( \frac{1}{3} \right) \left( \frac{2m^2}{(d^2)^2} \right) \right] + \left( \frac{1}{2} \right) \left( \frac{m^2}{d^2} \right) = \left( \frac{7}{6} \right) \left( \frac{m^2}{d^2} \right)$$

(10)

(11)

By opting for a unitary nation rather than a federal state, the nation polities of A and B now (individually) have power over polity C but not polity D. The resulting unitary nation has power over both C and D.
The above analysis would go to explain why federal systems become more centralized over time. Two prime examples of this trend are the United States and the Commonwealth of Australia. The latter is probably the quintessential example of this trend.

If however polity A decides to unite in a federal state with polity C instead of B (we refer to the resulting state as the Apex Nation), as shown in Figure AI.4(b), the resulting wealth is now given by:

\[
W_{\text{Apex Nation}} = 2 \left[ \frac{1}{2} \left( \frac{m^2}{d^2} \right) \right] + 2 \left[ \frac{1}{2} \left( \frac{m^2}{d'}^2 \right) \right] = 2 \frac{m^2}{d^2} \tag{12}
\]

The individual wealth of the polities constituting the Apex nation is still \( \frac{m^2}{d^2} \). As to polities B and D:

\[
W_B = W_D = 2 \left[ \frac{1}{2} \left( \frac{m^2}{d^2} \right) \right] + \frac{1}{2} \frac{m^2}{(\sqrt{2}d)^2} = \frac{5}{4} \frac{m^2}{d^2} \tag{13}
\]

The federal state configuration under Figure AI.4(b) is hence unstable. On the other hand, building a unitary state under Figure AI.4(b) would result in individual power for A and C relative to B and D:

\[
\tilde{W}_{\text{Apex Nation}} = \left[ \frac{2}{3} \left( \frac{2m^2}{(d')^2} \right) \right] + \left[ \frac{2}{5} \left( \frac{2m^2}{(d')^2} \right) \right] = \frac{4}{3} \frac{m^2}{d^2} \tag{14}
\]

Now each polity in the Apex nation has wealth equal to \( \frac{4}{3} \frac{m^2}{d^2} \). The other polities get:

\[
\tilde{W}_B = \tilde{W}_D = \left[ \frac{1}{5} \left( \frac{2m^2}{(d')^2} \right) \right] + \frac{1}{2} \frac{m^2}{(\sqrt{2}d')^2} = \frac{11}{12} \frac{m^2}{d^2} \tag{15}
\]

If the nation building by units A and C started after moving into the pyramid arrangement as shown in Figure AI.4(c), which is interpreted as closer cooperation between B and D as a response to the unification between A and C, the wealth of the nation is given as follows:

\[
W_{\text{Nation A and C}} = 2 \left[ \frac{1}{2} \left( \frac{m^2}{d^2} \right) \right] + 2 \left[ \frac{1}{2} \left( \frac{m^2}{d^2} \right) \right] = 2 \frac{m^2}{d^2} \tag{16}
\]

Each polity in the nation gets \( \frac{m^2}{d^2} \), while the other sovereign polities get:

---


\[ W_B = W_D = 2 \left[ \left( \frac{1}{2} \right) \left( \frac{m^2}{d^2} \right) + \left( \frac{1}{2} \right) \left( \frac{m^2}{d^2} \right) \right] = \left( \frac{3}{2} \right) \left( \frac{m^2}{d^2} \right) \quad (17) \]

And under a unitary nation we get:

\[
\begin{align*}
\tilde{W}_{\text{Unitary Nation A and C}} &= \left[ \left( \frac{2}{3} \right) \left( \frac{2m^2}{d^2} \right) \right] + \left[ \left( \frac{2}{3} \right) \left( \frac{2m^2}{d^2} \right) \right] = \left( \frac{8}{3} \right) \left( \frac{m^2}{d^2} \right) \\
\tilde{W}_B = \tilde{W}_D &= \left[ \left( \frac{1}{3} \right) \left( \frac{2m^2}{d^2} \right) \right] + \left( \frac{1}{2} \right) \left( \frac{m^2}{d^2} \right) = \left( \frac{7}{6} \right) \left( \frac{m^2}{d^2} \right) \\
\end{align*}
\]

(18)

(19)

A summary of the power under the configurations in Figure A1.4 for a federal state (unitary state) is shown in Table A1.1 (Table A1.2) below. These powers represent the wealth differential between polity A and polity B taken individually relative to the other polities (C and D respectively). Note that even if polities A and B consider the power calculation from the perspective of the nation-state rather than their individual wealth, the best outcome is still under a unitary state configuration under Figure A1.4(c).

<table>
<thead>
<tr>
<th>Nation polities power under federal state</th>
<th>Figure A1.4(a)</th>
<th>Figure A1.4(b)</th>
<th>Figure A1.4(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>((-1, -3))</td>
<td>((-1, -1))</td>
<td>((-1, -1))</td>
<td>((-1, -1))</td>
</tr>
<tr>
<td>(\frac{4}{4} )</td>
<td>(\frac{4}{4} )</td>
<td>(\frac{2}{2} )</td>
<td>(\frac{2}{2} )</td>
</tr>
</tbody>
</table>

Table A1.1: Polities A and B power in each of the configurations in Figure 4 under a federal state

<table>
<thead>
<tr>
<th>Nation polities power under unitary state</th>
<th>Figure A1.4(a)</th>
<th>Figure A1.4(b)</th>
<th>Figure A1.4(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\frac{1}{6} )</td>
<td>(\frac{1}{6} )</td>
<td>(\frac{1}{6} )</td>
<td>(\frac{1}{6} )</td>
</tr>
</tbody>
</table>

Table A1.2: Polities A and B power in each of the configurations in Figure 4 under a unitary state

Given the payoffs in Table A1.1 and Table A1.2, polities A and B would choose a unitary configuration under Figure A1.4(b). The polities outside the Apex nation would prefer a unitary state configuration under Figure A1.4(c) as it provides highest individual wealth for each.

C. On the Rationale for War

It is useful to point out how war, either for the objective of acquiring another sovereign polity or for keeping it in an existing union, would increase the power of the resulting nation-state. When war is waged on a polity, that polity is not only “lifted off” the lattice, but its identity is erased to the effect that power is now calculated from the perspective of the resulting nation. The cost of war is seen in the lost trade channels by the polities involved. With this in mind,
the payoffs under the federal and unitary nation formations in Figure A.4 are given in Table A.3.

<table>
<thead>
<tr>
<th>Nation total power under federal state</th>
<th>Figure A.4(a)</th>
<th>Figure A.4(b)</th>
<th>Figure A.4(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\frac{1}{2}, 0)</td>
<td></td>
<td>(\frac{3}{4}, \frac{3}{4})</td>
<td>(\frac{1}{2}, \frac{1}{2})</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nation total power under unitary state</th>
<th>Figure A.4(a)</th>
<th>Figure A.4(b)</th>
<th>Figure A.4(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\frac{3}{6}, \frac{5}{6})</td>
<td></td>
<td>(\frac{21}{12}, \frac{21}{12})</td>
<td>(\frac{3}{6}, \frac{3}{6})</td>
</tr>
</tbody>
</table>

*Table A.3: Payoffs from fusion through war under Figure 4 configurations*

The above payoffs would go to explain why political fusion would be associated with war on polities outside the union or by civil war. An example of this approach can be seen in the United States both through the American War of Independence (1775 to 1783) and the American Civil War (1861 to 1865).²⁷⁶

D. On the Stability of Polities

Going back to the Apex nation, once it forms as a unitary state under Figure A.4(b), the other polities could choose to: (1) create their own nation (option one) as shown in Figure A.5, (2) join the Apex nation (option two) as shown in Figure A.6, or (3) drift away into a different lattice site, away from their current quartet. All options will make the nation-state relative wealth disappear.

*Figure A.5: option one in response to the Formation of the Apex nation*

Under option one, which evolves from the unitary state configuration in Figure A.4(b), each nation obtains the same wealth:

\[
W_{\text{New Nation}} = \left( \frac{1}{2} \right) \left[ \left( \frac{2m}{d^2} \right)^5 \right] = 2 \left( \frac{m^5}{d^2} \right)
\]  

\[ W_{\text{Old Nation}} = \frac{1}{2} \left[ \left( \frac{12m^2}{d^2} \right) \right] = 2 \left( \frac{m^2}{d^2} \right) \] (21)

Under option two, one of the sovereign polities, say D, joins the A and C nation, as shown in Figure AI.6.

![Diagram](image)

*Figure AI.6: Option two in response to the formation of the Apex nation*

Now the wealth of the *universitas* equals:

\[ W_{\text{Universitas}} = \left( \frac{3}{4} \right) \times \left( \frac{3m^2}{d^2} \right) = \left( \frac{9}{4} \right) \left( \frac{m^2}{d^2} \right) \] (22)

Each polity in the *universitas* has \( \left( \frac{3}{4} \right) \left( \frac{m^2}{d^2} \right) \). The same wealth is obtained by the polity outside the *universitas*. Even if the power of the *universitas* is taken as a non-divisible entity (where the *universitas* is achieved by war), the polity outside the *universitas* would still destabilize the *universitas* by improving its expected power, either by joining the universitas or drifting away from it.

Both options represented in Figures AI.5 and AI.6 result in elimination of nation-state power and hence in political fission. The deficit in the value of sovereignty transferred into the Apex nation and the *universitas* necessitates a new social contract.

Why then do we see relatively stable nation-states (and *universitas*)? We have already looked at how war could be used to stabilize fusion. Another stabilization strategy emerges from how the nation-state externalizes the cost of fusing its socio-political mass. An illustration of this strategy is shown in Figure AI.7 where the configurations in Figures AI.4(a) and AI.4(b) are modified by new polities which drift from other parts of the lattice (as a result of the dissolution of nations in other quartets). Nation-states are now powerful relative to other polities.

![Diagram](image)

*Figure AI.7: The nation-states externalize their fusion cost. New (drifting) Polities are shown in grey color*

Now, under Figure AI.7(a), the nation-states have \( P = \left( \frac{23}{12} \right) \left( \frac{m^2}{d^2} \right) \) over polities B and D, and \( P = \left( \frac{24}{12} \right) \left( \frac{m^2}{d^2} \right) \) over the new polity C (shown in grey). Given their negative power, the
other polities would respond by fusing as (for example) in Figure A.I.7(b). The fusion would continue with the arrival of new drifting entities.

This stabilization is interpreted as a perpetual need to increase trade with polities outside the original quartet, which echoes the neo-liberal emphasis on economic growth.277 Per this model, economic growth is seen as a stabilization mechanism. The same arguments can be made for stabilizing universitas as shown in Figure A.I.8.

![Figure A.I.8: Stabilization of universitas through the externalization of fusion cost](image)

From our assumption of random distribution of quartets on the lattice (in the original position), the flow of drifting polities would be similarly random throughout the evolution of political fusion and fission. This would make fission only a question of time.

---

APPENDIX II: THE PRINCIPLE OF SUBSIDIARITY (HYPOTAXIS)\textsuperscript{278}

The principle of subsidiarity reconciles the dichotomy between methodological individualism and methodological holism along a continuum that envisages a \textit{vox populi} underlying decision-making through multi-level governance systems. This understanding suggests that referenda (\textit{qua} methodological individualism) are as much a component of subsidiarity as is federalism (\textit{qua} methodological holism). Subsidiarity does not only envisage multi-level governance, but also emphasizes direct democracy practices such as citizen-initiated referenda. As a constitutional principle, subsidiarity necessitates an explicit recognition of subnational levels of government (including local government), as well as processual outlets for \textit{vox populi} beyond the formalities of elections.

Next I elaborate on methodological individualism, methodological collectivism, and their connection to subsidiarity.

A. Methodological Individualism

Methodological individualism is a social ontology, or a form of social-scientific explanation,\textsuperscript{279} exemplified by the \textit{homo economicus} model of neoclassical economics and its marginalist revolution. “Strictly speaking, methodological individualism is a [normative] principle, rule, or program telling historians and social scientists how to define collective concepts, explain social phenomena, and/or reduce macro to micro”\textsuperscript{280} This methodology contemplates the sovereignty of the individual. It can be traced back to the writings of Max Weber and Joseph Schumpeter in the early twentieth century,\textsuperscript{281} although some attribute its first formulation to Thomas Hobbes in the seventeenth century.\textsuperscript{282} It was brought to sociology from economics where it has become the staple of mainstream analysis (neoclassical and to a lesser extent Austrian). Its philosophical counterpart is known as reductionism.\textsuperscript{283}

Methodological individualism has three constituent tenets: (1) only individuals have aims and interests (individualism), (2) individuals behave in a way consistent with their aims and circumstances (rationality principle), (3) only individual actions create and change social systems. In other words, methodological individualism furnishes ‘micro’ foundations for explaining ‘macro’ social phenomena.\textsuperscript{284} According to this view, society is simply the sum-total of individuals’ interactions.

Methodological individualism should be seen as a point on a continuum of explanatory propositions.\textsuperscript{285} A stronger form of methodological individualism is atomism. Methodological

\textsuperscript{278} For the connection between subsidiarity and \textit{hypotaxis} see Patrick McKinley Brennan, \textit{Subsidiarity in the Tradition of Catholic Social Doctrine, in Global Perspectives on Subsidiarity} 29 ed. M. Evans and A. Zimmerman (Springer 2014).

\textsuperscript{279} The emphasis here is on individualism as a methodology or road to knowledge, rather than as an ontology about social reality, or epistemology about possible knowledge. The methodological emphasis lies in governance as a road to knowledge through decision-making processes producing the legal systems underlying governance structures.


\textsuperscript{284} Jeffrey Alexander, \textit{The Micro-Macro Link} (University of California Press 1987).

\textsuperscript{285} For the various forms of methodological individualism see also Leon J. Goldstein, \textit{The Two Theses of Methodological Individualism}, 9 (33) The British Journal for the Philosophy of Science 1 (1958). Udehn, \textit{The Changing Face of Methodological Individualism}. 
Individualism however differs from pure atomism where the interactions between individual actors is not given any attention, and where the only possible reality is the individual. This strand underlies theories such as the theory of social contract and the theory of general equilibrium. On the other hand, a weaker form of methodological individualism is methodological localism where individuals are taken as socially situated and constituted, and hence shaped by social institutions and the history of society. Under localism, society is the conventional means of co-ordination between individual actions. That is to say, society is seen as a cluster of institutions that explain the inter-personal means of coordination. Here we see the influence of Ariean and Popperian respectively (subjective) social and (objective) institutional explanations of individualism. These weaker forms of individualism lead to a ‘spontaneous order’ understanding of society where the interaction of individuals creates (unconsciously) social phenomena. At its weakest point, we see individualism explained under James Coleman’s structuralism (and further under analytical Marxism) where social structure influences individual actions as well as combines the actions of individuals to produce systemic outcomes.

B. Methodological Collectivism (Holism)

In contrast to methodological individualism and the underlying reductionist approach, methodological collectivism asserts a systems approach to social phenomena where the focus of the analysis is on the system rather than its constituent parts. This collective understand of social life came into prominence in the nineteenth century on the hand of Louis de Bonald and Auguste Comte. This extends to a stronger version of methodological holism that is based on a complexity theory paradigm where societies are modelled as complex adaptive systems and the analytical emphasis is on the interdependence of actions by individuals within such system. Under holism, society is more than the Holism emphasizes an evolutionary rather than striving towards an ideal-type. Moreover, the causal analysis under holism matures away from the idea of a single driver and instead looks at a modulation matrix of many factors that influence the system simultaneously. Instead of seeking causal connections, holism looks for propensities that move the system in a general direction. Probably, the most important aspect of holism is accepting that people have multiple identities rather than one constant behavioral pattern.

Holism also has three constituent tenets: (1) Society is more than its constituent parts (holism), (2) society affects individual aims (collectivism), and (3) society influences and constraints individual behavior (institutional analysis). In essence, holism contemplates the existence of a social entity larger than the sum-total of its constituent individual interests and policies, an entity with its own interests and aims. In other words, holism accepts group sub-consciousness à la Jung, as opposed to the spontaneous order of Scottish Enlightenment.

---

286 See Daniel Little, Actor-Centered Sociology and the New Pragmatism, in Rethinking the Individualism-Holism Debate 55 ed. Julie Zahle and Finn Collin (Springer 2014). This understanding of methodological individualism could be traced back to the Austrian school of economics where individuals are seen as cultural beings living in society. See Udehn, The Changing Face of Methodological Individualism at 487.


289 See also Udehn, The Changing Face of Methodological Individualism at 494, 496 and 499.

290 Agassi, Methodological Individualism at 244.

291 This is in contrast to Freud who espoused an individualist psychologism in explaining social phenomena. See Agassi, Methodological Individualism at 246. Goldstein, The Two Theses of Methodological Individualism at 9.
The idea of a continuum from strong individualism to strong collectivism is not new. Some have already suggested complementarity between these methodologies. The gist of these approaches is the understanding that: (1) there are many versions of individualism and collectivism, and (2) the methodological usefulness of each of these approaches is contingent on the nature of the social phenomena under investigation. To understand this argument I will invoke an analogy with physical phenomena, and the usefulness of (Newtonian) classical versus quantum mechanics. Both have a ‘range’ of applicability depending on scale: classical mechanics accurately describes phenomena that can be observed due to their scale, namely size (larger than a molecule and smaller than a planet), temperature (close to room temperature), and speed (significantly less than the speed of light). Where the scale is not within these parameters, classical mechanics becomes inaccurate and quantum mechanics has to be employed. The same scalar divide plays a role in reconciling individualism and collectivism. These methodologies produce useful results and provide accurate normative signals depending on the scale of social phenomena: the more complex these phenomena are, the more likely they will require a shift from individualism to collectivism.

For our purposes in this paper, this suggests a subsidiarity rational guiding the reconciliation between individualism and collectivism. To understand this point, we first have to ‘unpack’ the principle of subsidiarity itself and then explain how it employs both individualism and collectivism.

D. A Brief Introduction to the Principle of Subsidiarity

The principle of subsidiarity is an organizational principle that originated in Mosaic Law, transferred to Greek political and social thought, and later elaborated on by St. Thomas Aquinas and medieval scholastics, before being updated by the Catholic Church as a social doctrine. The principle places a constitutional responsibility on higher levels of government not only to enable the autonomy of lower levels, but to provide these lower levels with

---


293 See Exodus 18: 13-27. Moses paid attention to his father-in-law’s counsel and choose from among the people competent men to be in charge of thousands, hundreds, fifties and tens. In the book of Exodus we read about Jethro, Moses’ father-in-law, and the appointment of judges (Exodus 18). The story goes as follows. Jethro objected to Moses’ approach in managing the affair of the Israelites. Moses wanted to be the sole source on the law and how it applied. Jethro saw the long-term instability inherent in this approach. He advised his son-in-law to adopt what could be called today ‘subsidiarity’. Moses hence chose capable men and made them leaders. These judges now decided the law for the people, save for difficult cases which were still brought to Moses. Now the law was able to evolve—to allow for local variation. I map this Mosaic approach unto sustainability. The analogy sets environmental law as this Mosaic Law that needs to be dispensed to the people, and that the people need to adhere to for their own salvation. Sustainability is Moses. But just like Moses, it cannot overcome what Leopold Kohr, a rather obscure Austrian economist, called ‘the problem of scale’. In the words of his most famous protégé, Ernst F. Schumacher, this problem can be described as follows: ‘[s]mall scale operations, no matter how numerous, are always less likely to be harmful to the natural environment than large-scale ones’ (Ernst F. Schumacher, Small Is Beautiful: Economics as If People Mattered (Hartlet and Marks 1999 [1973]). Kohr spoke of a ‘characteristic scale’. See Kohr, The Overdeveloped Nations: The Diseconomies of Scale. In the context of the Israelites, this scale was what Jethro’s advice is all about. Even if we are to follow Nietzsche and dispense with our Mosaic analogy in entirety, we still end up praying for subsidiarity.

294 Millon-Delsol, L’état Subsidiare at 15.

295 L’état Subsidiare at 15. For a detailed account of the theological origins of subsidiarity, and for its counterpart in Calvinism, see Kent Van Til, Subsidiarity and Sphere-Sovereignty: A Match Made In ...?, 69 (3) Theological Studies 610 (2008).
necessary support. The principle essentially makes providing support to local government central government’s primary responsibility. In the language of systems theory, the principle could be seen as analogous to managing increasing complexity through distributed systems.

The role of the principle of subsidiarity as a cornerstone in constitutional architecture straddles both unitary and federal states. For example, (the English translation of) the preamble of the 1997 Polish Constitution states that the Constitution is based ‘on the principle of subsidiarity in the strengthening [of] the powers of citizens and their communities’. At the same time, art3 of the Constitution states that ‘[t]he Republic of Poland shall be a unitary State’. However, (the official English translation of) art5a of the 1999 Swiss Federal Constitution states that ‘[t]he principle of subsidiarity must be observed in the allocation and performance of state task’, while art1 declares Switzerland a Confederation. Subsidiarity as a constitutional law can be seen in both unitary and federal states.

The subsidiarity principle furnishes the promise of a truly pluralistic society, where the local scale is neither abolished nor reduced to mere agency of national scale. It attempts to navigate the dichotomies of liberty and unity, variety and commonality, intervention and non-intervention. More importantly, the ‘autonomy’ inherent in subsidiarity imports a democratic dimension not possible under modalities of de-concentration (where sub-national governance structures remain accountable to national institutions) or non-democratic decentralization. Subsidiarity corrects this democratic deficit.

It is useful at this point to elucidate the relationship of polycentricity to subsidiarity. Polycentricity has three main attributes. First, it consists of multiple decision-making centers (distributed system). Second, it has an overarching system of rules defining the jurisdictional relationship of these centers to one another (rule of law). Third, it involves evolutionary competition and cooperation between the different decision-making centers (leading to spontaneity or self-organisation). Subsidiarity enters the picture where the multiple decision-making centers function autonomously; where ‘sovereignty’ is shared between these centers (but not necessarily divided between them as under federalism). Subsidiarity maleates the hierarchies that would otherwise dominate in polycentric political systems, making such hierarchies adaptable to change. This paper expands on how subsidiarity guides the nesting principle at higher scales of governance.

One of the weaker versions of the subsidiarity principle can be found in the Tenth Amendment to the US Constitution where it states that ‘powers not delegated to the [federal government] by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people’. A more recent formulation of the principle was established in the Charter of Fundamental Rights of the European Union in December 2000. The principle is also central to the European Charter of Local Self Government (art4(2) and art4(3)). The most progressive statement of the principle can be found in the 1999 Swiss Federal

---

297 Algicja and Tarko, Polycentricity: From Polanyi to Ostrom, and Beyond.
298 See also Graham Marshall, Nesting, Subsidiarity, and Community-Based Environmental Governance Beyond the Local Level, 2 (1) International Journal of the Commons 75 (2008). Marshall and Ostrom sterilise the political economy aspects of subsidiarity, for example when it comes to organising governance around Spinoza’s rendition of sovereignty. See Gassen, On the Problem of Scale: Spinozistic Sovereignty as the Logical Foundation of Constitutional Economics.
299 Carozza, Subsidiarity as a Structural Principle of International Human Rights Law.
The principle of subsidiarity must be observed in the allocation and performance of state tasks. The methodological individualist version in given in art6: ‘All individuals shall take responsibility for themselves and shall, according to their abilities, contribute to achieving the tasks of the state and society,’ while the methodological collectivist version can be seen in art3: ‘The Cantons are sovereign except to the extent that their sovereignty is limited by the Federal Constitution. They exercise all rights that are not vested in the Confederation.’

Subsidiarity is a concept wider than federalism and subsumes the latter as one of its modalities. Subsidiarity is about limiting sovereignty. Federalism limits that sovereignty by dividing it between federal and state levels. In this sense, subsidiarity is not only a wider concept than federalism, but a more dynamic one. Subsidiarity envisages a pendulum-like shift in the seat of decision-making, from the individual to the national state (and all the socio-political entities that lie in between) depending on the context and the time at which the decision is to be made. Hence, under subsidiarity there would be a considerable overlap between different levels of governance, and that overlap would allow for removing decision-making between these levels over time. One way of limiting sovereignty is through dividing sovereignty between different levels of government and then attempting to centralize some of the functions at the federal level. However, sovereignty could also be limited by local autonomy in a ‘quasi federal’ arrangement where the central (federal) government continues to ‘succor’ lower levels of government. It could also be limited to ‘single-issue’ politics where citizens propose changes to legislation (including non-constitutional matters) and government ‘succors’ such initiatives by carrying them through provided there are no constitutional bars on the same. In summary, subsidiarity looks at limiting sovereignty. Federalism is only one mode of achieving the same, through dividing sovereignty between (usually) two tiers of government. Under subsidiarity there is a political exchange that sees a wide margin of local autonomy woven into multi-level governance structures.

The literature provides a number of taxonomies. I briefly discuss two of the most relevant ones. The first taxonomy can be grouped under three headings: liberty (non-intervention), justice (transfer of competencies), and efficiency (assistance in the form of limited intervention). Under the liberty taxonomy of subsidiarity there are two main schools of thought. The first is that of Johannes Althusius who adopted a territorial interpretation of subsidiarity (inspired by orthodox Calvinism). In this school we also find a consociational

---


302 On the relationship between subsidiarity and federalism see also John Wanna, Common Cause, Strengthening Australia’s Cooperative Federalism: Final Report to the Council for the Australian Federation (Council for the Australian Federation 2009). Due to the nature of subsidiarity’s relationship to sovereignty, its role as a cornerstone in constitutional architecture straddles both unitary and federal states. For example, (the English translation of) the preamble of the 1997 Polish Constitution states that the Constitution is based ‘on the principle of subsidiarity in the strengthening [of] the powers of citizens and their communities’. At the same time, art3 of the Constitution states that ‘[t]he Republic of Poland shall be a unitary State’. On the other hand, (the official English translation of) art5a of the 1999 Swiss Federal Constitution states that ‘[t]he principle of subsidiarity must be observed in the allocation and performance of state task’, while art1 declares Switzerland a Confederation.

303 This explains why the US and Australia federal constitutions do not mention local government.


306 Althusius was part of the Calvinist political thought on liberty (inspired by the ‘city fathers of Geneva’). Calvinist resistance theory seized the language of liberty and framed it in the biblical Exodus narrative. The theory was presented as fighting for freedom from civil and ecclesiastical bondage. Althusius followed this tradition in arguing for popular self-government, emphasizing republican liberty and equality; ‘Althusius saw the absolute liberty of conscience as the natural corollary to the absolute sovereignty of God, a doctrinal staple of Calvinism’. John Witte Jr, Natural Rights, Popular Sovereignty, and Covenant Politics: Johannes Althusius and the Dutch Revolt and Republic, 87 University of Detroit Mercy Law Review 565,
(community-based) version,\textsuperscript{307} where emphasis is on functionality rather than on territoriality. While Althusius builds his subsidiarity on existing geo-social entities such as cities, consociationalism builds its subsidiarity on a functional organisation of political units. The second school under liberty is confederal subsidiarity, which adopts methodological individualism rather than collectivism (as under Althusius).\textsuperscript{308} This school also requires local government to be able to veto any intervention from the central government in its affairs, including the right to exit from any confederal arrangements, even by force if necessary. Because both schools, Althusian/Consocial and confederal, see subsidiarity as a mechanism to ensure the liberty of citizens from interventions by a central government, there is no emphasis on the need for central government intervention. Under justice, there are also two schools. The first is embedded in Catholic teachings where the state has to maintain respect for the individual and the family. The second comes from liberal contractarianism were civil deliberations between individuals (methodological individualism) lead to a just (and legitimate) organisation of society. Both schools emphasize prescriptive subsidiarity. The third strand, efficiency, has one main school of thought, fiscal federalism, which provides strong prescriptive signals for central government intervention.

Under the second taxonomy,\textsuperscript{309} subsidiarity is either instrumental or intrinsic. If instrumental, it could be based on methodological individualism, resulting in economy-oriented subsidiarity, or it could be based on methodological collectivism, which gives politically-oriented subsidiarity. The latter is an integration of objectives from the economy and the community. Alternatively, if subsidiarity is intrinsic, it could be civil-society oriented or communal, similar to Catholic individualism, or transparency oriented (based on collectivism). The transparency oriented strand is comprehensive in that it integrates the three spheres present in the other strands: the economic, the political and the communal.

The above typologies can be integrated into three core principles of subsidiarity that cut across methodological individualism and methodological collectivism.\textsuperscript{310} The first is a positive version, where a ‘rule of assistance’ requires higher levels of organisation to support lower levels (down to the individual) where they cannot perform the functions of governance. This rule would be violated where for example the central government refuses to assist upon the appeal of a local government, or when the local government requests aid for something it already can perform for itself.\textsuperscript{311} This subprinciple resonates with an ancient concept in western political theory where the state has a duty to protect its subjects and a reciprocal duty of obedience on the subjects towards the state.\textsuperscript{312} The second subprinciple is the ‘ban on interference’, a negative version of the subsidiarity principle, where the higher level of organisation is prohibited from interfering in the affairs of the lower level. This rule would be violated for example when the central government interferes with the work of a local government. This non-intervention rule parallels the concept emanating from the humanitarian movement of the 1820s and 1830s which recognizes the sovereignty and

\begin{itemize}
\item \textsuperscript{307} For an introduction on consociationalism see Brian Barry, \textit{The Consociational Model and Its Dangers}, 3 (4) European Journal of Political Research 393 (1975).
\item \textsuperscript{310} See for example Gosepath, \textit{The Principle of Subsidiarity} at 162. Peter J. Floriani, \textit{Subsidiarity} at 82-83 (Penn Street Productions 2012).
\item \textsuperscript{311} Note that subsidiarity is not limited to any particular number of levels of government.
\item \textsuperscript{312} This is what came to be known as the doctrine of allegiance.
\end{itemize}
independence of indigenous peoples. The third subprinciple derives from the first two and limits the legitimate support of higher levels to helping lower levels help themselves. This rule is violated where the positive rule is broken, for example where the federal government fails to correct a state government who fails to respond to an appeal for assistance from a local government. This third subprinciple is also violated when the negative rule is broken, for example, when the federal government fails to stop a state government from interfering with the work of a local government.

Notwithstanding a number of different renditions of the principle, it is dominated by a ‘state-centric’ approach, due to the ‘state-centric’ global order that is difficult to combine plausibly with non-Westphalian renditions of sovereignty, such as that of Baruch Spinoza. The main renditions of subsidiarity can be represented vis-à-vis state authority as shown in Figure AII.1.

![Figure AII.1: Main renditions of subsidiarity relative to increasing authority of the political state](image_url)

Here an ‘organisational units’ represents a pre-existing social organisation that mediates between the individual and higher orders: the family, church, city, etc. In other words, the subsidiarity renditions that are most in favor of individual freedom under a nation-state are those further to the left in Figure 5.1. As we move from left to right, the rendition becomes more territorial—here subsidiarity does not only defend non-territorial entities such as the individual, the family, or the church, but more importantly territorial organizations such as cities or regions (at the sub-national level), and even supra-national such as the European Union. These renditions attach low importance to entities mediating between the individual and the nation-state. For an elaboration of these versions, and their advantages and weaknesses, refer to Føllesdal. One key point that is worth emphasizing here about subsidiarity is that it conflicts with the welfare state. Subsidiarity envisages a plurality of orders that consists of different realms of governance, which is pragmatically a ‘redline’ under the welfare state.

The principle of subsidiarity is related to a number of similar principles. Salient among these is another structural principle known as ‘spheres of sovereignty’, which comes from Calvinist teachings as opposed to the Catholic origins of (modern) subsidiarity. Some suggest

---


314 Gussen, *On the Problem of Scale: Spinozistic Sovereignty as the Logical Foundation of Constitutional Economics*.

315 Føllesdal, *The Principle of Subsidiarity as a Constitutional Principle in International Law*.

that the two principles are complementary.\textsuperscript{317} Others point to their differences, especially that subsidiarity is about hierarchy, where spheres of sovereignty are about process (hence closer to polycentricity).\textsuperscript{318} It is also constructive to contrast subsidiarity with the principle of 'competence catalogues'. The latter is predicated on two doctrines: supremacy and pre-emption.\textsuperscript{319} Another related principle is the auxilium principle which interprets subsidiarity as only one of the modes through which there is ‘auxilium’ between the individual and nested levels of government. Other modes include the fiduciary principle.\textsuperscript{320} Others have also used the concept of auxilium, but in a different context, namely to distinguish between subsidiarity which applies to a social whole,\textsuperscript{321} and an auxilium principle that applies between different social wholes. If we superimpose the concept of sovereignty on the ‘social whole’ we can integrate these principles as seen in Figure AII.2.

![Figure AII.2: Conceptualizing the relationship between subsidiarity, spheres of sovereignty and auxilium](image)

Within a given sphere of sovereignty (from the Calvinist conception), we can discern the operation of the principles of subsidiarity and solidarity,\textsuperscript{322} within what Gustav Ermercke calls a social whole (sozialen Ganzen).\textsuperscript{323} Under this construction the state is a moral organism (whole) analogous to a physical one (e.g. the human body).

Some also suggest that there are only minor differences between subsidiarity and federalism.\textsuperscript{324} Jordan and Jeppesen suggest that subsidiarity is the defining feature of

\textsuperscript{317} Id.
\textsuperscript{318} Michelle Evans, The Use of the Principle of Subsidiarity in the Reformation of Australia's Federal System of Government (Curtin University 2012).
\textsuperscript{319} Christian Kirchner, Competence Catalogues and the Principle of Subsidiarity in a European Constitution, 8 Constitutional Political Economy 71 (1997).
\textsuperscript{320} Benjamen F. Gussen, The State Is the Fiduciary of the People, 3 Public Law 440 (2015).
\textsuperscript{321} Gustav Ermercke, Subsidiarität Und Auxiliarität in Staat Und Kirche, 17 Jahrbuch für Christliche Sozialwissenschaften 81 (1976).
\textsuperscript{322} Solidarity operates ‘horizontally’, that is to say it applies within a sphere of sovereignty and between groups at the same organisational scale (e.g. between inferior groups). It requires horizontal coordination among groups. In contrast, subsidiarity is about vertical coordination between groups that belong to different organisational scales.
\textsuperscript{323} Ermercke, Subsidiarität Und Auxiliarität in Staat Und Kirche.
\textsuperscript{324} Evans, The Use of the Principle of Subsidiarity in the Reformation of Australia's Federal System of Government.
Similarly, I see subsidiarity as a principle that encompasses federalism. In other words, federalism is a subset of subsidiarity. This is so given that federalism is about dividing powers, which is only one modality through which we can share powers as stipulated for by the principle of subsidiarity.

It is the ethical rationale that differentiates subsidiarity from centralization. Subsidiarity is understood as legal decentralization, but is intended to ensure a moral principle guaranteeing free will to everyone, namely human dignity. It is the equity criterion that differentiates subsidiarity from decentralization. In a sense, subsidiarity integrates efficiency and equity in a way similar to special and general relativity. Instead of using space and time as separate constructs, Einstein understood them as dimensions of the same construct. Subsidiarity also uses efficiency and equity as one construct: efficiency-equity. Subsidiarity ensures that the calculus of efficiency is always woven into that of equity. This approach is hugely different from what we have come to be accustomed to under traditional approaches of law-and-economics, and neo-classical economics generally.

The principle of subsidiarity has two natures. It is a prima facie rule of intuitive thinking (the heuristic nature). It is also a methodological principle of critical thinking (the methodological principle). Subsidiarity has three main functions: (1) regulate the allocation of powers within political or legal order, (2) structure the debate on the allocation of powers between various organisational scales (local, national, and global), (3) serve as a normative ‘constitutional principle’ to justify state authority. Melé suggests nine attributes to subsidiarity: (1) the principle arises from the concept that humans are endowed with reason and freedom, (2) it has a close ethical content, (3) subsidiarity has to be considered with other ethical principles: solidarity, authority, and participation, (4) subsidiarity has to be applied considering all the relevant circumstances in a situation, (5) the principle stipulates that whatever could be done by an inferior social group should not be absorbed by a superior organisational group, (6) the principle also stipulates that initiatives by individuals and groups must contribute to the good of the whole community, (7) under subsidiarity, individuals and inferior social groups should do as much as they can, (8) while superior entities have a duty to favor the initiatives of inferior groups, and last, (9) the principle requires that if an individual or an inferior group cannot perform a necessary activity, even if provided with appropriate help, then the superior group can and ought to carry out the activity.

---

327 Pablo Martínez de Anguita, Maria Angeles Martín, and Abbie Clare, Environmental Subsidiarity as a Guiding Principle for Forestry Governance: Application to Payment for Ecosystem Services and Redd+ Architecture, 27 (4) Journal of Agricultural and Environmental Ethics 617 (2013).
329 Føllesdal, The Principle of Subsidiarity as a Constitutional Principle in International Law.
331 In essence, subsidiarity is a principle of reflection rather than a mechanical rule.
E. Subsidiarity’s Economic and Ethical Foundations

Historically, there were two main formulations of subsidiarity. One is economic, the other ethical. While Aristotle would remind us, they are two faces of the same coin, the difference therefore between decentralization and subsidiarity is that the latter includes an ethical rationale that goes beyond the economic ‘efficiency’ objective inherent in decentralization theories.333 Next, I discuss the economic formulation; we later turn our attention to the ethical one.

Conventional public economics is predicated on a decentralization theorem that models incomplete contracts under uniformity and homogeneity assumptions where the central government can replicate the public goods supplied by local governments. Subsidiarity on the other hand introduces a procedural mechanism that is also predicated on ethical considerations that signal the appropriate scale at which political organisation should be induced. Identifying that scale is a collective responsibility of different levels of government, not only the highest (national) level. Subsidiarity is hence a decentralization modality that takes into account the political forces of existing social structures. The principle has its foundation in the right to human dignity,334 and the principle of social trust.335 The use of trust as the basis for describing the relationship between the state and its subjects is hardly an innovation.336 Recourse to general principles of justice in order to assist the ‘just’ application of law is a feature common to major legal systems.337 In relation to the political state, trust manifests itself either as either a fiduciary or subsidiarity standard. Trust emerges as a way of coping with the task of governing under complexity. State-subject relations emerge as a delicate dialectic of trust and distrust, discretion and accountability, hard legal rules and soft social norms. The fiduciary and subsidiarity principles maintain the integrity of relationships perceived to be of importance in a society.338 As the perceptions of social interests and values change, so also can the ambience of these principles. In this, the true nature of the fiduciary and subsidiarity principles is revealed. They originate in public policy.339 However, there is an overarching principle that can be seen in the subsidiarity and fiduciary principles.340 The

334 « Le fondement du principe de subsidiarité réside dans la dignité inhérente à la personne humaine car attachée à sa qualité de créature de Dieu façonnée à son image ». Joël-Benoît D’onorio, La Subsidiarité: Analyse d’un Concept at 13, in La Subsidiarité: De la théorie à la pratique 10 eds. Joël-Benoît D’onorio et al (TÉQUI 1995). The right to dignity form the basis for all human rights law. For an elaboration on this right refer to Rex D Glensy, The Right to Dignity, 43 Columbia Human Rights Law Review 65 (2011). Glensy expounds four different meanings to the right to dignity: a positive rights approach, a negative rights approach, a proxy approach and an expressive approach. Glensy argues that “[t]he centrality of dignity in a democratic society cannot be underestimated.” (at 68). Glensy quotes Paolo G Carozza (at 68) who makes the link between the right to dignity and the principle of subsidiarity. See Paolo G Carozza, Subsidiarity as a Structural Principle of International Human Rights Law, 97 The American Journal of International Law 38, 39 (2003): “When used in its original and most comprehensive sense, subsidiarity has deep affinities at its roots with many of the implicit premises of international human rights norms, including presuppositions about the dignity and freedom of human persons, the importance of their association with others, and the role of the state with respect to smaller social groups as well as individuals.”
335 See B. F. Gussen, The State is the Fiduciary of the People, 3 Public Law 440 (2015). This paper introduces an analytical model, ‘the auxilium model’ to explain the connection between social trust, the fiduciary principle and subsidiarity.
338 At 134.
340 See B. F. Gussen, The State is the Fiduciary of the People.
need for, and existence of, this overarching ‘auxilium’ obligation (on the state towards its subjects) is independent of any legislative enabler, and is superior to parliamentary sovereignty. This superiority derives directly from the nature of social relations, although there are also important arguments to be made from (common law) historical analyses.341

One of the earliest economic formulations of subsidiarity can be found in Christian Wolff’s Principles of Natural Law, first published in 1754.342 In section 1022, the principle is formulated as integral to the creation of the welfare state, where the subsidiarity principle keeps ‘the burden of the welfare taxes to be borne by citizens at a minimum’.343 This is so given that state intervention is only where individuals have ‘no relatives or friends who could take care’ of them.344 In this sense, the state is only subsidiary to community relationships. A clear statement of the ethical formulation of subsidiarity can be found in the first papal encyclical on the ‘social question’, Leo XIII’s Rerum Novarum of 1891,345 where we see a principle of intervention (positive dimension) but not interference (negative dimension) based on the ethical objective of ‘remedy of the evil or the removal of the mischief’.346 A stronger and more precise version of the ethical formulation is contained in section 79 of Pius XI’s 1931 papal encyclical paper, Quadragesimo Anno.347 This formulation emphasizes the ethical constraint on larger (political) entities, preventing them from usurping duties that can be reasonably discharged by smaller entities. The justification for such a constraint is derived directly from ‘the principle of justice’.348

The other formulation of the subsidiarity principle is ethical. The first text referring to this formulation was the first papal encyclical on the ‘social question’, Leo XIII’s Rerum Novarum of 1891, where we see a principle of intervention (positive dimension) but not interference (negative dimension) based on the ethical objective of ‘remedy of the evil or the removal of the mischief’.349 A stronger and more precise version of the ethical formulation is contained in section 79 of Pius XI’s 1931 papal encyclical paper, Quadragesimo Anno.350 This formulation emphasizes the ethical constraint on larger (political) entities, preventing them from usurping duties that can be reasonably discharged by smaller entities. The justification for such a constraint is derived directly from ‘the principle of justice’.

343 At 137–138.
344 At 137–138.
348 For a detailed account of the theological origins of subsidiarity, and for its counterpart in Calvinism, see Kent A Van Til, Subsidiarity and Sphere-Sovereignty: a match made in ...?, 69 (3) Theological Studies 610 (2008).
F. Subprinciples of Subsidiarity

While a polysemous principle in its classical formulation, the principle of subsidiarity’s core could be decomposed into three interrelated subprinciples. The first is a positive version, where a ‘rule of assistance’ requires different levels of government to support each other where they cannot perform the functions of governance. The second subprinciple is the ‘ban on interference’, a negative version of the subsidiarity principle, where different levels of government are prohibited from interfering in each other’s affairs. The third subprinciple derives from the first two and limits the legitimate support of government to ‘helping … governments help themselves’.\(^{351}\)

Traditionally, the principle of subsidiarity has three meta-rules that govern the interaction of different parts of a given system or organisation.\(^{352}\) The first is a positive version, where “higher levels support lower levels in case of need”. This requires the central government to support local communities where they cannot perform the functions of governance. The second meta-rule is that “higher levels must not arrogate functions of lower levels”. This is a negative version of the subsidiarity principle, where the central government is prohibited from interfering in the affairs of local government. The third meta-rule derives from the first two and is implied by the hierarchical structure (micro versus macro level): the first and second meta-rules apply to all scales within the system (under subsidiarity there would be a minimum of at least three scales—individual, local or regional, and national or supra-national).\(^{353}\)

Using this reconstruction of subsidiarity we can now elucidate how it maps onto self-organisation.\(^{354}\)

G. Subsidiarity as Self-Organisation

Self-organisation,\(^{355}\) also known as spontaneous order,\(^{356}\) refers to the ability of acquiring and maintaining a structure without external control. Self-organisation is associated with (non-equilibrium) pattern formation.\(^{357}\) The evolutionary process itself could be viewed as self-organizing, and hence leading to emergent properties.\(^{358}\) This is part of an ongoing convergence of evolutionary and complexity thinking.\(^{359}\)

---


\(^{352}\) Id.

\(^{353}\) See Peter Floriani, *Subsidiarity* at 82-83 (Penn Street Productions 2012).

\(^{354}\) As with many other political concepts, subsidiarity is a complex construct. For a critical review of this concept see Andreas Føllesdal, *Survey Article: Subsidiarity*, 6 (2) Journal of Political Philosophy 190 (1998).


\(^{358}\) For the classic work on emergent evolution see Lloyd C. Morgan *Emergent Evolution* (Williams and Norgate 1923).

Self-organisation has four characteristics. First, it restricts the behavior of the system to a small region called an attractor (see below), which gives the system a structure. Second, self-organisation is possible only where there is freedom from external control. Third, self-organisation provides adaptable behavior that makes the system robust to change (in the external environment). Fourth, it is a process that evolves over time towards more order (as an evolutionary fitness trait). These characteristics could be distilled to three essential ingredients: there needs to be many interactions between micro-scale (or lower scale) entities (which is the genesis of the principle of solidarity), non-linearity of these interactions (in the form of positive and negative feedback loops signifying both competition and cooperation), and a balance between interactions resulting in competition, and those resulting in cooperation (or exploration and exploitation).

The dynamics of highly complex systems exhibit a combination of positive and negative feedbacks. This feedback means that causation in such systems in nonlinear. In other words, self-organizations exhibits negative and positive feedback that enables emergence to occur but to also influence the structure of the system at the micro-level.

The ideas of Friedrich Hayek on spontaneous order could help illustrate self-organisation. Hayek even coined a new word, ‘catallaxy’, to describe a self-organizing system where voluntary co-operation dominates competition. For Hayek there are two types of order. The first is described as ‘taxis’: an ‘organisation’ which is ‘made’ or ‘artificial’. The second is referred to as ‘cosmos’: a ‘spontaneous order’ which is ‘grown’ endogenously and is self-organizing. The primary example of cosmos is any society of a size larger than that of a tribe or clan. City-regions are the quintessential cosmos. For Hayek, when one canvases regions of high complexity, one would be able to find only spontaneous order. The high complexity of such order is the result of elements adapting to their environment (in other words evolution). A primary example of this high complexity is “the structure of the modern society”. In any given society, micro-level entities such as families and firms, which are organizations, are integrated into “a more comprehensive” (micro-level) spontaneous order.

In addition, Hayek explains that the elements of spontaneous order will often adapt to the environment through a process of abstraction. Through evolution, “a repertory of action type adapted to standard features of the environment. Organisms become capable of ever greater varieties of actions….” Hayek also asserts that “the formation of a new abstraction seems never to be the outcome of a conscious process, not something at which the mind can deliberately aim, but always a discovery of something which already guides its operation.” (Emphasis in the original). Hayek explains the role of abstraction in the emergence of new behavior in the following terms:
“It is the determination of particular actions by various combinations of abstract properties which makes it possible for a causally determined structure of actions to produce ever new actions it has never before, and therefore to produce altogether new behavior such as we do not expect from what we usually describe as a mechanism. Even a relatively limited repertory of abstract rules that can thus be combined into particular actions will be capable of ‘creating’ an almost infinite variety of particular actions.”

Hayek hence proposes that self-organisation (*qua* spontaneous order) results in emergence through the process of abstraction.\(^{369}\)

**H. Subsidiarity and the Prisoner’s Dilemma**

The principle of subsidiarity can be interpreted as a way of overcoming the prisoner’s dilemma. Here subsidiarity represents a dynamic continuum of coordination states, leading for individualism to (strong) collectivism at states of increasing coordination (cooperation). The main issue with common interest is the existence of a ‘free rider’ incentive. This can be explained with the following canonical form of the prisoner’s dilemma. See Table AII.1. Let’s assume that A is an individual and B is a social group in which A is a member: \(A \in B\). Both are assumed to be rational and self-interested. Both A and B are assume to have consciousness.

<table>
<thead>
<tr>
<th></th>
<th>B Cooperates</th>
<th>B Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Cooperates</td>
<td>((\beta, \beta))</td>
<td>((\delta, \alpha))</td>
</tr>
<tr>
<td>A Defects</td>
<td>((\alpha, \delta))</td>
<td>((\gamma, \gamma))</td>
</tr>
</tbody>
</table>

Where \(\alpha > \beta > \gamma > \delta\)

*Table AII.1: The payoff matrix for the prisoner’s dilemma showing absolute payoffs*

The orthodox analysis of this game suggests A and B will choose not to cooperate, which leads to a \((\gamma, \gamma)\) payoff. However, if we now assume that A and B adhere to the principle of subsidiarity, irrespective of any informational asymmetries, the following calculus takes place. Under this calculus what is important is not the absolute payoff of each player, but their relative payoffs. This is a mirror image of what biologists call ‘evolutionary spite’.\(^{370}\) If A and

\(^{369}\) Also refer to the dialectic between symmetry and symmetry breaking discussed in B. F. Gussen, *On the problem of scale: Hayek, Kohr, Jacobs and the reinvention of the political state*, 24 (1) Constitutional Political Economy 19 (2013).

B obtain different payoffs, i.e. \((\alpha, \delta)\) or \((\delta, \alpha)\), then the rule of assistance would require A and B to rectify this difference. Assistance would be possible up to the point where both achieve the same payoff. This means A and B would want to move either to \((\beta, \beta)\) or \((\gamma, \gamma)\). Under the rule of non-interference A and B are indifferent between \((\beta, \beta)\) and \((\gamma, \gamma)\) as both get the same payoff. Non-interference occurs as a negative condition where no further help is possible. However, under the third subprinciple (above), both A and B would want to improve their outcome by moving to \((\beta, \beta)\). Applying the subprinciples of subsidiarity would overcome the free-rider incentive.

The above analysis does not mean that the free-rider incentive disappears under the subsidiarity principle, but that having clear rules for interaction between multi-levels of governance (including the individual) is one way of overcoming the issue of free riding.

I. Subsidiarity and Methodological Collectivism

In this part I expand on the understanding of subsidiarity as collectivism, especially in its *universitas* version. For us to understand this aspect of subsidiarity we also need to engage the concept of sovereignty.

The state *qua universitas* replaces sovereignty with subsidiarity (its limited version of federalism to be precise).\(^{371}\) Sovereignty was developed to furnish justification for ‘who’ holds (absolute) supreme power. On the other hand, subsidiarity focuses on ‘how’ that supreme power is shared (divided) through a continuum that stretches from the individual to the highest level of governance structures (national or supra-national). The origin of subsidiarity is traced to ancient Greece.\(^{372}\) However, some suggest it has evolved within federal governmental regimes.\(^{373}\) Others argue subsidiarity derives from methodological individualism (see above),\(^{374}\) suggesting a bottom-up legitimization of authority.\(^{375}\) Regardless of its origin or rational basis, subsidiarity poses a threat to sovereignty.\(^{376}\) Subsidiarity “does not reconstitute the sovereign state as the object of its concern. It explicitly contemplates intervention and assistance for the purpose of protecting human dignity”.\(^{377}\) A nexus with human rights means that the principle is neither contractarian nor utilitarian. Furthermore, today the principle does not make any normative claims on the structure of political or economic organization.\(^{378}\) The principle remains paradoxical in that it limits the state, but also empowers and justifies it. It reduces the relationship between the national and the local scales to a one-dimensional functional exchange.\(^{379}\) While sovereignty, even if only implicitly, gives permanence to the national scale, (the strong version of) subsidiarity takes away that permanence: “Subsidiarity has updated the concept of decentralization … No longer

---

378 At 44.
must arguments be made for the devolution of power from the nation-state. Instead the nation-state itself must defend its legitimacy against claims from communities demanding greater control over decision making”.

The key point is that without proper constitutional constraints (see the discussion on Spinoza below) there will always be a cyclical dynamic that underlines the tension between societas and universitas.

There is now a considerable body of literature suggesting the nation-state is obsolete and is no more the optimal unit for organizing economic activity. Thanks to the information revolution, the glocal—the intertwining of the global and the local, is taking precedence over the national. This withering of the nation-state is ushering a new form of ‘universitas’ that attacks sovereignty not only from within the (nation) state, but by attacking the state itself. An example at hand is that of Italy with its industrialized north and rural south. Moreover, there is now a decoupling of the democratic process from the bulk of the working population.

Governments have become hostage to political parties that represent special interests rather than the majority. The result being the adoption of policies (both at the national and sub-national levels) that make no economic sense. These gyrations are summed up by Gianni De Michelas, a former foreign minister of Italy, as follows: “We are witnessing the explosion of a long-obsolete model of liberal democracy that can no longer accommodate our dynamic, complex societies with their sophisticated electorate of vast diversity and highly differentiated interests.”

Today sovereignty is largely seen as declining in the aftermath of increasing global economic integration, which continues to be dominated by one particular modality: globalization. A new conception of the nation-state has emerged: the state as a network. Some however argue that “[t]he claim that globalization is undermining sovereignty is exaggerated and historically myopic,” adding that “indicators such as regulatory power and macroeconomic autonomy are ahistorical. They refer to state functions that were either never fully performed by sovereign states or only assumed very recently by such states.”

Notwithstanding, states are no longer able to protect themselves from the negative actions of other states or outside groups. Sovereignty is not the absolute it used to be. It is now relative. There is now imperial sovereignty that “signals the end of the idea of the modern state ... and of a relational sovereignty based on a territorial unit ...” (Emphasis added). The link between sovereignty and territoriality is being replaced by arrangements where state

---

382 On glocalisation see for example P. S. Gopalakrishnan Glocalization: thinking global, acting local (Icfai University Press 2008).
384 At 56.
385 At 60.
jurisdiction is punctured by multi-level governance. The empirical and theoretical developments of the late twentieth century have “led to a more fundamental questioning of how national boarders themselves have been conceptualized”. Similarly, in the European context, one can identify two (proto-glocal) constitutional revolutions since the end of World War II (WWII). The first is resulting in the more visible creation of pan-European institutions.

The second is the counter-unitary-state revolution that started in the 1920s, but reached its height in the decades after WWII. This revolution saw the creation of sub-national, meso-scale, democratic institutions—especially ‘regional states’, that filled the space between the national and the local scales. By the 1990s, even the United Kingdom finally joined this constitutional revolution with the passing of the devolution Acts (The Scotland Act 1998, The Government of Wales Act 1998, and the Northern Ireland Act 1998). There is now evidence in the United Kingdom, of the emergence of ‘polycentric states’.

Sovereignty is hence targeted by ‘the unravelling of territoriality’, which is a constitutive element of the state. A prime example of this is the disappearance of “territorially homogenous and exclusive” currencies that “accompanied the emergence of the ‘nation-state’”. Notwithstanding, it has to be said that capital mobility is not necessarily behind the fraying of state territoriality. Hence, the introduction of the Euro was also motivated by political calculations outside of already high levels of capital mobility. Moreover, financial globalization per se does not necessarily pose a challenge to territorial currencies as can be seen in the growth of ‘local currencies’.

Others argue that the effect of universitas (qua economic integration through the modality of globalization) on sovereignty is part of a cyclical process indigenous to capital accumulation, where the pendulum swings between the polar positions of universitas and societas. This effect of globalization on sovereignty demonstrates the cyclical processes of ‘production of scale’ and ‘collapse’ where there is no constitutional constraint on the growth of the jurisdictional footprint of the state (refer to section 3). The last five centuries have seen more emphasis on societas, first in the European context, and later on globally, through the instruments of international law. However, we now see a shift in emphasis, even though the present wave of economic integration is not novel except for its scale.

“In each of the four systemic cycles of accumulation [marked by the migration of economic hegemony on the world stage from Genoa, to the Dutch, to the British, and last to the United States] that we can identify in the history of world capitalism from its earliest beginnings in late-medieval Europe to the present, periods characterized by a rapid and stable expansion of world trade and production inevitably ended in a crisis of over-accumulation that ushered in a period of heightened competition, financial expansion, and eventual breakdown of the

---

394 Andrew Herod Scale at 201-202.
398 At 152.
400 See for example Yishai Blan.
organizational structures on which the preceding expansion of trade and production had been based … these periods of intensifying competition [are] the time when the leader of the preceding expansion … is gradually displaced … by an emerging new leadership.”

After the Hobbesian *Leviathan* (first published in 1651), a sovereign state was conceived of as a territorial jurisdiction: “the territorial limits within which state authority may be exercised on an exclusive basis” (emphasis added). Today, however, “[e]merging forms of ‘complex sovereignty’ break down the internal structural coherence of the state”. Today’s jurisprudence “became the jurisprudence of a fracturing state, characterized by polycentric centers of power …”. These polycentric centers of power are an extension of the idea of shared sovereignty which could be traced back to ancient Greece. However, this idea did not re-emerge (in the form of federalism) until 1756 when John Locke revived the idea of the *Social Contract*, paving the way for the rise of federal states as exemplified by the United States (US 1789 constitution), and the Swiss federation (in the 1848, 1874, and 1999 constitutions). However, sovereignty was expected to still operate from within the state. Since the signing of the Peace of Westphalia in 1648, and especially in the post-Napoleonic era (after 1815), “a prominent operating principle regulating the size and shape of states has indeed been that states should be contiguous and non-perforated” (emphasis added). This should be understood in relation to the observation that “the Westphalian State is … bound symbiotically to the ideology of nationalism”. The relationship between sovereignty and territory is captured by the principle of *uti possidetis juris* “according to which existing [state] boundaries are the pre-emptive basis for determining territorial jurisdictions in the absence of mutual agreement to do otherwise”. In particular, this principle subordinated the principle of self-determination to boundaries decided by colonial powers: juridical-territories trumped sociological-territories.

The ‘modern state ideal’ is described as that where “a political economy would very much seem to be that of a geographically circumscribed area within which exists a more or less fixed political hierarchy, which includes all individuals and all political institutions, and whose physical extension is contiguous and non-perforated”. It could be argued that the collapse of the gold standard, the emergence of Keynesian economics, and European decolonization had the combined effect that in the mid-twentieth century the world increasingly came to be “pictured in the form of nation-states, with each state marking the boundary of a distinct economy”. The nation-state (since the eighteenth century) remains the principal territorial unit. Nations result from a process of production of scale that is
enforced on a given territory. France is a prime example of this process. Critique of this national scale and the contiguous non-porous nation-state is relatively rare in the (constitutional) political economy literature, notwithstanding the now widely accepted claim that a decentralized political community would better meet heterogeneous individual preferences. Keeping in mind of course that decentralization would obtain only under the auspices of the nation-state.

J. Subsidiarity and Methodological Individualism

I now proceed to elaborate on subsidiarity and the interconnection between this principle and methodological individualism as exhibited by the concept of referenda. Subsidiarity is a principle that is “anchored in the concept of sovereignty of the individual,” where “all other levels of social organisation are given a subsidiary role, taking up only those tasks and responsibilities that are beyond the capacity of the individual.” Subsidiarity envisages ‘onion-like’ layers of socio-political structures where the bulk of decision-making is taken at the lowest scales. Subsidiarity “holds that the burden of argument lies with attempts to centralize authority.” In other words, subsidiarity is built on the ideas of methodological individualism and methodological collectivism. This formulates the basis for the link between subsidiarity and referenda on the one hand (through methodological individualism), and subsidiarity and federalism on the other (through methodological collectivism). The principle hence places a constitutional responsibility on higher levels of government not only to enable the autonomy of lower levels, but to provide these lower levels with necessary support.

The sovereignty of the individual under subsidiarity leads to referenda. Referenda were used by Germanic tribes before being adopted by Switzerland in the sixteenth century. The German word for referenda is ‘Volksbefragung’ which literally means ‘asking the people’. Referenda correspond in their widest sense to the maxim ‘vox popli, vox dei,’ where they ‘devolve’ decision-making to individuals. Referenda are analogous to opinion polls, although the former are more authoritative and comprehensive than the latter. England itself is in

---

417 For a good introduction to this principle in English, see Michelle Evans and Augusto Zimmermann eds Global Perspectives on Subsidiarity (Springer 2014); Alessandro Colombo ed Subsidiarity Governance: Theoretical and Empirical Models (Palgrave Macmillan 2012).
420 Methodological individualism asserts that explaining sociological phenomena must be anchored in facts about the individual. Methodological collectivism, however, holds that sociological phenomena are explained by social institutions as real entities with their own complex existence that cannot be reduced to individuals.
423 The Latin word ‘referendum’ comes from the verb ‘refero’ which in turn means ‘to give up’ (to the people). Theorist or ‘referendum’ comes from the verb ‘refer’ which in turn means ‘to give up’ (to the people).
424 Graeme Orr, The conduct of Referenda and Plebiscites in Australia: A Legal Perspective at 117, 11 Public Law Review 117 (2000). The referendum could be seen as an interpretation of subsidiarity in the following terms:

'The taking of Referendum on any question is, so far as it goes, a reversion to the ideals of Greek democracy. The orator is replaced by the writer, the Ecclesia by a few hundred polling-booths; but the voice of the people cries
fact the birthplace of modern referenda under the Levellers movement of the mid-seventeenth century. At the same time, we see referenda as part of the law-making process in New England. Since then the use of referenda ‘has proliferated remarkably [especially since the 1970s].’ Referenda are ‘used twice as frequently today compared with fifty years ago and almost four times more than at the turn of the twentieth century.’ The reason for this proliferation, according to the input-output model of political systems, where input is first articulated by civic society, which is then aggregated by political parties into legislation; is that the alignment between the inflexible and highly institutionalized ‘articulators’ and the dynamic ‘aggregators’ had broken down.

It was Switzerland who first made referenda a cornerstone of political systems. Their use was first introduced at the cantonal level, as early as 1830, when it was possible to amend the cantonal constitution or repeal a legislation using a referendum. Referenda were later used at the federal level, first to amend the constitution (since 1848), and later to repeal ordinary law (since 1874). The last evolutionary step was the introduction of citizen-initiated referenda which occurred for the first time in 1891.

Similarly, in the United States referenda were first used for approval of state constitutions and constitutional amendments, and later, ‘states also began to confer upon the people the right to legislate directly upon subjects other than constitutional questions.’

Referenda are based on methodological individualism as seen in consociational, confederal and liberal (contractarian) subsidiarity. Under methodological individualism only individuals choose and act. The decisions are made by individuals, not collectives. Carl Menger, who founded the Austrian School of Economics, and is considered the founder of methodological individualism, was open to the idea that economic analysis can be based on units larger than the individuals (such as the city or the state), although the ultimate explanation of all phenomena must be the individual. The doctrine means that ‘all social phenomena (their structure and their change) are in principle explicable only in terms of

‘Aye’ or ‘No’ as clearly as if they were gathered together in a market-place or a Senate House.’ [Sir Robert Randolph Garran, The Coming Commonwealth at 134 (Angus and Robertson 1897).]

429 There are different strands of methodological individualism. See Lars Udehn, Methodological Individualism: Background, History and Meaning at 347 (Routledge 2001). For our purposes this detail is not essential.
430 The phrase ‘methodische individualismus’ was coined by Max Weber’s student, Joseph Schumpeter, in his 1908 work Das Wesen und der Hauptinhalt der theorethischen Nationalökonomie. Note however that Schumpeter was more of a methodological pluralist, closer to the Austrian tradition and to Emile Durkheim’s interpretation of social facts as sui generis and therefore irreducible to facts about individuals. See Udehn, Methodological Individualism: Background, History and Meaning at 106 and 34. This Weberian concept suggests that while we talk about states (and other social organizations) as capable of action just like an individual, these collectives must still be treated as the resultants of individual acts, since only individuals can be treated as having a subjectively understandable action. For Weber, ‘action’ refers to the subset of human behaviour that is motivated by an intentional state. (For example: coughing is behaviour, apologizing afterwards is action.) Methodological individualism stands in opposition to historicism and structural functionalism as determinants of individual behaviour. Its use in economic analysis was promoted first by the Austrian School of economics. For a more detailed account, refer to Joseph Heath, Methodological Individualism, in Edward N. Zalta ed The Stanford Encyclopedia of Philosophy (Stanford University Press 2011).
431 It follows that parliaments don’t make decision but members of parliament do, and this is only a second best approach as it only uses a sample of the larger body of decisions-makers, namely the electorate. When it is cost effective to consult a larger sample (especially due to a low frequency of such consultations), and the issues are of high importance that merits the same, then subsidiarity enshrines a right to referenda.
432 Lars Udehn, Methodological Individualism: Background, History and Meaning at 94 (Routledge 2001).
individuals—their properties, goals, and beliefs.”**434 Methodological individualism allows for ‘revolutionary’ changes to the political state that do not take into account historical ‘meso’ scales of social organisation. It only allows for the micro of the individual from which is born the macro of the nation-state. This is in contrast to methodological collectivism which adopts an evolutionary understanding of the state where jurisdical breakup is a ‘natural’ biological consequence of both growth and eventual death (of the state). Emphasis on methodological individualism allows for the state to grow in ‘revolutionary’ ways both through the speed of growth as well as its nature.

REFERENCES


Brooks, Robert C. "Metropolitan Free Cities ". *Political Science Quarterly* 30, no. 2 (1915): 222-34.


Friedrichs, Christopher R. "The Swiss and German City-States ". In *The City-State in Five Cultures* edited by Robert Griffeth and Carol G. Thomas, 109-42. Santa Barbra, California ABC Clio 1981.


Lefebvre, Henri *La Production De L'espace* Paris Anthropos, 1974.


Maitland, F. M. *Introduction to Gierke’s Political Theories of the Middle Ages* Cambridge Cambridge University Press 1900.


Schumacher, Ernst F *Small Is Beautiful: Economics as If People Mattered* Point Roberts, WA: Hartlet and Marks 1999 [1973]


