

Organizations not Atoms: An organizational theory of development

Kings College London

May 16, 2023

John Wallis

University of Maryland and

University of Cambridge

We all know that something happened in the middle of the 19th century that changed the course of human history.

It was an economic phenomena: the rise of modern economic development: 1.5 percent real per capita income growth over a century and a half: unprecedented in human history.

It was equally a political phenomena: the rise of modern advanced democracy: elections with durable political parties who competed intensely, but did not kill each other when they won: and gradually expanding (although incomplete) political, civil and economic rights for citizens.

Why and how those changes happened are not so clear, and we probably have not fully grasped what happened even now.

“Throughout we think of good economic institutions as those that provide security of property rights and relatively equal access to economic resources to a broad cross-section of society.” (Acemoglu, Johnson, and Robinson, 2005, p. 395, *Handbook of Economic Growth*)

To this we might add rule of law and government constraints that lead to credible commitment.

Since the 1960s, social scientists have generally accepted institutions as a key part of the story, but no one has a convincing explanation for how they work, why institutions changed, or how they are sustained.

But just as North and Thomas said about macro based explanations of development:

“Though this [macro] theoretical tradition is still vibrant in economics and has provided many insights about the mechanics of economic growth, it has for a long time seemed unable to provide a *fundamental* explanation for economic growth. As [North and Thomas \(1973, p. 2\)](#) put it: “the factors we have listed (innovation, economies of scale, education, capital accumulation, etc.) are not causes of growth; they *are* growth” (italics in original). Factor accumulation and innovation are only *proximate* causes of growth. In North and Thomas’s view, the fundamental explanation of comparative growth is differences in *institutions*.” (AJR. 2005, p. 388)

In the same way, secure property rights, inclusive politics, rule of law, and limited government not the causes of institutional development, **they are themselves institutional development**. Why did they occur?

Today I offer an institutional theory of economic development based on rules and organizations, not on secure property rights, inclusion, rule of law, or credible commitments.

Without explaining *why* impersonal rules – rules that treat everyone the same – appeared on a broad scale in a few countries in the 19th century, it does explain *how and why* the appearance of impersonal rules stimulated modern economic development and modern political development.

The adoption of credible impersonal rule provisions which led to impersonal rule adoption over a broad range of government rules changed the dynamics of economics and politics, and their interaction, in ways that led to modern development.

The argument has an assumption and two parts:

While there are groups of people in all societies, organizations are groups that adopt rules to govern their relationships.

Key assumption: organizations adopt rules to increase the value of their relationships by enhancing coordination.

The first part is an institutional and organizations economics argument about the relationship between rules and organizations, types of rules, and the connections between types of rules and how they affect relationships **between** organizations.

The second part is a political economy argument about the appearance of new types of political organizations, that today I will call *mature political parties* that are long lived, durable, organizations that compete with each other in a *mature party system*. When they lose elections they believe they will be able to compete in future elections. Winners do not kill or suppress the losers.

Part I:

Rules, Organizations, and Coordinating Organizations
(e.g. Governments)

The first part of the argument is easier to understand if we begin with an example, illustrating that **default rules** are rules that are enforced but not followed. Only if people in a relationship decide to invoke the rule will the appropriate authorities enforce the rule:

Union nail rule example.

The rule is carpenters drive nails, laborers don't. But laborers often drive nails. The rule is enforced, but not followed.

The opposite of a default rule is a **prescriptive rule**: a rule that is meant to be followed and resources are devoted to making sure people follow the rule.

In the union nail rule example, default rules enable

- 1) Lower transaction costs
- 2) Greater heterogeneity among labor/carpenter pairs.

In general, default rules enable greater heterogeneity among organizations, because they do not have to be followed: they are outside options not binding constraints.

Heterogeneity is a first order source of economic growth: specialization and division of labor.

In the nail rule example there is a rule and organization matrix, made up of all the rules (the rule environment) and all the organizations (the organizational ecology).

The “Organizational Ecology:”

State Safety Commission

Carpenter and Laborers Unions

Construction Firm

Carpenters and Laborers

The “Rule Environment”

State:	Wear safety goggles when you drive nails
Unions:	Carpenters drive nails Laborer’s Don’t
Firm:	Do what the carpenter says
Carpenter/ Laborer	Depends on the carpenter, laborer, and their relationship

“The Rule and Organization Matrix”
The Organizational Ecology and Rule Environment of
Laborers and Carpenters
with respect to Driving Nails

Organizational Ecology:

Rule Environment:

The State Safety Commission:

Rule I: Don't drive nails without wearing safety goggles

The Unions:

Rule II: Carpenters drive nails, laborers do not drive nails

The Construction Firm:

Rule III: Do what the carpenter says

The laborer/carpenter pairs

Rule IV: Whatever agreement the carpenter and laborer work out between themselves

The multi-dimensional aspect of the rule and organization matrix is important. All the rules and all the organizations **potentially** interact.

In practice, not all rules apply to everyone. Many rules are “identity rules,” whose form and enforcement depend on the identity of the individuals to whom the rule is applied.

Not everyone has the same access to rules, either.

This is why “organizations not atoms:” the structure of the rule and organization matrix shapes the interests of everyone, and their organizations.

Why do we need to articulate the rule and organization matrix?

Why do the construction firms use the union as a rule enforcer? Why don't they just enforce the rule themselves? It is a good question.

Steps in the argument:

Organizations are groups that adopt **internal** rules to increase the value of their relationships by enhancing coordination.

- 1) Relationships and rules are in a **fundamental tension**. Organizations adopt rules to enhance relationships, and if a rule weakens relationships it will be ignored, abandoned, or replaced. Rules that are not predictable, however, are weaker coordinating tools. Thus the tension.
Relationships drive rules, and relationships erode rules.

2) **External** rules are a way to deal with the tension. External rules are rules that one organization creates and enforces, but other organizations can use (like governments that create and enforce laws).

Organizations can form “organizations of organizations” under the same assumption that the organizations adopt rules to enhance the value of their relationships.

Organizations that create and enforce rules other organizations can use are **coordinating organizations**. Governments are coordinating organizations. There are many coordinating organizations in societies, but we often assume in political economy that there is just one: the government, the Leviathan.

The union is a coordinating organization in the nail rule example.

If the coordinating organization is insulated from the relationships that interfere with rule enforcement in the rule using organization, then the corrosive effect of relationships on rules is reduced.

“The Rule and Organization Matrix”
The Organizational Ecology and Rule Environment of
Laborers and Carpenters
with respect to Driving Nails

Organizational Ecology:

Rule Environment:

The State Safety Commission:

Rule I: Don't drive nails without wearing safety goggles

The Unions:

Rule II: Carpenters drive nails, laborers do not drive nails

The Construction Firm:

Rule III: Do what the carpenter says

The laborer/carpenter pairs

Rule IV: Whatever agreement the carpenter and laborer work out between themselves

“The Rule and Organization Matrix”
The Organizational Ecology and Rule Environment of
Laborers and Carpenters
with respect to Driving Nails

Organizational Ecology:	Rule Environment:
The State Safety Commission:	Rule I: Don't drive nails without wearing safety goggles
The Unions:	Rule II: Carpenters drive nails, laborers do not drive nails
The Construction Firm:	Rule III: Do what the carpenter says
The laborer/carpenter pairs	Rule IV: Whatever agreement the carpenter and laborer work out between themselves

“The Rule and Organization Matrix”
The Organizational Ecology and Rule Environment of
Laborers and Carpenters
with respect to Driving Nails

Organizational Ecology:

Rule Environment:

The State Safety Commission:

Rule I: Don't drive nails without wearing safety goggles

The Unions:

Rule II: Carpenters drive nails, laborers do not drive nails

The Construction Firm:

Rule III: Do what the carpenter says

Coordinating Organization

The laborer/carpenter pairs

Rule IV: Whatever agreement the carpenter and laborer work out between themselves

Default Rule

3) **Default** rules are rules that can be enforced but are not followed. Default rules provide outside options, rather than binding constraints.

Prescriptive rules are meant to be followed and often resources are devoted to their enforcement.

External rules work better if they are default rules than if they are prescriptive rules. They are more flexible as they do not have to be followed in practice but can be used as outside options.

“The Rule and Organization Matrix”
The Organizational Ecology and Rule Environment of
Laborers and Carpenters
with respect to Driving Nails

Organizational Ecology:

Rule Environment:

Prescriptive Rule

The State Safety Commission:

Rule I: Don't drive nails without wearing safety goggles

The Unions:

Rule II: Carpenters drive nails, laborers do not drive nails

The Construction Firm:

Rule III: Do what the carpenter says

The laborer/carpenter pairs

Rule IV: Whatever agreement the carpenter and laborer
work out between themselves

“The Rule and Organization Matrix”
The Organizational Ecology and Rule Environment of
Laborers and Carpenters
with respect to Driving Nails

Organizational Ecology:

Rule Environment:

The State Safety Commission:

Rule I: Don't drive nails without wearing safety goggles

The Unions:

Rule II: Carpenters drive nails, laborers do not drive nails

The Construction Firm:

Rule III: Do what the carpenter says

The laborer/carpenter pairs

Rule IV: Whatever agreement the carpenter and laborer work out between themselves

Default Rule

4) Default rules are more powerful coordinating tools if they are **impersonal rules**: if they are rules that apply equally to everyone.

In contrast, **identity rules** are rules whose form or enforcement depend on the identity of the people to whom the rules are applied.

If the nail rule was enforced as an identity rule, then laborer and carpenter would have to know who each other are before they can anticipate how the rule will be applied.

Default rules enable greater heterogeneity in relationships, because not every relationship has to follow the rules, as in the laborer/carpenter relationships in the nail rule example.

Heterogeneity is a first order source of economic growth: specialization and division of labor.

Impersonal external default rules enable:

Lower transaction cost

Greater Heterogeneity

More organizations

(because impersonal rules for forming organizations lead to more organizations)

More innovation

More personal liberty and freedom

So we have talked about three pairs of rules:

Default vs. Prescriptive rules

External vs. Internal Rules

- Coordinating organizations

Impersonal vs. Identity Rules

There is a fourth pair, primary and secondary rules, that I will not talk about today. H.L.A. Hart's concept.

Steps in the argument

- 1) Rules and relationships are in fundamental tension, and relationships drive rules.
- 2) External rules enable organizations to ease the tension, by shifting enforcement to organizations not subject to the same relationships.
- 3) External default rules are more effective coordinating tools than external prescriptive rules.
- 4) Impersonal external default rules are more effective coordinating tools than identity external default rules.

How do societies manage to get impersonal rules, which affects the number, the productivity, and the heterogeneity of all the organizations in the society?

Part II:

Politics, Political Parties, and how impersonal rules are sustained.

The historical problem is that all the societies we know about rely on identity rules rather than impersonal rules.

In historical terms, the first societies to adopt impersonal rules on a wide scale were the United States and Britain in the 1840s and 1850s.

Indiana was the first state to adopt an impersonal rule provision in its 1851 constitution, which required that the legislature only pass general laws (impersonal rules that applied equally to everyone) for 17 specific functions, whenever possible all laws be general, and only create corporations under general laws.

The historical problem is that all the societies we know about rely on identity rules rather than impersonal rules.

North, Wallis, and Weingast *Violence and Social Orders* (2009) argues that in all human societies before 1800, social order was maintained by creating rents for powerful organizations in the “dominant coalition” by creating rules that gave each organization privileges.

The privileges were based on identity rules.

Identity rules were the result of the need to keep relationships between the powerful organizations from breaking down and resulting in violence and civil war.

The higher we go in a “natural state”/identity rule regime, the more the rules are driven and eroded by relationships.

Agreements made at higher levels of the rule and organization matrix in a natural state are more dependent on relationships. The agreed upon rules in those agreements are more likely to be adjusted as relationships change, not less likely.

The agreed upon rules in a natural state enhance the value of relationships between powerful organizations, and if those relationships break down violence and civil war are likely to follow.

In those circumstance “abiding by the rules” is not the best option. The rules are less credible *ex ante* and therefore are weaker at coordinating.

Even in the 21st century, most societies are **unable** to create and enforce impersonal rules on a broad scale. **Impersonal External Default Rules** do not exist in most societies.

Organizations in those are not as numerous, productive, or heterogeneous because their rules and organization matrix, the society's institutional structure, provides less support for organizations.

How were these rules sustained? Particularly when we realize that most societies in 2023 cannot create and enforce impersonal rules on a broad scale?

Factional Polities

All societies before 1840 were factional polities.

Factions, ala Madison, are narrow groups that pursue their own interests.

Social order is maintained in a factional polity by using identity rules to create privileges for powerful organizations and individuals. If social order breaks down, those organizations lose their privileges, giving them some incentive to abide by their agreements (the agreed upon rules). This is the NWW argument.

The rules in these societies are inherently identity rules.

Factional dynamics are ephemeral and constantly changing, factions and coalitions are typically not durable and long lived.

Identity Rules

In both Britain and the American states, 75% of all legislation passed by Parliament and state legislatures affected specific individuals, specific organizations, or specific localities.

In American terms, these were private, special, and local acts.

The bulk of legislation created identity rules. (see Lamoreaux and Wallis, 2021 and 2022).

Majorities, or consensus, was reached by putting together bundles of bills addressing specific, narrow interests.

Legislative dynamics and political outcomes were dominated by the logic of identity rules.

Impersonal Rule Provisions

When impersonal rule provisions were introduced in the 1850s (Indiana in 1851 was the first), the dynamics of legislatures had to change.

It was now much more difficult to build majority coalitions using private, special, or local legislation.

Building durable coalitions required that **mature political parties** replace factions.

Mature political parties are durable through time and elections, employ professionals as well as volunteers, and are much more explicitly “organizations.”

A mature party system in which stable, durable parties compete in repeated elections is a critical element of a **mature democracy**.

John Aldrich, in his book *Why Parties*, concludes that durable parties are necessary for mature democracies: “What matters is the sustained competition that comes from the interaction between or among durable parties, such that it is the fact that any winning party must seriously consider the prospect of losing an election before democracy becomes tenable. A necessary condition for effective democracy, in this view, is that there must be a party system, an ongoing set of parties in sustained competition for access to power.” (Aldrich, 2011, p.4)

How could a *factional party system* -- a political system with elections made up of parties who are short lived factions and coalitions -- come to believe that political parties would have long lives? That is, how could a party come to believe it could lose an election and be around in the future to compete in elections again?

Three institutional changes were required:

1) Rules insuring competitive elections

2) Rules insuring that parties that win elections control the government (much more important in Europe than in the US)

3) Rules insuring that all agreed upon rules are impersonal, that rules apply equally to all parties.

If the parties expect to be around in the future, these institutional arrangements can induce a self-enforcing equilibrium in which all the major parties (the parties with a chance at winning elections) have an incentive to support and sustain impersonal rule provisions.

The durability and expectations of parties are key to **the logic.**

In a mature party system all of the major parties have an incentive to enforce impersonal rule provisions, because the requirement that all rules apply equally to everyone (to all parties) is essential to guaranteeing that elections in the future will be free and open, and that a losing party will not be crippled, harassed, or eliminated by a change in the rules that apply only to the losers.

In a mature democracy, mature political parties reciprocally control access to governments, and all of the major parties have strong incentives to maintain impersonal rule provisions.

While there are no good histories of impersonal rule adoption, there are many good histories of political parties and political institutions.

If we proxy for the presence of impersonal rule provision by the number of corporations in 1910, we can see whether political parties and political institutions in the countries with impersonal rule provisions adopted the three provisions, and whether the political parties and democracy itself in the countries without impersonal rule provisions was durable in the early 20th century.

Corporations		Adopted Three Elements Before 1920?		
		Elections	Administration	Impersonal Rules
USA	2,913	Yes	Yes	Yes
Norway	2,117	Yes	Yes	Yes
Canada	2,032	Yes	Yes	Yes
New Zealand	1,637	Yes	Yes	Yes
Australia	1,545	Yes	Yes	Yes
Netherlands	1,262	Yes	Yes	Yes
UK	1,241	Yes	Yes	Yes
Switzerland	1,060	Yes	Yes	Yes
Sweden	1,055	Yes	Yes	Yes
Denmark	998	Yes	Yes	Yes
Finland	755	Yes	Yes	Yes
Belgium	561	Yes	Yes	Yes
France	306	Yes	Yes	Yes
Germany	403			
Spain	106			
Italy	78			
Austria	70			
Portugal	176			

Corporations		Adopted Three Elements Before 1920?		
		Elections	Administration	Impersonal Rules
USA	2,913	Yes	Yes	Yes
Norway	2,117	Yes	Yes	Yes
Canada	2,032	Yes	Yes	Yes
New Zealand	1,637	Yes	Yes	Yes
Australia	1,545	Yes	Yes	Yes
Netherlands	1,262	Yes	Yes	Yes
UK	1,241	Yes	Yes	Yes
Switzerland	1,060	Yes	Yes	Yes
Sweden	1,055	Yes	Yes	Yes
Denmark	998	Yes	Yes	Yes
Finland	755	Yes	Yes	Yes
Belgium	561	Yes	Yes	Yes
France	306	Yes	Yes	Yes
Germany	403	No	No	No
Spain	106	No	No	No
Italy	78	No	No	No
Austria	70	No	No	No
Portugal	176	No	No	No

Germany, Italy, Austria, Spain, and Portugal all had political systems with democratic elements in the 1920s and before, but they did not have impersonal rule provisions. They all had factional political systems. The word used to describe their party systems is **caquismo**.

All five of the countries lost their democracies in the 1920s and 1930s. Their political parties and party system was not durable.

All the societies with indications of impersonal rule provisions not only kept their democracies (except under German occupation), the parties that competed in elections in the 1950s were often the same durable parties that competed in the 1920s.

Political science is fairly unified around the idea that mature democracies (pick your adjective) requires mature party systems composed of a stable group of durable political parties competing over regular and recurrent elections.

The connections between rules and organizations are not always immediately visible. Default rules are enforced but not followed. Most mature democracies have very few rules about political parties, but nonetheless party's interests are shaped by the rules about elections, government administration, and impersonal rule provisions.

Modern economic development began after 1840, in terms of per capita income, when the number, productivity, and heterogeneity of organizations of all types increased.

The rules that made that increase possible were secured by changes in the organization of the polity. Those changes were based on rules, but interestingly not on the rules about political parties, but about elections, government administration, and impersonal rule provisions. The organizations that controlled access to governments – political parties – had strong and durable interests in maintaining these agreed upon rules.

Most of the “good” institutions that economists identify as important for supporting economic development:

Secure property rights

Rule of Law

A dependable contracting environment

Are actually **outcomes** of impersonal rule provisions.

Until the dynamics of the political process are changed, it is impossible to believe that the rules that apply today will apply tomorrow, and that the identity of my trading partners will not affect on the collectively agreed upon rules will be applied to us.

The adoption of impersonal rule provisions induces a change in organizations by making default rules more effective tools for enhancing coordination within and across organizations.

Adopting impersonal rule provisions changes the shape, structure, and connections of the rule organization matrix.

This is why the organization of the economy and the organization of the polity change simultaneously in the societies that adopt impersonal rule provisions.

The organization of the polity and economy changes at the level of individual organizations, as well as at the level of organizations of organizations. The emergence of modern governments as more effective coordinating organizations does not depend on their monopoly on violence (*Leviathan Denied*), but on the agreements made through the political process to abide by impersonal rule provisions.

Thank you.