# Populism and the 'narrow corridor' of liberty and justice<sup>1</sup>

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#### Abstract

Populist responses to matters of social concern are considered in a framework like that of Acemoglu and Robinson's 'narrow corridor' that supports liberty and justice. We discuss the risk that such responses could result in a country being pushed out of this narrow corridor — and, if so, with what long-run consequences.

We conclude that a political system of 'checks and balances' can play a key role in keeping the society within the narrow corridor; but it is incumbent on the existing political system to confront the issues of populist concern so as to come up with creative solutions. (98 words)

Keywords: Populism, Liberty, Competing Species, Nash Bargain, Social Contracts.

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#### 1. Introduction

A key feature of recent times has been the rise of populism in Europe and the United States of America. The Populist movement originated in the US in the 1880s, when it pitted the rural populations and the Democratic Party against the more urban Republicans (Holmes 1990); later, in the 1930s when FDR was elected to lead the nation out of the Depression by interventionist policy, populist sentiment was credited with 'keeping his feet to the fire'.<sup>2</sup> In the 1950s, populism was seen in Europe, when the term was applied to Fascist and Communist movements. Yet, prior to its recent rise, it seemed that European and the US political systems had put populism behind them. This involved the evolution toward pluralist political systems able to establish a consensus based on the legitimacy of different groups.

A natural question has arisen as to why populism is on the rise now in Europe and the US, how it might affect the political landscape, and with what long-term implications. These are the issues addressed in this article.

## 1.1 Different perspectives

## (a) Populism a la lettre

We begin with a widely accepted definition of populism due to Mudde (2004) which runs as follows. Populism considers society as separated into two homogeneous and antagonistic groups: 'the pure people' versus 'the corrupt elite'. This Manichean dichotomy can be applied to all sorts of ideologies, such as socialism, nationalism, anti-imperialism or racism, in order to explain the world and justify specific agendas. Hence populism may be left-wing or right-wing. Its defining feature is that, as for Jean-Jacques Rousseau, politics should help express the general will of the people.

On this definition, populism challenges the pluralist political approach of establishing a consensus based on the legitimacy of different groups. So, it is claimed, there is a direct parallel with the idea of the tyranny of the majority, where the majority of an electorate pursues its own objectives at the expense of those of minorities, leading to the oppression of minorities (Mill, 1859, pp.6,

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<sup>&</sup>lt;sup>2</sup> "Roosevelt's challenge wasn't the number of populists unreconciled to his leadership but their intensity and variety. He had to act boldly and effectively enough to satisfy the outrage. Yet he also had to establish himself as the cooler alternative to demagogues who often generated among the populace as much fear as hope." Greenberg (2009)

7, 13). Thus one challenge posed by populism is that it will ultimately result in the majority oppressing minority groups. Another downside is losing the benefit of a deliberative assembly (Burke, 1789); for an implication of populism is that the will of the people is allowed to dominate the judgement of politicians who are elected to the assembly (Conniff, 1977).

## (b) Populism as a threat, not an end in itself

Mudde's perspective is based on ideological considerations, where populism is interpreted as a desire for direct democracy. But what if the challenge created by populism is intended as a means and not as an end in itself<sup>3</sup>?

Michael Ignatieff, for instance, argues that a populist revolt may – like an alarm clock – provide a timely wake-up call for a slumbering elite.

[P]opulist revolts, often incited and led by skilled demagogues, are a common feature of the Western democratic tradition. They serve as a signal of discontent and can force elites to wake up and address issues of exclusion and inequality that have been ignored or left unaddressed ... In this way, populism can be a source of renewal for democratic systems. Ignatieff (2020, p. 1)

This notion, that popular protest may play a strategic role in the evolution of democracy, is a theme explored in detail by Acemoglu and Robinson (2006) in their earlier study of the economic origins of dictatorship and democracy.

With respect to the First Reform Act of 1832 in Britain, for example, they note that:

By the early nineteenth century, the Industrial Revolution was well underway and the decade prior to 1832 saw continual rioting and popular unrest. ... The consensus among historians is that the motive for the 1832 reform was to avoid social disturbances. ... The Reform act did not create mass democracy but rather was designed as a strategic concession.

Overall, the picture that emerges from British political history is clear. Beginning in 1832, when Britain was governed by the relatively rich, primarily rural aristocracy, strategic concessions were made during an eighty-six year period to adult men. These concessions were aimed at incorporating the previously disenfranchised into politics because the

<sup>&</sup>lt;sup>3</sup>This involves shifting to what Moffitt (2020, pp.17,18) describes as a 'strategic' perspective - in contrast to the 'ideational' perspective favoured by Mudde. The use of threats in games of strategy is analysed in Dixit et al. (2021, Chapter 8).

alternative was seen to be social unrest, chaos and possibly revolution. Acemoglu and Robinson (2006, pp. 3,4)

It is by treating such strategic threats as populist<sup>4</sup> that one arrives at Ignatieff's conclusion – that populism can help improve democracy.

# (c) 'Time inconsistency' of populist leaders

As Ignatieff acknowledges, however, this more optimistic perspective is subject to an important caveat - that the revolt should not seriously damage the institutional fabric of society:

The real threat to democracy comes when executive power – such as is the case in Hungary – sets out to weaken the courts, the media, the universities, indeed, all the counter-majoritarian institutions of a society. Then, but only then, does authoritarian populist majoritarianism set a country on the path to a single party state and exit from democracy itself. Ignatieff (2020, p. 5)

The risk of such a damaging outcome is considerably increased by the 'time-inconsistency' problem identified in the literature on populism. This arises because a charismatic politician can gain power through a populist mandate promising the electorate policies that will benefit them: once in power, however, the populist politician may not only fail to enact the promised policies, but instead pursue policies that act to their detriment (Dornbusch and Edwards, 1991). By using the position in office to relax constraints on the executive - such as presidential term limits, for example - the elected populist can increase the power of the elite at the expense of the power of the people.

# (d) 'Pseudo-populism' and 'people-populism'

Since this style of populism involves deception – reneging upon pre-electoral promises – we will typically refer to it as 'pseudo-populism'. This contrasts with what we will call the 'people-populism' discussed above that aims to promote the voice of the people, either via direct democracy (as on Mudde's 'ideational' definition) or by promoting a more representative pluralist system (as on Ignatieff's 'strategic' view). The term 'populism' without qualification will be used to refer broadly to both pseudo- and people- varieties.

#### 1.2 The narrow corridor and 'free and fair' social contracts

The tractable framework<sup>5</sup> we use to consider populism and its implications formalises the principal proposition in the *Narrow Corridor* of Acemoglu and

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 $<sup>^{4}</sup>$  As the editors of the Special Issue of the NIER invite us to do.

<sup>&</sup>lt;sup>5</sup> As developed in Miller and Zissimos (2021)

Robinson (2019), hereafter AR: namely that the development and preservation of liberty depends on the balance of power between the state and society staying within a 'narrow corridor'. While the argument in their book<sup>6</sup> involves lively competition between these two blocs, the simple formalisation used here is based explicitly on a biological model where the co-evolution and development of balanced power of state and society is analogous to that of two species living in harmony with one another. Outside the narrow corridor, however, the negative-sum behaviour of the Competing Species literature comes into play. (In this context, the basic building blocks of state and society can be matched with the building blocks of populism, where 'the state' designates 'the elite' and 'society' designates 'the people'.)

An interesting issue is how the concept of a 'narrow corridor' in the balance of power might relate to the idea of a 'free and fair social contract' developed by Binmore (1998, 2005). From the perspective of evolutionary game theory, he argues that a viable social contract must satisfy three conditions. First, it must be incentive-compatible at the individual level (as in a Nash equilibrium). Second, it must select an efficient equilibrium from the perspective of society as a whole (as in the Nash equilibrium of a repeated game with no definite ending). And finally it should also be 'fair' - according to the power relations of the society under consideration. All this, he concedes, calls for skilled 'mechanism design'. In Binmore (2005, Ch. 12), moreover, he introduces the idea of a 'Whiggish' social contract<sup>7</sup>: this involves relatively balanced power relations between members of society, giving rise to egalitarian outcomes across society as a whole in a manner that resembles the 'narrow corridor' of AR.

While social conditions that support liberty and justice may be studied from these different perspectives, it should be acknowledged that they reflect two different traditions in game theory. For AR see things as a 'dynamic contest' between the elite and the citizens in competition to control the output of society<sup>8</sup>: accordingly, the evolution of the power of state and civil society involves solving for the Nash equilibrium<sup>9</sup> of a *non-cooperative* dynamic game.

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<sup>&</sup>lt;sup>6</sup> See the review by Dixit (2021), who concludes: 'Acemoglu and Robinson have written a brilliant, thought-provoking book. Their model of a dynamic game pitting forces of disorder against those of despotism is a valuable contribution to focus thought and analysis.'

<sup>&</sup>lt;sup>7</sup> So-called after the British political party that opposed the Tory party in Parliament in the 18th century. The Whigs opposed absolute monarchy and supported the passage of the 1832 Reform Act.

<sup>&</sup>lt;sup>8</sup> As indicated in Acemoglu and Robinson (2017, p.8) where "At date t, if the elite and civil society (citizens) decide to fight, then one side will win and capture all of the output of the economy, and the other side receives zero. Winning probabilities are functions of relative strengths."

<sup>&</sup>lt;sup>9</sup> i.e. a profile of strategies – one for each player – in which each player's strategy is a best reply to the strategy of the other.

Ken Binmore, on the other hand, visualises the parties to a social contract as participants in a *cooperative* game; so he focuses on the Nash Bargaining Solution as the rational agreement when the players have equal bargaining power. As he notes: 'The Nash who first proposed the Nash Bargaining Solution is the same as the Nash who formulated the concept of the Nash equilibrium, but ... the two ideas are very different.' Binmore (2005, p.26).

Relations between state and society clearly involve elements of both cooperation and conflict, however. The state can provide public goods and help provide social insurance, as William Beveridge (1942) proposed in his historic report<sup>10</sup>. Yet, in the interest of individual freedom, its powers need to be checked. For, as Michael Ignatieff (1999) put it succinctly, "if you create the state that protects everybody, sooner or later you have to protect the individual against the state"! So we believe it is worth considering both these-contrasting but complementary - perspectives in the analysis that follows.

# 1.3 Will the rise of populism push Europe and the US out of the narrow corridor?

Since our focus on the recent rise of populism concerns the countries of Europe and the US, it is reasonable to think of the starting point for our analysis as being a country that lies in the narrow corridor. Indeed, AR cite such countries as exemplars - and Binmore (2005 Ch.12) argues that such countries have 'Whiggish' social contracts. The idea that is common to both these works is that these countries have liberty precisely because the power of their states and their societies are in balance with one another.

Acemoglu and Robinson emphasize that, when the power of state and society co-evolve in balance 'along the narrow corridor', the liberty enjoyed by their citizens facilitates ever greater levels of development and well-being. Binmore (2005, p.189) puts it more bluntly: 'command economies are hopelessly inefficient. Not only are people happier when they aren't bossed around all the time, they can be immensely more productive'.

This characterisation highlights the specific concern with the rise of populism in Europe and the US - that it threatens to undermine the liberty that currently exists, and could in turn undermine the heightened levels of development and wellbeing enjoyed by the populations of these countries. We frame the issue

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<sup>&</sup>lt;sup>10</sup>Against the problems of 'Want, Disease, Ignorance, Squalor and Idleness', as they were categorised in his proposals for a welfare state.

simply as whether the recent rise of populism threatens to push the countries of Europe and America out of the narrow corridor.

Framing the rise of populism in this way may act as a reminder of the benefits arising from the balance of powers that gives rise to liberty; and as a warning of the dangers posed should populism become the dominant political paradigm in the countries of Europe and America.

### 1.4 Shocks that give rise to populist responses

The rise of populism is widely regarded as an endogenous response to various shocks that have taken place over half a decade or more. A major factor is the forces unleashed by globalisation (Rodrik, 2018).

Many believe that globalisation has empowered states and their elites, through the rise of global finance, for instance, with the 'revolving door' between financial centres such as Wall Street in New York and the nearby seat of power on Capitol Hill in Washington D.C. providing an important case in point. According to this view, the relationship between finance and government precipitated the global financial crisis in 2008, to which the state responded by bailing out banks who were 'too big to fail', while the majority of society took the brunt of the Great Recession. This in turn created a sense that the state and the elite were 'corrupt' in looking after their own interests and ignoring those of society - the hallmark of the populist view of the world.

Another proximate cause for the rise of people-populism in Europe, that comes under the broad banner of globalisation, is the increase in immigration to Europe, especially since the early 2000s (Angeli 2018). Matteo Salvini in Italy, Jaroslaw Kaczynski in Poland, Sebastian Kurz in Austria, Andrej Babiš in Czech Republic can all be qualified, according to our definition, as people-populists<sup>11</sup>. They all stand on a broad-based platform to embody the will of the people, the so-called 'silent majority' - while rejecting minority groups, especially the migrants themselves. As Angeli explains, the rise of populism is the result of a process that begins with a shock that precipitates overwhelming immigration, such as civil war in Africa that has led to large numbers of migrants crossing the Mediterranean Sea from south to north over the last decade. This triggers fear in society that the provision of public goods will be jeopardised - as well as their cultural identity and the ability of locals to find jobs. A people-populist backlash that promises to protect the 'silent majority' is the result.

Donald Trump's inauguration speech, delivered when he took up the presidency in January 2017, was overtly people-populist. It reads as follows:

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<sup>&</sup>lt;sup>11</sup> While Viktor Orban in Hungary may have started as a people-populist, he now acts as a pseudo-populist.

We are transferring power from Washington D.C. and giving it back to you, the people. For too long, a small group in our nation's Capital has reaped the rewards of government while the people have borne the cost. Washington flourished but the people did not share in its wealth. Politicians prospered but the jobs left, and the factories closed. The establishment protected itself, but not the citizens of our country. Trump (2017).

Notwithstanding this rhetoric, during his time in office as US President, Trump has, by common consent, turned out to be an exemplar of pseudo-populism!

In this context, it appears that the spread of social media has allowed society to coordinate in ways that were not possible in the past, enabling it to respond to shocks created by globalisation in populist fashion. Binmore (2022) discusses how modern technology in the form of social media has enabled disaffected members of society to coalesce in challenging established social norms, with the coalitions so formed threatening to undermine the existing social contract in the narrow corridor.

As an example, Binmore cites Trump's 'big lie' that the US election had been stolen. Republican voters (people-populists) and politicians (pseudo-populists) alike had an interest in perpetuating the lie as they perceived that it served their interests to keep Trump in office. Social media provided a new channel through which they could cooperate.

# 1.5 Remaining inside the narrow corridor, or falling out – with what prospects?

Using Hobbes' (1651) representation of the state as a Leviathan, Acemoglu and Robinson determine three possible long-run outcomes for society — as indicated in Figure 1, discussed in more detail in Section 2. If the country remains in the narrow corridor throughout its development, then the power of the state is matched by a proportional increase in the power of society - the case of the 'Shackled Leviathan'. The state is 'shackled' by institutions that constrain its inclinations to undermine the power of the people and to expropriate them. A classic example is through democracy, where the people get to determine who controls the organs of the state.

If the country falls out of the narrow corridor by responding to a shock in a way that increases the power of the state, however, then their prediction is that the power of the state will eventually completely overwhelm that of society, giving rise to a Despotic Leviathan. The state becomes predatory and expropriates the people. If the country leaves the narrow corridor in the other direction, by responding in a way that increases the power of the people, then the result is

an Absent Leviathan. State power becomes completely overwhelmed by that of the people as the country becomes effectively stateless.

What Acemoglu and Robinson do not consider, however, is a significant, but very different, possibility outlined in Binmore (2005, Chap. 12), for which he has coined the term Neofeudal. This is where, on departure from the narrow corridor, a social contract is sustained that, like serfdom, satisfies conditions for individual motivation and for social efficiency but is not free nor fair as seen from the standpoint of a country that has liberty.

Given a particular shock - precipitated, say, by globalisation — then, by distinguishing between responses which are people-populist and pseudo-populist, our framework highlights a variety of potential outcomes. Take the issue of waves of immigration, for example. Through the introduction of anti-immigration policies, *people-populist* leaders may threaten to push their countries out of the narrow corridor and, by gathering momentum behind 'mob rule', undermine the power of the state. This could ultimately lead to an Absent Leviathan, with exit from narrow corridor through an excessive increase in the power of society that leads to statelessness.

A pseudo-populist response, on the other hand, might involve coming out of the narrow corridor through an excessive increase in the power of the state and heading towards despotism. Thus, when in office, Donald Trump attempted to manipulate US democratic institutions so that he would be free of the requirement to leave the White House on losing the election. So, while standing on a people-populist mandate, he acted as a pseudo-populist in trying to push the country out of the narrow corridor through an increase in state power.

Populism may threaten to push a country out of the narrow corridor; but the outcome will depend on the resilience and capacity of the institutions that can prevent this. Here again, US experience proves illustrative. While Donald Trump posed an overt populist threat, US institutions have, so far, proved sufficiently robust to defuse this threat and keep the country in the narrow corridor. Our conclusion is that the downside risks come not so much from populism itself, but from failures in the country's institutions to address the underlying concerns that give rise to populist resentment. It is this failure that would in turn lead the country to exit from the narrow corridor.

#### 1.6 A brief survey of related literature

The early literature on the economics of populism (and some more recent work in that tradition) focuses on the fact that populists tend ultimately to be or become authoritarian: hence our term pseudo-populists. While such populists may at first pursue a policy agenda that appears to be in the interests of the

people, they ultimately fail to do so and the policies they enact hurt those who elected them (Sachs 1989, Dornbusch and Edwards 1991). In practice, such leaders often end up using their time in office to increase the power of the state and reduce that of society (Acemoglu, Egorov and Sonin 2013).

Over the time-period that this literature developed, pseudo-populism was mostly a Latin American phenomenon and so there was a tendency to frame it in terms of the Latin American experience. Seen in terms of our discussion, however, we would not be inclined to characterise these countries as being in the narrow corridor. Our framework suggests interpreting Latin America's experience with populism as being one of pseudo-populist leaders *keeping their countries out of the narrow corridor* by increasing the power of the state rather than society!

In shifting the focus to European and American populism, we consider countries that *begin in the narrow corridor* with the norms and institutions that typically serve to keep them there. This takes the discussion away from the Latin American experience, and that of developing countries more generally, and shifts the focus to considering the more recent wave of populism in a developed-country setting.

In focusing on the recent wave of populism in Europe and the US, one is drawn to consider the political science literature on the conditions for the emergence of populist parties. That literature places significant emphasis on the institutional arrangements that make it possible for populist parties to play a pivotal role in government and policy-making: the so-called 'supply of populism'. These papers tended to focus initially on the emergence of parties on the radical right (Norris 2005, Mudde 2007, Golder 2016), but more recently on the radical left (Pauwels 2014, Stavrakakis and Katsambekis 2014).

Only relatively recently has the attention of political scientists shifted to the 'demand for populism' - the inclination of voters to shift their allegiances away from the traditional parties of the left and right and towards populism. Inglehart and Norris (2016) observe that cultural variables outweigh economic ones in the decision to vote for a populist party (rather than to abstain or vote for a non-populist party). Guiso, Herrera, Morelli and Sonno (2018) are the first to consider the interaction of demand and supply factors in examining the recent wave of populism.

#### 1.7 What is to come

This paper is structured as follows. In Section 2, we briefly review Acemoglu and Robinson's idea of the narrow corridor and go on to discuss our formalisation of this idea in non-technical fashion. We then use it to consider contrasting

people-populist and pseudo-populist responses to an exogenous shock - and where these might ultimately lead. In Section 3, we examine the 'microfoundations' of these responses using Binmore's game-theoretic analysis of social contracts (as efficient and sustainable equilibria of repeated games of altruism). This leads to considering whether populist responses to an exogenous shock will leave a country in the narrow corridor or not; and what unhappy outcomes may be in prospect in the latter case.

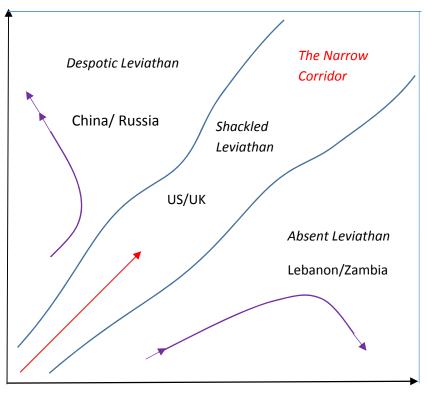
Section 4 concludes with a discussion of how society might avoid being pushed outside the narrow corridor despite such populist responses. Technical details for the derivation of our model of the narrow corridor, based on a 'competing species' behaviour, are placed in Annex 1.

## 2. The Narrow Corridor - and institutions that support it

# 2.1 Acemoglu and Robinson (2019)

The framework of Acemoglu and Robinson is illustrated in Figure 1 which parameterises economic, political, and social outcomes for a society in terms of the balance of power between the state and society. The horizontal axis measures the power of society in terms of its norms, practices and institutions,

#### Power of the State



**Power of Society** 

Figure 1 The evolution of Despotic, Shackled and Absent Leviathans

especially when it comes to acting collectively, coordinating its actions and constraining political hierarchy. The vertical axis measures the power of the state, similarly combining several aspects including the power of political and economic elites and the capacity and power of state institutions (AR, p. 63). The three regimes discussed in the Introduction are illustrated (along with cases in point): those of Shackled Leviathan (in the narrow corridor), Despotic Leviathan (above the narrow corridor), and Absent Leviathan (below the narrow corridor).

Note that these dynamic paths, to be elaborated upon below, may be subject to substantial shocks. So a country that is under a Despotic Leviathan could be pushed into the narrow corridor by a shock that increases the power of society to constrain that of the state. This is what happened to aid the development of democracy in Ancient Athens. Likewise a country inside the narrow corridor could be subject to a shock that pushes it outside — as appears to be the case in modern-day Hungary. Such shocks can have substantial long-run effects insofar as they lead to 'crossing the border' from one regime to another.

# 2.2 A simple formalisation of the narrow corridor and populist responses to an exogenous shock

Acemoglu and Robinson (2017), hereafter AR (2017), develop a theoretical model that gives rise to the phase diagram presented in Figure 1. Like inventors vying for a patent, where the winner takes all, state and society can engage in intense competition that supports liberty and gives rise to political and economic development. In our view, this feature of the winner taking all does a good job of characterising the situation *outside* the narrow corridor, where one group does ultimately take all power. But it does not seem to do so well at characterising the situation in the narrow corridor itself, where cooperation seems key.

A tractable model that has the same basic features as those illustrated in Figure 1 above is developed in Miller and Zissimos (2021). For present purposes it suffices to present the 'phase portrait' obtained, shown in Figure 2 below (with a brief summary of the equations provided in Annex 1).

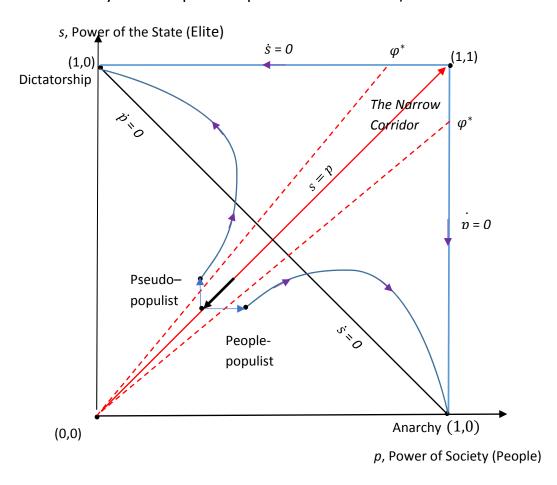


Figure 2 An adverse globalisation shock followed by different Populist responses

As in AR (2017), the power of society - representing 'the people' - is denoted by p, and the power of the state, managed by an elite, by s; and these are measured on the horizontal and vertical axes respectively with the variables on a scale of 0 to 1, with 0 representing 'no power' and 1 'maximal power'. The cone bounded by dashed red lines illustrates the narrow corridor in our model. The solid red arrow on the diagonal shows the path of a country where the evolution of power is exactly balanced between the two groups until both become maximal in the upper right hand corner of the diagram. The parameter  $\varphi^*$  helps to capture the width of the narrow corridor in our framework, within which some deviation from an exact balance of power between the state and society is still consistent with mutually reinforcing growth.

While the main features of this model are broadly similar to those of AR (2017), there is an important difference in the respective characterisations of the narrow corridor. In their case, because competition between the state and society is treated as a contest where winner takes all, faster growth in the corridor stems from increasingly frenzied competition. In our case, however, life in the narrow corridor is seen as relatively harmonious, with both groups enjoying faster growth of power as an externality from co-evolution and cooperation. Outside the narrow corridor, however, this benefit is lost as the more powerful group uses its superior position to undermine the power of the 'under-dog' in an application of Competing Species dynamics<sup>12</sup>. In the limit, the 'top-dog' enjoys absolute power.

Figure 2 also includes a heuristic illustration of the possible implications of an adverse globalisation shock<sup>13</sup>, indicated by the black arrow located on top of the red arrow in the narrow corridor but pointing in the opposite direction. In principle, there are many ways in which globalisation shock could affect state power and the power of the people. We illustrate it here as decreasing both, as firms and even individuals become more footloose and hence more difficult for the state to tax, while at the same time (domestic) people power is potentially undermined by the presence of immigrants who compete for jobs. (How this outcome relates to the micro-foundations of a globalisation shock is discussed further in Section 3 below.)

Two different types of populist response are shown. The horizontal arrow shows a potentially powerful *people-populist* response which seeks to reverse this

<sup>&</sup>lt;sup>12</sup> For a technical account of how species compete for limited resources, see Arrowsmith and Place, 1992

<sup>&</sup>lt;sup>13</sup> Such as a wave of immigration, considered further in Section 3 below.

shock by increasing the power of the people. Should this succeed in pushing society out of the narrow corridor, this would put society on a trajectory that ultimately maximises the power of the people, but completely suppresses the power of the state - and, as Hobbes warned, takes away incentives for economic innovation and creativity. The rise of right-wing anti-immigration parties in Europe discussed in the Introduction could illustrate such pressure to leave the narrow corridor.

It is important, however, to draw a distinction between this kind of radical populist response and one that leaves society within the narrow corridor, like the activism that led to the Reform Act of 1832, triggered by demands to give representation to new industrial towns with large increases in population due to the Industrial Revolution. Though the protests that gave rise to this Act were widespread and sometimes violent (Aidt and Franck, 2015), their function as a strategic threat led to the parliamentary electoral system becoming a good deal more representative. This would be illustrated by an increase in the power of society, but one that AR characterise as a positive step in progress within the narrow corridor, not one that led outside.

To return to Figure 2, the vertical arrow shows a *pseudo-populist* response that increases the power of the state – possibly by enough to take society outside the corridor. This is paradoxical in that it does not increase the power of the people. In the introduction, the case of Donald Trump was given as an example as he was elected to the US Presidency on a populist mandate, but used his position to try to dismantle US institutions that support democracy - and hence increase the power of the state. A number of Latin American presidents have been more successful than he was in amending the constitution of their countries to extend their presidential term limits, thus increasing the power of the state at the expense of the people. This type of pseudo-populism is so prevalent across Latin America, indeed, that Dornbusch and Edwards (1991) define economic populism entirely in these terms!

This second type of populist response can have very different ramifications from the first. As indicated in Figure 2, it could, for example, put the country on a trajectory towards Despotism, whereby the state is ultimately able to reign supreme and crush the power of the people. This outcome is often characterised by excessive 'taxation' as the state sets up extractive institutions to maximise the rents that they can collect from office in the short term. In the longer term, liberty will be thwarted as the incentive of individuals to be

economically innovative and creative is crushed by the threat of expropriation by the state.

As indicated earlier, however, the outcome may not be as extreme as Despotism. The result could instead be to establish 'Neofeudalism', where the state becomes disproportionately powerful, but does not crush the people completely. This kind of outcome is what we believe characterises modern-day China and Russia, where people enjoy some degree of autonomy and well-being, but are far from enjoying liberty and the full panoply of civil and human rights.

# 2.3 How to maintain social norms and institutions – by controls on populism?

Since leaving the narrow corridor can have such dire consequences, it is worth considering historical examples of how beneficial social norms and institutions can be preserved intact. To see how 'stages of punishment' can be used for this purpose, Binmore (1998, 2005) considers evidence from hunter-gatherer societies. These, he reports,

operate a social contract that holds the power of any individual in check by bringing to bear the power of the group as a whole whenever anyone shows signs of getting bossy. At first, the bossy character is mocked. If he persists, he is ostracised. In extreme cases, he may be expelled from the group altogether – in which case he will be lucky to survive. Binmore (2005, p.41)

AR, for their part, look at developments in ancient Athens, the birthplace of democracy. They report that one of the ways in which Solon (c. 630 –c. 560 BC) institutionalised popular control over elites was via his Hubris Law which 'created the crime of *graphai hubreos*, aimed at combatting humiliation and intimidation of the people by a member of the elite. It enabled Athenians not only to control the elites, but also to enjoy liberty from the dominance of powerful individuals'. (AR, p.19)

In proceeding to discuss how Athens 'gradually built one of the world's first Shackled Leviathans, a powerful, capable state effectively controlled by its citizens', they observe that:

Cleisthenes<sup>14</sup> formalised the institution of ostracism as a means of restraining the political dominance of powerful individuals. ... Like Solon's

 $<sup>^{14}</sup>$  who lived c. 570 – c. 508 BC and is credited with being 'the father of democracy'.

Hubris Law, it was a tool using and transforming the norms of society for disciplining elites. According to the law of Cleisthenes, every year the assembly [of all male citizens] could take a vote on whether or not to ostracise someone. If at least 6,000 people voted and at least half of them were in favour of an ostracism, then each citizen got to write the name of a person whom they wanted ostracised on a shard of pottery. The person whose name was written on most shards was ostracised – banished from Athens for ten years. (AR, pp.44,45).

Ostracism was used sparingly, and only fifteen people were ostracised over the 180-year period when the institution was in full force; but just the threat of ostracism was a powerful way for citizens to discipline elites. (AR, p.45).

The *sequencing* that Binmore describes – summarised as laughter, boycott and expulsion – includes some relatively low-cost, and hence frequently used, mechanisms: but the institution of ostracism was evidently more cumbersome and costly. Yet norms and institutions operating at all levels are likely to have been critical in helping to prevent departures from the narrow corridor.

An interesting historical parallel that comes later, in medieval Italy, is reported by AR. There is evidence of the earliest 'stage of punishment' in Siena where, we are told:

Norms were brought to bear to protect the commune from the Nine and other politically powerful individuals. For example, taking a page from the Athenians who came up with the Hubris Law, you could give politicians that were too big for their britches a "bad name" – literally. ... Get too powerful or misbehave, and you risked getting a surname featuring Caca. (AR, p.132).

Arguably, the early stage of such a sequence has recently been seen in the UK. With the government having taken very substantial powers of social control in light of the COVID-19 pandemic, a key member of the government was nevertheless forced to resign as Health Secretary despite getting the backing of the Prime Minister. Why so? Surely because - after tabloid revelations of him locked in close embrace with an office colleague – for him to tell the public to stay two metres away from people outside their households would have provoked not compliance but mocking laughter!

The proroguing of Parliament in 2019, so that MPs were unable to discuss matters relating to Brexit, called for a more robust institutional response however, as discussed in below in the Conclusion.

## 3. The micro-foundations of populist responses

To characterise possible 'micro-foundations' of the populist responses illustrated in Figure 2, we draw on Binmore (1998, 2005). To begin with, however, we outline how he formalises a 'social contract' in terms of a two-person bargaining problem. The key idea is to consider a social contract as an element of:

the two-dimensional set X of all feasible agreements. The two coordinates of a point in X represent the payoffs that the two players will receive if they agree on this point, measured in notional units of utility called utils. The boundary of the feasible set X consists of all the efficient agreements that are available.

When offering a social contract interpretation of the bargaining problem, each point in the feasible set X is identified with the pair of utilities or payoffs that the parties [which he refers to as Adam and Eve] will receive if they coordinate on one of the many equilibria in the repeated 'game of life' that they face. The set X represents the set of all their feasible social contracts [FSCs] – all the stable forms of social and economic organisation that are possible within the human game of life. The disagreement point D in a bargaining problem [here] represents the inefficient social contract that [the parties] are assumed to be operating at present.

The Nash Bargaining Solution<sup>15</sup> (NBS) is the rational agreement when the players have equal bargaining power.<sup>16</sup> (Binmore 2005, pp.23, 24, 26)

The set-up described above is illustrated in Figure 3, where Adam's payoff is measured on the horizontal axis while Eve's payoff is on the vertical axis. The set of FSCs is shown as X, bounded by the axes and the efficient boundary shown as the arc going through point N, Nash Bargaining Solution. What might this set-

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<sup>&</sup>lt;sup>15</sup> Where the product of the players gains over their disagreement payoffs is largest.

<sup>&</sup>lt;sup>16</sup> He goes on to caution, however that 'the Nash bargaining solution has no fairness content whatsoever. The notion of 'fairness' evolved for use in situations in which face-to-face bargaining isn't an option.' Binmore (2005, p. 27).

up imply about a populist response that could eject the bargaining parties from the narrow corridor?

# **3.1 Exogenous shifts** in the set of Feasible Social Contracts (FSC)

# (a) Balanced growth in the narrow corridor

We begin by discussing two changes to the set X. Consider first a *uniform expansion* of the set X to set Y as in Figure 3. Assume that, in the short run, what Binmore calls the Egalitarian Bargaining solution determines how the cake - here the set X - is to be divided between the two parties if agreement is reached. This solution is indicated by the ray from point D, whose slope, as shown, is determined by the social indices (SIs) of the two players<sup>17</sup>. In the figure the slope of the line DE is approximately 45 degrees, implying that Adam has the same social index as Eve. Increasing Adam's social index would flatten the ray and increase Adam's share.

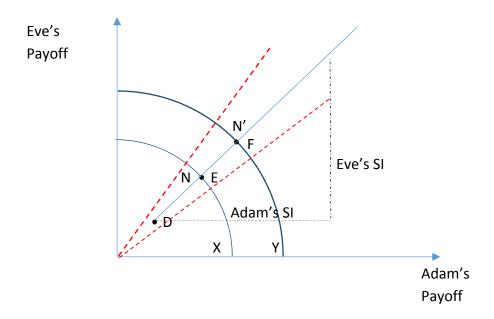


Fig 3 The 'fair' outcome following an exogenous symmetric change in the set  $\boldsymbol{X}$ 

For convenience, we begin with the Egalitarian Bargaining solution shown by E coincident with the Nash Bargaining Solution<sup>18</sup> at point N. Let the social weights supporting N as an Egalitarian solution be taken as a definition of what society

<sup>17</sup> Technically, as Binmore explains, along this ray each player's weighted gain is equal after their payoffs have been rescaled by dividing each player's payoff by his/her social index (SI).

<sup>&</sup>lt;sup>18</sup> To be found geometrically where a rectangular hyperbola, drawn with reference to the origin D, is tangent to set X.

currently treats as 'fair'. Note that when the feasible set expands uniformly to Y, the new Egalitarian Bargaining solution shown by F also coincides with the new NBS at N'. As both E and F lie on the same ray from D, fairness is preserved.

This example of balanced growth could serve to illustrate the process of development in the narrow corridor along the path indicated by the diagonal of Figure 2, for example. The dashed lines inserted in the figure are designed to suggest the boundaries of the narrow corridor. So, in Binmore's terms, these are the boundaries within which social contracts are Whiggish and hence supportive of liberty. As long as expansion proceeds within these bounds, the bargaining parties remain in the narrow corridor, and liberty is preserved.

## (b) Populist responses to an exogenous wave of immigration

What about exogenous shocks that, when substantial, can threaten to push society out of the narrow corridor? To apply Binmore's two-player bargaining ideas to the issues posed by populism, we begin by relabelling the horizontal axis as 'payoff for society (or people)' and the vertical axis as 'payoff for state (or elite)' as in Figure 4. To take this step, we can think of the case in which all members of the state are identical to one another, and all members of society are identical to one another. Each member of the state is different to each member of society, reflecting the differences in the powers of state and society described above. Since each member of each group is identical, we can now model this situation as a two-player bargaining game.)

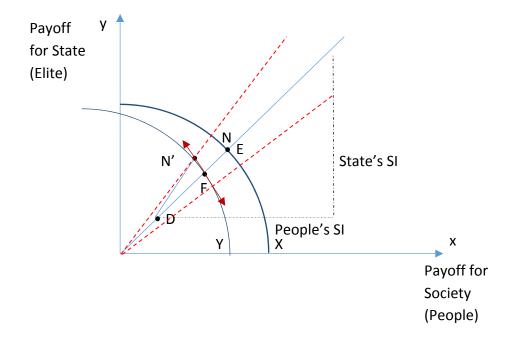


Figure 4. Immigration shock with F as fair outcome, given by pre-existing social weights

The initial equilibrium is at the Nash Bargaining Solution labelled N; and assume, as before, that this is also the Egalitarian solution E – lying on the ray from the disagreement point D, with slope determined by the Social Indices as indicated. Let the impact of an exogenous immigration shock, judged to reduce the utility of the people, be to move the set of FSCs *sideways to the left* from X to Y as shown in Figure 4.

Immediately after the shock, the fair equilibrium, using the pre-existing set of weights, will be at point F, where the ray DN cuts the efficient frontier of set Y. With this as the short-run outcome, the people suffer a loss of utility. In the medium term - where, as Binmore assumes, the social weights move to support the revised NBS at N' - this will involve a rise in the social index for the state (Elite) and a further loss of payoff for the People. (Annex 2 presents more detail on how these equilibria are determined; and alternative cases where the payoff to the state can ultimately remain intact, or even increase.)

What could a populist do? Reversing the shock by imposing an anti-immigration policy would, in principle, be the objective of a people-populist who sought to remedy these outcomes. But, subject to the Binmore's restriction that neither party can deliberately shift the set of FSC, taken to be exogenous<sup>19</sup>, the best that can be done, is to *shift the choice of social contract from F so as to increase the payoff of the people, at a cost to that of the state, as indicated by the arrow pointing down to the right in the figure.* Initially this proceeds along the efficient frontier in clockwise fashion; subsequently, however, it leaves the set of Feasible Social Contracts as populist pressure pushes society outside the Narrow Corridor.

This would hardly appeal to a pseudo-populist gaining office in the light of the shock: for - by talking a lot but doing nothing - he or she could enjoy the increase in state payoffs that results from the shift to the N' that Binmore predicts will happen over time! The temptation would be to increase the state's payoff even more. This can be achieved with efforts to shift the social contract to favour of the state, as indicated by the arrow pointing upwards to the left. This initially moves along the frontier in an anti-clockwise direction; subsequently, as the

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<sup>&</sup>lt;sup>19</sup> except for actions that violate the existence-conditions for social contracts.

pseudo-populist wields ever greater power, it leaves the set of FSC as society leaves the Narrow Corridor.

An important alternative also needs to be considered, however: that is to *stay* on the efficient frontier and keep moving in an anti-clockwise direction by replacing free and fair social contracts by increasingly Neofeudal alternatives (not shown here but discussed further below, see Figure 5).

Such contrasting responses provide some background to the arrows in Figure 2, which can take equilibrium outside the Narrow Corridor. An obvious cause for concern is how a pseudo-populist may, by exploiting public concern, shift society onto trajectories that may lead either to Despotism or to Neofeudalism sustained by a social contract which circumscribes justice and liberty.

# **3.2 No exogenous shift** in the set of Feasible Social Contracts

## (a) Formation of Dissident Coalitions

Even without exogenous changes to X, other shocks may threaten the social norms associated with the narrow corridor. Binmore (2022) discusses, for example, how modern technology in the form of social media has enabled disaffected members of society to form coalitions that challenge social norms – the mob invasion of Congress in protest against the handover of power from Trump to Biden in January 2021 being a case in point. Such coalitions can, he argues, undermine the equilibria that sustain the existing social contract in the narrow corridor - opening up the prospects discussed immediately above.

# (b) Evolutionary drift

Like the 'genetic drift' that causes a new population to be genetically distinct from its original population, random deviations in human behaviour - as when individuals act in a bossy or lawless way - can also pose a threat to the existing social contract. The 'stages of punishment' discussed earlier are meant to prevent this. Should they fail, however, 'free and fair' social contracts will no longer be sustainable. What then?

#### Prospects with no social contract

The trajectories leading to Despotism or statelessness, discussed above in the context of Figures 1 and 2, could describe the contrasting prospects facing society when existing social norms are destroyed without replacement (as one

or more of the necessary conditions for sustainable social contracts fails). The history of the Soviet Russia under the dictatorship of Stalin (cited by Binmore, 2005, p.189) illustrates one such an outcome – of Despotism. The current situation of Lebanon (cited by AR, pp. 59-63), where the capital has subsequently been shattered by an explosion from cargoes left unattended for years in the harbour, may illustrate another – of statelessness, an Absent Leviathan.

# Prospects with a Neofeudal social contract

There is another possibility, more orderly perhaps but disturbing nonetheless. This consists of shifting to a Neofeudal social contract, which is stable and efficient but curtails freedom – and would not be regarded as fair from the standpoint of a country in the narrow corridor. Reducing the intensity of 'growth-blocking' by the top dog in the competing species model<sup>20</sup>, so as to leave the underdog retaining some power in the long run, illustrates such an outcome, see Figure 5.

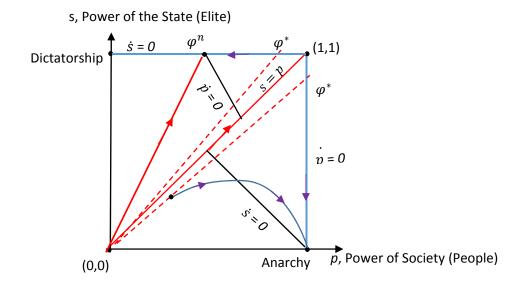


Figure 5 Linear path to long run equilibrium with a Neofeudal Social Contract.

With such damping of the conflict, it can be shown that there will be a linear path of stable convergence to a long run equilibrium of  $(\varphi^n, 1)$  where  $\varphi^n < 1$ , as indicated on the top edge of the figure. Relaxing the punitive behaviour of

 $<sup>^{20}</sup>$ Specifically, setting  $\gamma=1-\varphi^n$  in equation (3) of Annex 1.

the 'top dog' in such fashion may indeed better serve the interests of the supreme leader than root and branch destruction of all opposition. Recent moves toward autocracy by President Putin in Russia and President-for-life Xi Jinpeng of China may be of this type, sometimes labelled Neoautocracy.

#### 4. Conclusion

We conclude by returning to the question of how a country might avoid being forced from the narrow corridor by the forces of populism. Our analysis has emphasized the benefits of free and fair social contracts – and has dramatised the potential consequences of failure to stay in the narrow corridor. This does not, of itself, provide a direct answer to this question; but should help in the process of designing mechanisms to preserve justice and liberty.

Historical – and pre-historic! - practices to resist challenges to a free and fair social order, as already discussed, are of course still relevant. Thanks to the development of social media and of advanced techniques of social surveillance, however, yet further challenges have arisen. These have increased the vulnerability of democratic systems like that of the US, on one side of the globe, while enhancing the powers of social control for Neofeudal states like China and Russia on the other.

Recent experience in the US and in the UK offers persuasive evidence that having a political system of 'checks and balances' can play a key stabilising role. For if a populist response involves members of society acting unlawfully, they can be brought to account through the judiciary. Likewise, the executive branch of government can be scrutinised effectively by a democratically elected legislative branch, supported by the judiciary if necessary. It was in this spirit, that the UK Supreme Court in 2019 ordered the Conservative government to reconvene Parliament which had been prorogued rendering MPs unable to debate important issues relating to Brexit.

Other institutions of government and society may also play a part<sup>21</sup>. As Angeli (2018) points out, the rise of populist anti-immigration policy was driven not by immigration *per se*, but by the perception that the existing state apparatus had dealt with the crisis so poorly: populists were able to gain traction because the state seemed ineffective in reaching a solution.

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<sup>&</sup>lt;sup>21</sup> Ignatieff (2020) includes the role of Universities and the media.

The pressing issue of global warming - and the consequential rise of Green parties and of protest movements like Extinction Rebellion to combat this - demonstrates clearly, in our view, that aiming to supress such popular responses without addressing the underlying causal factors is not the answer. Norms and institutions are needed to ensure that populist fervour be channelled into more practical responses to keep society in the narrow corridor.

It is incumbent on the existing political parties to confront the issues of public concern in order to come up with creative solutions. This may involve what Benjamin Disraeli once described as 'stealing the clothes' of those who challenge the status quo; or perhaps forming an alliance with them, as in Germany where the Christian Democrats have been replaced by a 'rainbow coalition' including the Green party. It could also involve seeking solutions outside the country in the form of international cooperation. As regards immigration, for example, George Soros has proposed that European countries should cooperate in providing resources to the countries the migrants are fleeing from, so as to reduce their incentives to do so – thus exporting hope instead of importing despair.

Soros himself, who narrowly escaped the clutches of Fascist and Communist forces in his youth, has recently had to swallow a bitter pill as pseudo-populist President Orban has progressively undermined multiparty democracy and academic freedom in Hungary. For in 2018 the Central European University he founded was forced by "lex CEU" legislation, drawn up by the Hungarian government in contravention of European law, to relocate from Budapest to Vienna.

While this provides a depressing symptom of problems to be faced, European history post-World War II offers a more positive perspective. What Karl Popper (1945) dubbed our Open Society has shown itself able to defeat the siren calls of Fascism and Communism: so it should surely be able to stop excesses of populism depriving us of liberty and justice.

### **Postscript by Marcus Miller**

The view expressed in the paper - that Russia was on the path to a stable autocracy — has, in my view (which is not shared by my co-author), been shattered by the launch of a full-scale military invasion of Ukraine. With the threat of 'consequences you have never experienced before in your history' for

any nations that interfere, the Russian President has chosen to nurture a messianic Despotic Leviathan rather than enacting some form of rational Neofeudalism.

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## Annex 1. Equations of our formalisation.

As in their background paper, AR (2017), we use the notation of p for power of society (the people) and s for the power of the state (the elite), both constrained to lie between zero and one.

In the narrow corridor: cooperative coevolution

We broadly assume a common pattern of logistic growth, so

$$\dot{p} = \beta^* (1 - p) p \tag{1}$$

$$\dot{s} = \beta^* (1 - s)s \tag{2}$$

which has the convergent linear path shown running along the diagonal of Figure 2; but many other nonlinear convergent paths as well.

At the edges of the Narrow Corridor, however, the dynamics are modified to ensure proportional growth. Thus on the edge lying above the diagonal, where  $p=\varphi^*s$ ,  $\varphi^*<1$  so p is the lesser power, s continues as in (2) above, but p speeds up, so

$$\dot{p} = (\beta^*/\varphi^*)(\varphi^* - p)p \tag{1}$$

Likewise, below the diagonal where  $s=\varphi^*p$  ,  $\,\varphi^*<1\,$  , p continues as in (1) while s speeds up, so

$$\dot{s} = (\beta^*/\varphi^*)(\varphi^* - s)s \tag{2'}$$

With edges defined by these cases of limited but persistent inequality, the Narrow Corridor may be widened to the cone shown in Figure 2. Within this cone, however, a wide variety of progressive dynamics processes may be contained<sup>22</sup>.

Above the narrow corridor: competing species with state as 'top dog'

When s is the stronger power, it is assumed to act so as to reduce the growth of people-power by a term  $\gamma s$  that reflects its own superiority, so:

$$\dot{p} = \beta(1 - p - \gamma s)p \tag{3}$$

while its own state power evolves unchecked much as before, so

$$\dot{s} = \beta(1-s)s \tag{4}$$

except that, without cooperation, convergence is now slower than in the narrow corridor i.e.  $\beta < \beta^*$ .

Assuming the 'growth-blocking' term  $-\gamma ps$  only applies for  $p < \varphi^* s < s$ , this will, for  $\gamma = 1$ , generate dynamics outside the narrow corridor above the diagonal, converging to the point (0,1) as shown in Figure 2.

<sup>&</sup>lt;sup>22</sup> Including, for example, stochastically disturbed versions of (1) and (2), with the edges acting as reflecting barriers.

Below the narrow corridor: competing species with the people as 'top dog'

When the people have more power, p continues much as before, so

$$\dot{p} = \beta(1-p)p \tag{5}$$

except that convergence is now slower than in the narrow corridor as  $\beta < \beta^*$ .

For s < p, however, the growth rate of the state will be impeded by  $-\gamma p$ , a term designed to capture how the people will try to 'cripple the power of elites', so

$$\dot{s} = \beta (1 - s - \gamma p) s \tag{6}$$

Assuming the 'growth-blocking' term  $-\gamma p$  only applies for  $s < \varphi^* p < p$ , this will, for  $\gamma = 1$ , generate dynamics outside the narrow corridor below the diagonal, converging to the point (1,0) as shown in Figure 2.

#### Annex 2. Effect of a shift in the set of Feasible Social Contracts.

The idea of Figure 4 in the text is to show how shifting the convex set X of FSCs to the left will change the ratio of Social Indices in favour of the elite when the new Nash Bargaining equilibrium is reached. Here the results shown are derived algebraically for a shift of  $s \ge 0$ .

The exercise involves maximising a strictly convex preference ordering M=xy on the set X, also assumed to be strictly convex. Assuming both are differentiable, a necessary condition of optimisation is that they be tangent, i.e. the slope of the objective function must be equal to that of the constraint at the point of maximisation (Dixit, 1990). Note that the slope of the objective function is found by differentiation; for setting M=ydx+xdy=0 implies  $\frac{dy}{dx}=-\frac{y}{x}$ .

For analytical convenience, consider the quadratic case, where the solution is easy to find. Let the set X be a quarter circle, so  $x^2 + y^2 = R$ , where R is the radius and  $x, y \ge 0$ .

The slope of the objective function has been shown above. Now consider the slope on the boundary of the constraint set X (i.e. before shifting, so s=0).

Setting dR = 2xdx + 2ydy = 0 for the constraint in this case, implies that  $\frac{dy}{dx} = -\frac{x}{y}$ .

Setting the two equal implies  $-\frac{y}{x}=-\frac{x}{y}$ , so y=x i. e. the initial NBS lies on the  $45^{\circ}$  line; see N in Figure below. (Since  $2x^2=2y^2=R$ , so  $x=\sqrt{R/2}=y$  is the desired Nash Bargaining Solution.)

To determine the slope on Y (i.e. after shifting, for s>0), note that the constraint becomes  $(x+s)^2+y^2=R$ . So setting dR=2(x+s)dx+2ydy=0

implies 
$$\frac{dy}{dx} = -\frac{x+s}{y}$$
.

Setting the two slopes equal, so  $-\frac{y}{x} = -\frac{x+s}{y}$ , implies  $y^2 = x^2 + sx$  so

 $y = \sqrt{x^2 + sx}$ . Hence the relevant Nash Bargaining Solution will be where this intersects the boundary of Y at N', as shown in Figure A1.

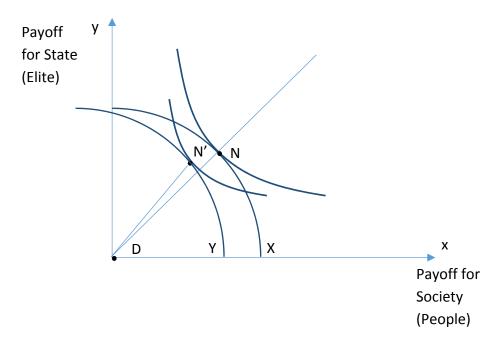


Figure A1 Effect of shifting to the left a strictly convex (quadratic) constraint set, X

In this illustrative example the payoff for the People falls both in the short run and in the longer run at N'. The possibility that the Elite's payoff remains the same at Y and X is also ruled out. To see this, note that, as  $y^2 = x^2 + sx > x^2$ , so the new NBS labelled N' must lie above the  $45^{\circ}$  line. That it must also involve a lower value of y at N' than at N can be proved by contradiction.

Assume that N' does have the same y value as N, i.e.  $y = \sqrt{R/2}$ . This implies that, after shifting, the tangency solution must occur with the same slope of the constraint as at N, i.e.  $\frac{dy}{dx} = -1$ . At the assumed new Nash Bargaining Solution, the slope of the objective function still has to satisfy the optimality condition that  $\frac{dy}{dx} = -\frac{y}{x}$ . But y has remained the same while x has decreased by s; so it must have become steeper. This yields a contradiction. (The same logic rules out N' having a higher value of y than at N.)

Note, however, that if the constraint set X were *not differentiable* at the point of contact, the Elite's payoffs could remain the same for Y as X, as indicated in Figure A2.

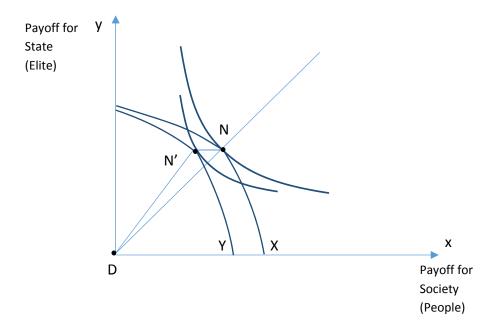


Figure A2 A kink in the set X can keep payoff for Elite constant.

If, however, the shift of the set X were not just to the left, but with an upward displacement too, so that it becomes elliptical, then the Elite's payoff could easily increase, while that of the People decreases, see Figure A3.

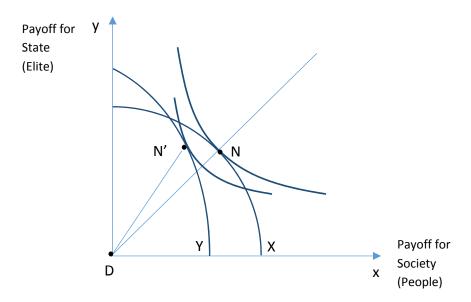


Figure A3 A shift of X to NW (i.e. upwards as well as to the left) can increase the payoff for the Elite.