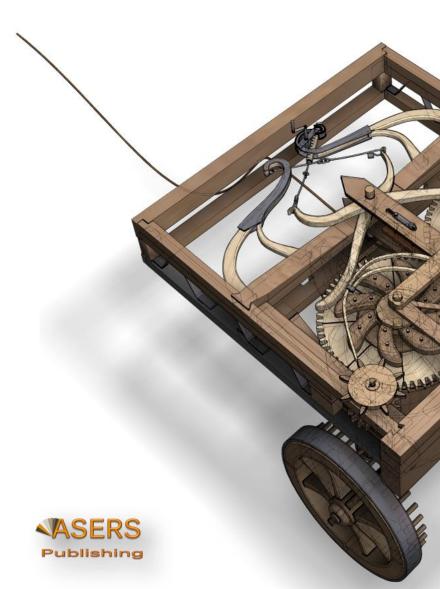
## Theoretical and Practical Research in Economic Fields

Biannually

Volume XIII Issue 2(26) Winter 2022

**ISSN** 2068 – 7710 Journal **DOI** https://doi.org/10.14505/tpref



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## RUSSIA THE BACKGROUND OF THE RUSSIAN INVASION OF UKRAINE

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### **Suggested Citation:**

Hanappi, H. (2022). Russia. The Background of the Russian Invasion of Ukraine. *Theoretical and Practical Research in Economic Field*, (Volume XIII, Winter 2022), 2(26): 116-129. DOI: 10.14505/tpref.v13.2(26).02

Article's History:

Received 29th of October 2022; Revised 4th of November 2022; Accepted 17th of November 2022; Published of 23rd of December 2022. Copyright © 2022 by ASERS® Publishing. All rights reserved.

## Abstract:

This paper presents an interpretation of the underlying dynamics of global political economy, which has led to the invasion of Ukraine by Russia in February 2022. It thus is an alternative to interpretations that view the individual psychological traits of Vladimir Putin as the driving force behind this event. To enable a more sensible account, it turns out to be necessary to go back in the history of the conflict between Russia and NATO to the times of the Cold War. Briefly, two important fields of methodology – a theory of power and game theory – have to be touched upon. Finally, the justified emotional disgust concerning Putin's aggressive war and the somewhat more detached scientific analysis are tried to be reconciled in the concluding paragraphs.

## Introduction

On the 24th of February 2022 the Russian Federation, represented by Vladimir Putin as the leader of its ruling class, proved that it is determined to return to its Stalinist roots. By starting a full-fledged war on its ethnic neighbour, the Ukraine, it demonstrated that it considers aggregate coercive physical power, manifested by its army, as the preferred tool to extend its power, to extend its reach of dominance and exploitation. As one of the two leading countries with a well-developed police and military structure controlling the exploitation mechanisms of so-called state-capitalism, it obviously surprised many observers by its ruthless direct aggression, disregarding all possible alternative ways of international conflict resolution. In a sense this type of war politics is currently the culmination of what I have called the transition of integrated capitalism (in this case state-capitalism) to **disintegrating capitalism**<sup>1</sup>.

There were early signs of this transition in the USA, see the attempt of Trump to become an autocratic ruler on the 6<sup>th</sup> of November 2021, but also in a more institutionalised way the constitutional changes in China and the RF were clear signs of a small autocratic elite in each of these empires to cement their position, to eliminate all democratic feedback mechanisms standing in their way. But while Trump failed (it remains to be seen if he can return at the next election), and the transitions in China concerned above all the implementation of high-tech surveillance systems, the outbreak of brutal military aggression in the Russian case is a new quality. It brings the global political system of disintegrating capitalisms on the verge of World War 3.

But is it correct to call the emergent class rule of a small autocratic elite 'capitalism', 'disintegrating capitalism'? To answer this question a brief review of the concept 'capitalism' is

<sup>&</sup>lt;sup>1</sup> Compare (Hanappi, 2019a, 2020a)

necessary: Capitalism is a form of social organisation of society that enables *exploitation*, exploitation of nature by man as well as exploitation of man by man. While the former is the very basis of the ability of the human species to dominate life on earth, the latter is the general condition for the dynamics of class structures within human societies. What had happened in the last 500 years is a transformation<sup>2</sup> of one such class structure, namely feudalism, into another class structure, namely capitalism. Thus, capitalism is a particular form of exploitation of one group of classes by another group of classes. The characteristic of this structural form is its dialectical interaction between (1) the entrepreneurial innovation activity of capitalist owners of the means of production and (2) the increasing gap between the exploited classes and the exploiting classes. Innovation enables higher labour productivity (more leisure time with the same number of products) and the introduction of new utility dimensions. This feature of capitalism has been called its historical mission. But the exploitative nature of capitalism at the same time leads to an allocation of the fruits of its historical mission in the hands of the exploiting classes. This is why the gap in wealth and income between the antagonistic classes increases. In the 20th century attempts to integrate parts of the exploited classes into the global capitalist process occurred, though brutally interrupted by fascist regimes, which replaced capitalist processes by direct coercive exploitation carried out by a hierarchically structured military (and police) class. The power<sup>3</sup> of this class combined direct physical, coercive power with the use of ideological power, a form of power that was substantially enhanced by new information technologies (broadcasting). After the breakdown of classical Fascism in 1945 a new wave of integrated capitalism in the Western hemisphere started to flourish. But since 1919, at least since the takeover of Stalin in 1924, the Soviet Union experienced a substantially different type of state development. There, power remained firmly in the hands of a small group of Bolshevists, of militarists that excluded members of the ordinary working class and streamlined the social organization of society according to their needs. They constituted a new exploiting class. As Stalin had announced, the goal was 'socialism in one country', in fact a misuse of the original use of the concept 'socialism' in the 19th century. As George Orwell has described satirically in his political satire 'Animal Farm' in 1945, the Soviet society had become an exploitative class structure. The power of the exploiting class was cemented by direct military and police force, democratic feedback loops were reduced to a minimum. This was the birth of a system that I have called Stalinist production system, (Hanappi 1992), a system that prevailed till 1990.

## 1. From 1945 to 1990

After 1945 the victorious **Western Alliance** experienced a second wave of integrated capitalism (the first wave appeared in the interwar period). With respect to macroeconomic policies this usually is dubbed as a period of dominance of Keynesian policies. It allowed the domestic working classes in rich Western countries to achieve better education levels, higher income shares, more secure employment conditions, and a voice in government decisions concerning domestic affairs<sup>4</sup>. But with respect to international relations no sign of integration occurred, quite the opposite took place: From the Cold War of the 50-ties to the Korea Crisis, the Cuba Crisis, and finally to the disaster in Vietnam a bipolar world was continuously moving along the possibility of a third World War. It is remarkable that the Vietnam War – the attempt of the US army to keep a military stronghold on the continent of Russia and China – was led by a US president of the democrats, J.F. Kennedy, and in the end faltered due to the socially progressive movements in the domestic economy, the anti-Vietnam movements. This was a clear sign

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<sup>&</sup>lt;sup>2</sup> Transformations are characterized by a combination of slower modifications interrupted by sudden revolutionary pushes, compare (Hanappi and Scholz-Wäckerle, 2017).

<sup>&</sup>lt;sup>3</sup> A more formalized approach to the concept of power is provided in appendix A.

<sup>&</sup>lt;sup>4</sup> This evidently was the time when European social-democratic parties became carriers of social progress and could make their mark as the political force offering a worker-friendly capitalist alternative to Stalinism. In the USA the democratic party assumed a similar strategy, e. g. by taking a stand against racism.

that in the early 70-ties integrated capitalism in rich Western countries had gained considerable strength<sup>5</sup>. A whole generation of young people was socialized during that period.

In the **Eastern hemisphere** the opposite development occurred: The revolt of the Hungarian population in 1956 and the rebellion of the Czech Spring in 1968 were brutally knocked down by Russian tanks, by Stalinist political practice. Again, a whole generation was socialized in a very specific political atmosphere of oppression of civil life, oppression that visibly had its root in Stalinist Russia. It is this experience of 45 years of being oppressed by the Russian ruling class, which explains why the large majority of the population in Eastern European countries see their independence from Russia as a *progressive social revolution*. Economically the exchange of products between Russia and its Eastern European satellite states typically concerned Russian oil and gas for Eastern European products manufactured with a better trained workforce, e. g. in Eastern Germany or Czechoslovakia. Since the Cold War foreign policy of the Eastern bloc first did not change much. Only when the West started its long journey towards a restauration of conservative roll-back, abolishing Keynesian politics, reversing integrated capitalism, i. e. when Ronald Reagan, Thatcher and Kohl became heads of state, only then a slight change in Eastern regimes started.

There are many different reasons why in 1990 the Soviet Union ceased to exist. One of them certainly is the lack of innovative power – technologically as well as socially - that a military regime and its command economy necessarily implies. Only the sectors important for its military force, e. g. weapons industry related research, were pushed. Another reason is the vulnerability of a strict hierarchical organization: Once the top decision-maker(s), e. g. president Gorbachev and his follower Boris Yelzin, tended to give up a strict streamlining of the regime, it could be expected that the whole pyramid below them will fall. Gorbachev later turned out always to have been closer to social-democratic ideas and Yelzin was even more attached to 'Western' ideology. Finally, the generally depressive mood in the Russian population confronted with stagnating welfare, corruption and complete lack of democratic feedback control surely also played a role in the silent disappearance of the Soviet Union. On the 31st December of 1999 Putin took over the leadership of a Russian Federation that had lost its role as the second large global power.

When the Soviet Union imploded and was replaced by the Russian Federation the strength of the exploiting class in Russia was severely reduced. Of course, the military circles maintained their overarching control - Russia remained a police state with a strict command-oriented economy. But it had to adjust to a considerably stronger world economy within which its interaction – the transformation of its exploited surplus into the world currency of US Dollars – had to be managed. Partly the respective top level of the military hierarchy could take care of this business, partly a group of newly emerging oligarchs was able to make its fortunes. As a member of globalized capitalism Russia, like China after Teng Hsiao Ping, was acting like any other capitalist state. The major difference of the two statecapitalist regimes in Russia and China was the way in which their internal social organisation was organised: they were, and still are, police states – a military elite controls all social relations. In Russia as well as in China a group of extremely rich oligarchs complements - nourishes and is nourished by the leading military that directs politics. It is thus justified to consider these state-capitalist countries as examples of disintegrating capitalism. The dominance of the military-industrial complex in the USA and its complement of super-rich billionaires works in a similar way, and is just another manifestation of disintegrating capitalism. When Trump's rioting mass tried to capture power with their run to the capitol, they were trying eliminate the last democratic feedback loop that usually still exists in the Western hemisphere. Luckily, this last step towards the authoritarian endpoint of disintegrating capitalism has been prevented.

Having sketched the trajectory from integrated capitalism in the West towards disintegrating capitalism approached by the three large empires (USA, China, Russia)<sup>6</sup> in the last decades, it is

<sup>&</sup>lt;sup>5</sup> In Europe this was the high tide of two-party coalition governments (in Austria even a social-democratic government) led by social-democracy.

possible to highlight some more recent features. These considerations are important to evaluate Putin's last move, 'last' in a double sense.

## 2. From 1990 to the War of 2022

But before going into these details the growth of the military structure of the Western hemisphere, of NATO, has to be brought into the picture. NATO was founded in 1949, mainly motivated by the intention of US president Harry Truman to prevent the extension of the Soviet Union in Greece and Turkey<sup>7</sup>. Today NATO consists of 30 member states sending their representatives to the North Atlantic Council, which is the top decision council. All top *military decisions* are taken by the Chiefs of Defence (CHOD) of the member states, actual control of military operations has the *Supreme Allied Commander Europe* (SACEUR). Since May 2019 this position is held by the US general Tod D. Wolters; this position is *always to be assigned to a US general*. In reaction to the founding of NATO in 1949 the Soviet Union and seven other Eastern European states founded the military alliance called the *Warsaw Pact* in 1955. It ended in December 1990 when the USSR was declared dissolved. To see how dominant military expenditure of the USA is in the world, one could compare the US share in total military expenditure of all countries in the world<sup>8</sup> in 2020 (40,3 %) with the corresponding share of Russia (3,2 %), China (13,1 %), and Germany (2,7 %). This explains why the US clearly is in a position to guide the decisions of NATO.

In the 90-ties, after the collapse of the Soviet Union, the basic strategic framework of NATO changed. While the Cold War was based on a static game theoretic framework, a model in strategic form, which highlighted that a limited, simultaneous build-up of nuclear weapons on both sides – USA and USSR – can lead to an '*equilibrium of deterrence*', the new doctrine that became fashionable was based on a repeated game in extended form<sup>9</sup>, which rather implied *perpetual disequilibrium*. The first US president, who after some time of hesitation subscribed to this new strategy was Bill Clinton, interestingly enough again a democratic president. In 1997 George F. Kennan, one of the famous designers of the Cold War strategy notes in his diaries:

That the Russians will not react wisely and moderately to the decision of NATO to extend its boundaries to the Russian frontiers is clear. They are already reacting differently. I would expect a strong militarization of their political life, to the tune of a great deal of hysterical exaggeration of the danger and of falling back into the time - honored vision of Russia as the innocent object of the aggressive lusts of a wicked and heretical world environment.

(Kennan, 2014, chapter 1997)

Despite the influence of political heavyweights like Kennan the USA via their military vehicle NATO continued to extend their military reach. The timeline of NATO's successes is telling:

1949: Founding Members:

Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, United Kingdom, United States

**Enlargements** 

- 1952: Greece, Turkey
- 1955: Germany
- 1982: Spain
- 1990: Germany
- 1999: Czech Republic, Hungary, Poland
- 2004: Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, Slovenia

<sup>&</sup>lt;sup>6</sup> The thrive towards authoritarian regimes that are built on police states can be observed in smaller countries in the semi-periphery too, e. g. Turkey, Hungary, Brazil, etc.

<sup>&</sup>lt;sup>7</sup> The so-called *Truman Doctrine* had the primary goal of containing Soviet geopolitical expansion during the Cold War. Its final form was presented to the US Congress on July 4, 1948.

<sup>8</sup> Data extracted from the SIPRI database www.sipri.org.

<sup>&</sup>lt;sup>9</sup> Compare appendix B for some details of the involved game theoretic models.

2009: Albania, Croatia2017: Montenegro2020: North Macedonia

It is visible how the speed of advance of NATO towards the East increased after 1999. From 1990 to 1999 Russia's domestic economy did not only frustrate foreign investors, this decade also was marked by the constitution of a new ruling class, which to a considerable amount consisted of individuals that already had been in power before 1990, supplemented by what later had been dubbed 'new oligarchs. President Yelzin, supported by his circle in the ruling party and in the military leadership, had to accept that in Afghanistan – a country under Soviet influence since 1979 – the US-supported Taliban took over power. After 1996 US troops themselves, forcing the Taliban out of the country, came close to the border of the former Soviet Union satellite states of Turkmenistan, Uzbekistan and Tajikistan. Yelzin thus came under severe pressure from the South. Also Taking place in the South of Russia, the first war against Chechnya, started by Russia in 1994, in the end was not successful. The peace of 1996 was only short-lived, Chechnyan terrorism continued, in 1999 a second war started. In the eyes of the new ruling class the presidency of Yelzin was a period of failure and complete loss of the superpower status the USSR had achieved in WW2. This was the situation when from 2000 onwards Vladimir Putin entered the stage.

At the turn of the millennium the working of the world economy had somewhat settled in the new hegemony of US-led global capitalism. The old doctrine of 'economic motives in the long-run will always win over short-term political resistance' allowed to start the transformation process of Eastern European countries on a slower, but sustainable pace. The vehicle of this *economic* integration was the extension of the *European Union*. But as was already visible in the founding years of the EU, this economic integration process was designed to take place under the military umbrella of US-led NATO. Military forces in Western European countries always were already integrated in hierarchical command structure of NATO. The political independence of Western European states was limited by the fact that their political ambitions by and large had to comply with the strategic goals of NATO. In the old Western states this room to move included a two-party system in which the social-democrats were a kind of insurance against too left-leaning influences of workers<sup>10</sup>. In Eastern European member states of the EU such a soft frontier was not necessary: The strong anti-Stalinist mood in the population lived on even though the blessings of capitalist welfare did not materialize. If popular frustrations reached the surface of public policy at all, then they were channelled in newly emerging nationalism, e. g. Hungary and Poland. As a consequence, EU extensions rather smoothly could go hand in hand with NATO extensions.

In Europe, US military hegemony implied – and was nurtured by – economic hegemony. Nevertheless, Eastern EU members soon played a particular role. In these countries the national ruling classes were a mixed group of newcomers to the rich table of global exploitation schemes<sup>11</sup>. In their own countries exploitable opportunities remained limited, seventy years of Stalinism had frozen productivity growth. Some clever young entrepreneurs had taken the chance of 'go west young man' and had left. What remained often were sly bureaucrats aiming at subsidies from Brussels, sometimes ganging up with semi-criminal circles. For the EU Eastern Enlargement slowly became a problem. Not so for NATO. Its latest territorial expansion was Montenegro, becoming a NATO member even before it became a member of the European Union.

The split between a military layer and the economic layer was not occurring in Putin's Russia. In a Stalinist regime the ruling class controls both simultaneously – and it does so by a hierarchical command structure. Of course, Putin noticed the change in the strategy of NATO (compare appendix B). But there was not much he could do. To see that NATO easily could destabilize, and in the end destroy Yugoslavia, split it up into many powerless little states, install a new (Albanian) state, Kosovo, just close

 $^{\rm 10}\,\mbox{A}$  borderline case was the government of Alexis Tsipras in Greece in 2015.

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<sup>&</sup>lt;sup>11</sup> An interesting case is the Czech Republic, which in some areas managed to squeeze in between semi-finished products imported from Asia and the consumer markets in richer Western European states.

to the remaining ally Serbia, all this served him as an example for a successful intervention via a mixture of quick military force and coordinated media policy - and cleverly circumvention of United Nations consent. In a similar way he viewed the political tactics of Donald Trump as adorable. Strike with full direct force if possible and always accompany your atrocities with a media campaign full of wild and ruthless lies. It also is quite telling that the last friendly visitor of Vladimir Putin just before he started the war in Ukraine was Viktor Orbán, another leader subscribing to this new autocratic style.

The tactical move to equip local rivals in an intended goal of conquest with weapons, so that they would produce a chaotic situation, which then could be used by the truly conquering state to 'bring peace'; this tricky game was played by the US in the Middle East several times too. In a somewhat more hidden way Putin tried to imitate this tactic by supporting the extreme right in Western European states. Of course, he was not able to produce a military shake-up, but at least some political turmoil, e. g. in France, Germany, Italy and Austria, was possible. And evidently, he had recognized that the Eastern advance of NATO was starting to play this game in Ukraine in 2014, replacing the 'neutral' friend of Russia, Yanukovych, by the Western ally Poroshenko. In Western media this event was called the Maidan Revolution. And this was justified as far as for the Ukrainian population it indeed seemed to be a promise to approach Western welfare standards. But from 2014 to 2022 this promise did not materialize. As in the other earlier cases in Eastern Europe a highly corrupt ruling class kept the Ukrainian population as poor as possible<sup>12</sup>. But in 2014 the strategy of NATO did not work: As an immediate answer to the Maidan Revolution Russia occupied the Crimea to secure its access to the Black Sea (the Southern and Western shore were already lost to NATO; Romania, Bulgaria, Turkey) and supported the separatists in two eastward provinces. The advance right to the border of Russia had led Putin to change his strategy.

In the Middle East Russia could keep its access to the Mediterranean Sea via Syria, the regime in Iran is endangered but not fallen yet, the complicated warfare between the USA and Russia got stuck in a stalemate. In the Far East NATO had been advancing too. Against the rise of China as a new superpower the US, UK and Australia had built the new military alliance AUKUS. From Russia's point of view this increase of hostilities against China should motivate Xi Jinping – the representative of China's ruling class, which had developed a similar form of state capitalism – to tolerate Russia's military interventions in the Ukraine. Moreover, military interventions, the use of brutal direct coercive force, has always been the instrument of choice in Stalinist regimes. But as the reaction of NATO and a newly united European Union quickly showed, the war on Ukraine fires back on the Stalinist regime in Russia. The ruling class in Russia is still controlling much of the public opinion. The grip of military and police on the civil society still exists. But banning Russia from the participation in the fruits of global welfare increase will stir up unrest in the Russian population in the mid-run. And China, which had advanced domestic electronic control and had diversified its funds – both, financially and politically - all over the world, China soon will moderate its support for Russia.

The fate of Putin and his generals is not clear yet. With respect to military force Russia cannot compete with NATO, in the meantime even China is stronger than Russia. It therefore was unwise to play the military card. In the West a bigger problem is the emergence of disintegrating capitalism, above all in the USA. New nationalism, the takeover of state power by small military-based elites, is not just a phenomenon that occurs on the capitalist periphery only. Disintegrating capitalism is moving to the centre stage. The fall of Putin's regime could be a sign of the fragility of such regimes. If this does not happen in the near future, it only will take a bit longer – but it is inevitable. Only then a new Russia can flourish.

## 3. Some Implications

When a few months ago, Joe Biden said that 'Putin is a killer', many observers thought that this is an exaggerated expression owed to necessary rhetoric of internal US politics. Since the 24th February of

<sup>&</sup>lt;sup>12</sup> Data shows that in 2021 Ukraine had a GDP per capita of 13.943 US \$, the lowest in Europe. Germany had 56.956 US \$ and even Albania had 15.225 US \$.

2022 it is evident that Putin's decision to invade Ukraine indeed has killed many thousand people – and it has also *killed the belief that the Russian government has finally overcome its Stalinist roots*. The bleeding wound of a fierce war taking place in Europe provokes the immediate wish to stop this war, to enforce a ceasefire. But as I am writing these lines the just carried out brief analysis (including the appendices) shows that this wish will not be fulfilled. The *fights in Ukraine will go on for many weeks*, until Putin and his circle consider their 'military intervention' to be a successful 'limited conflict'.

Despite the fact that success is not guaranteed – Ukrainian resistance is not broken yet – it is highly questionable what success of Russia finally would mean. It will be difficult to keep the country occupied, an artificially installed new government will need many Russian soldiers to keep a permanent Guerrilla movement at bay. In the somewhat *longer run the invader's fate* probably will resemble the fate of the *USA in Vietnam*, or *Russia in Afghanistan*. So, far from having consolidated the sphere of influence of the current Russian government, Putin will be confronted with isolation and worldwide hostility. The current wave of anti-Russian sentiments is just a first taste.

To wake up *left-leaning intellectuals* – in the West as well as in the East – by showing them that Stalinism is not dead, that it still can raise its ugliest face, *i.e.*, brutal coercive warfare, has been an unintended consequence of the Putin's military strategy. It now is only too explicable why there is such a tight connection between Putin's circle, Donald Trump's entourage and all the other leaders of the extreme right in Europe. Their common enemy is democratization. But to build their empires they also need larger parts of the population. To get them as supporters their only strategy can be to *implant a superficial social identity* that splits off a large enough part of the total population. This identity usually is based either on older *religious divergences* (e.g. in the Middle East) or on *archetypes of nationalist ideology*<sup>13</sup>. This, of course, leads back to Stalin's strange mixture of 'national communism', 'socialism in one country', etc.

The accelerating turn of global capitalism into divergent streams of disintegrating state capitalism *leads to wars*. In an age of *rising alienation* (due to uncontrolled – and at the same time overcontrolled – information power) rather *chaotic public reactions* have to be expected. A sea of *diverging interpretations* of what is going on is already swapping on the shores of European perception. But there always are some clarifying aspects in this process too. Some humans can *learn from their history*, others don't. The community of the learning part<sup>14</sup> might be able to survive. *The Russian invasion of Ukraine did teach us a hard lesson*.

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<sup>&</sup>lt;sup>13</sup> Needless to mention that this was already the trick of classical national socialism, also known as fascism.

<sup>&</sup>lt;sup>14</sup> In (Hanappi, 2020b) I have labelled this group the global class of organic intellectuals.

## **Appendix A - Power**

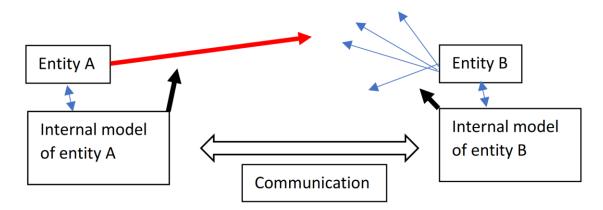
In its most rigorous form, the concept of power describes a relationship between two entities<sup>15</sup>. Entity A has power over entity B if it can influence the set of possible actions that B can choose to take.



With its action, symbolized by the red arrow, entity A can exert power on entity B by making it impossible for entity B to choose one of the three upper actions, symbolized by three blue arrows. Only the lowest blue arrow now can be chosen by entity B.

Several important amendments are necessary to appreciate this scarce characterization of power.

First, power comes in two forms: *direct coercive power* and *information power*. Direct coercive power means that physical force is applied to make actions of the opponent impossible. Information power is a more subtle tool, which often is combined with direct coercive power: Entity A says to entity B 'If you are not willing to restrict your action set to the lower blue arrow, then I will use direct coercive power to force you.'. If information power works, then direct coercive power is not necessary. Moreover, entity B will store the successful threat of entity A in its memory and eventually will be easier to convince in the case of a repetition of the event in the future. From a more general perspective information power always presupposes those entities maintain internal models of the situation and are able to communicate (send and receive) internal models.



Note also that the set of possible actions is constructed with the help of the internal model of an entity, symbolized by the thick black arrows. Influencing the internal model of the opponent therefore can change the situation dramatically. With such manipulations possible options can be hidden, or not feasible options that will fail can be constructed. To construct a reliable characterization of a certain power relation is extremely difficult since internal models rarely are accessible to the scientist.

Second, power relations usually are *two-sided*. While there usually is a dominantly powerful entity, there rarely is a completely powerless opponent. In this respect the time structure of power dynamics is of particular interest. Economic dynamics are working slowly but steadily, while politics – including warfare – are fast actions. 'Politics is just concentrated economics.' has been a widely used

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<sup>&</sup>lt;sup>15</sup> Quackenbush, following (Dahl, 1957, pp. 202-203), classifies this a relational definition of power (Quackenbush, 2015, p. 97). His critique that this type of definition can only be empirically determined after power has been exerted confuses the application of a theoretical construct (following Kant a 'synthetical judgement') with its theoretical usefulness (an 'analytical judgement').

slogan. Introducing a certain tax regime is a sudden political change, but how it will work out for the welfare of a society will take much longer. A political burst of discontent in a country will set free a number of more or less direct coercive measures – usually centralized via the monopoly of coercive power of the state – but what will be the economic consequences will only turn out much later. Since groups in society still are best characterized as classes, this process can be called the *dynamics of global class struggles*<sup>16</sup>.

Third, as societies grow and relationships and interdependencies are getting more and more most mutual power relations were becoming *institutionalized*. That is, they are fixed with the help of a law system, which is enforced by a coercive power monopolized by the police of a state. Though there is a slight flexibility provided by a system of judges, severe changes of the law system are hard to bring about. This development clearly gives the set of power relations a kind of neutral flavour. The advantage of the institutional solution certainly is that it streamlines expectations, it can be predicted what is a legal type of power exertion. On the other hand, the institutional apparatus itself often can react only slowly. In particular with respect to the influence of modern information power the law system typically is years behind the actual development in this field. Even more important: an institutionalized solution to a conflict can only fix a currently prevailing 'balance' of power. If there is an implicit permanent shift of the power relation, then the institutionalized handling sooner or later will have to break. In a more optimistic vein such a stepwise improvement of institutionalized power handling can be viewed as the way in which democratic progress, 'civilization' development, proceeds. It is this third amendment to the characterization of power relations, which shows where the development of Russia's society has failed. The elimination of effective democratic feedback loops within the Bolshevist party by Lenin had been a necessary measure for the success of the revolution in 1917. But to keep this feature as a doctrine for cementing the power of the new ruling class turned out to be the core of Stalinism. It makes obvious that that Stalinism is incompatible with democratic progress.

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<sup>&</sup>lt;sup>16</sup> Today the concept of class needs to be reframed to take into account the global structure of production (value chains) and the tremendous influence of modern information technology, see (Hanappi, 2019).

## **Appendix B - Game Theory**

The strategic questions of mutual deterrence had become a central topic as soon as after the end of WW2 the bipolar setting of global powers, the USA and the USSR, turned into questions of a nuclear conflict that could imply the extinction of the human species. It was John von Neumann himself, the inventor of game theory, who early on thought that his theory of strategic games could help to clarify the involved strategic issues. He had some influence on President Eisenhower and was said to have given some strategic advices based on game theoretic insights, e.g. that it would be wise to eliminate China because two-person games are more stable than three-person games, or that a pre-emptive nuclear strike against the USSR would be a preferable strategy. Fortunately, President Eisenhower did not follow these recommendations; von Neumann's genius in so many scientific disciplines evidently also was accompanied by some shortcomings in the area of social sciences. Since he never proposed an explicit model on nuclear deterrence on which his advices had been based, this always will remain unclear.

The followers of von Neumann, who used game theory to study the possibility of a stable equilibrium of powers based on the mutual threat of a deadly retaliation started with two archetypes of simultaneous-move games in strategic form<sup>17</sup>: the prisoners' dilemma<sup>18</sup> and the chicken game<sup>19</sup>. It soon turned out that in a prisoners' dilemma the pivotal element of retaliation cannot be adequately presented – there must be a first move on which to retaliate, which in a simultaneous-move game cannot be described. Most of the following models thus were based on extensions of the chicken game. To capture the notion of assured retaliation these models included the acceptance of a contract on *Mutually Assured Destruction* (MAD) – the acronym is said to mirror von Neumann's cynic type of humour – each superpower should maintain the capability for immediate retaliation if the other attacks first. Based on such a stable game theoretic setting of mutual deterrence a nuclear conflict in the times of the Cold War could be avoided – at least this could be seen as a theoretical model describing rational decision-makers, which explains the actual empirically observed nuclear peace<sup>20</sup>.

Soon after 1990, when the USSR had disappeared, the focus of game theoretic modelling shifted too. The maintenance of equilibrium between two similarly powerful hemispheres was substituted by the study of the possibilities of 'limited warfare' that a so-called 'challenger' could initiate to improve its position vis-à-vis a weaker 'defender', compare (Kilgour and Zagare 2007). It is not too far-fetched to relate these theoretical considerations to the advance of NATO towards the East that occurred from the war in Yugoslavia onwards.

These models usually are formulated as repeated games in extensive form. An interesting example comes from (Kilgour and Zagare 2007, 68). Here the 'challenger' is assumed to be discontent with the status quo with a probability x - just like NATO was discontent with its limited influence in Yugoslavia and Eastern Europe. If the 'challenger' now advances ('defunct'), then the 'defender' has three options: concede, defy, escalate. If 'concede' is chosen, then the challenger has a cheap win. In the case of 'defy' a further round of the game is needed in which the 'challenger' now can choose 'defy' and can lead a 'limited conflict'. But at this stage the 'challenger' could as well have chosen to 'escalate'. In the latter case the 'defender' gets a final choice between "defy' and 'escalate'. If then the 'defender' chooses 'defy' he loses, otherwise an all-out Conflict occurs. If the 'defender' already escalates in the first round and the 'challenger' retaliates with escalation, then all-out Conflict is happening too. Only if

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<sup>&</sup>lt;sup>17</sup> In older texts the strategic form sometimes is called the ,normal' – though there is nothing particularly normal in this presentation. The form that explicitly shows the time structure of moves is called extensive form.

<sup>&</sup>lt;sup>18</sup> See (Rapaport, 1970, pp. 45-92) for a good description of the prisoners' dilemma game.

<sup>&</sup>lt;sup>19</sup> This game as well as a brief introduction of its use in models of nuclear conflict can be found in (Ferreira, 2020, pp. 5-7, 178-182).

<sup>&</sup>lt;sup>20</sup> An interesting extension of such a model that softens the binary choice between cooperation and defunct was provided by (Brams and Kilgour, 1985, 1987). By introducing a quantitatively determined level of cooperation 'optimal deterrence' can be calculated.

the 'challenger' defies in the second round – after the defender has escalated – only then the escalation of the 'defender' wins.

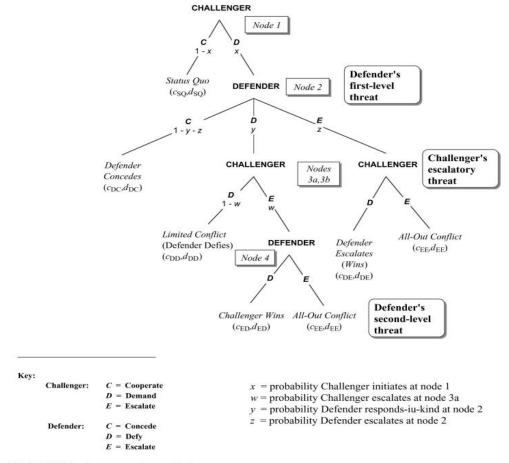


FIGURE 1 Asymmetric escalation game.

To solve this game by backward induction some assumptions on the values at the nodes of the game tree are necessary. They are made as follows:

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Challenger: c_{\text{DC}} > c_{\text{SQ}} > c_{\text{ED}} > c_{\text{DD}} > [c_{\text{EE}} \text{ and } c_{\text{DE}}]
Defender: d_{\text{SQ}} > d_{\text{DE}} > [d_{\text{DD}} \text{ and } d_{\text{DC}}] > [d_{\text{EE}} \text{ and } d_{\text{ED}}].
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The conditions for limited conflict can then be derived and in a concluding note the authors note 'that the escalation game we postulate is rather inimical to peace. Challenger always has an immediate incentive to upset the status quo, ...' (Kilgour and Zagare, 2007, p. 80). Their modelling approach, of course, does not refer directly to NATO enlargements, they rather find historical examples in the more distant past<sup>21</sup>.

It is clear that Putin and his military-oriented circle always have been keen observers of all theoretically oriented new research of game theory in this field. And it cannot be denied that from their perspective in the last 25 years Russia has been mainly in the role of a 'defender'. With each instance of the repeated game the expectation that further advance will be conceded, or at best will be defied, the image and the expectation of Russia's helplessness was consolidated. Only in 2014, with the occupation of the Crimea peninsula and the support of Eastern Ukrainian separatists Putin showed the first sign of his intention to revert the long downturn of Russia.

From a game theoretic point of view Putin now is trying to invert the situation. By starting the war against Ukraine, he signals to start a new game, a game in which Russia is the challenger and plans to lead a 'limited conflict' with the defender being the USA, a defender that shies away from all-out conflict.

<sup>&</sup>lt;sup>21</sup> See also (Zagare, 2018) for historical underpinnings for his game theoretic work.

If this interpretation holds, then Putin's immediate strategic goal was not a new Russian imperium, but a stepwise enlargement of its sphere of influence. The unexpectedly heavy retaliation of the West with economic sanctions now has caught Putin's inner circle in an impasse. The imitation of NATO strategy does not work because brutal direct coercive power – demonstrated by the weaker global power - cannot substitute for longer lasting strength with respect to civilian, democratic progress.

The **strategy to imitate the action of the opponent** - its last move - has been extensively studied in game theory; it has been called tit-for-tat strategy, e. g. compare (Axelrod and Hamilton, 1981), (Dixit and Skeath, 1999, pp.271-274). For simple repeated prisoners' dilemma games of highly stylized agents with a limited memory of up to four rounds this strategy shows a surprising superiority. Nevertheless, the level of abstraction that these game theoretic studies have to assume forbids any too strong conclusion for actually observed warfare. But notice also that John Mearsheimer in his very influential book 'The Tragedy of Great Power Politics' (Mearsheimer 2003, 444 - 504) warns that China is challenging the USA by *imitating* the strategy that the US had applied when it did rise to hegemonic power just after WW2: namely to produce an environment of politically and militarily weak surrounding countries<sup>22</sup>.

This throws a light on how simplified game theoretic models should be used. Consider the elementary model of a 2-person prisoners' dilemma in table 1. Assume that strategy 1 of country A is to increase its military expenditure next year by a percentage x, and that its strategy 2 is to keep its military expenditure constant. In an analogue way let country B choose between the same two strategies.

Prisoners' Dilemma		Country B	
		Increase	Keep constant
Country A	Increase	<u>5, 5</u>	<u>7,</u> 3
	Keep constant	3, 7	6, 6

Table 1. Military Expenditure as a Prisoners' Dilemma

The payoff matrix (first entry country A, second entry country B) describes an almost trivial situation: Of course, it would be better for both countries to use the tax payers' money for socially more beneficial purposes (health, education) - a solution giving (point 7,7) - than for military expenditure (point 6,6). In particular this is the case if the current situation seems to be a stable and secure equilibrium of power. But in prisoners' dilemma situation there nevertheless is the expectation of each country that a one-sided increase of military expenditure leads to an advantage that benefits the deviating country even more than (point 7,7) as long as the other country does not follow: (point 8,3) or point (3,8). Since both countries know pretty well about the strategies and expectations of the other country – even due to introspection – the only stable outcome is the Pareto inferior solution (point 6,6). There will be a continuous increase of military expenditure. In game theoretic jargon (point 5,5) is the only Nash equilibrium (both entries are underlined because they are best answers to the opponent's choice):

The reformulation of such a simple, symmetric interaction between two equally powerful entities as a matrix of payoffs does not add any content. But in its rigorous clarity it opens up the space *to discuss its own limits in a similarly rigorous way*. *E.g.* to make explicit what is known about expectation formation, what is known about communication between agents, what happens if there are more agents? As Rapaport already had shown: There exists a 3-person prisoners' dilemma, though it is substantially more difficult to formulate its conditions (Rapaport 1970). What is even more disturbing: 3-person game theory differs quite distinctly from 2-person game theory, both differing from 4-person game theory, and so on ... Only if the n of n-person game theory goes to infinity, only then things are getting easier again<sup>23</sup>.

<sup>&</sup>lt;sup>22</sup> Mearsheimer's views, in particular those concerning the Ukraine, are heavily criticized by another doyen of international relations' studies: Richard Ned Lebow, see (Lebow, 2018).

<sup>&</sup>lt;sup>23</sup> An interesting application of 3-person game prisoners' dilemma situations to arms races has been provided by Frank Zagare (Zagare, 2021). He shows that their emergence hinges on rather demanding conditions.

Another simple archetype of a 2-person game is the already mentioned chicken game. Its payoff matrix differs only slightly from the prisoners' dilemma, but nevertheless it tells a different story.

Chicken Game		Country B	
		Be chicken	Stay on the road
Country A	Be chicken	5, 5	<u>3, 10</u>
	Stay on the road	<u>10, 3</u>	0, 0

The original story has two drivers on a one-lane street heading with their cars at each other in high speed. Both face the decision either to leave the street, to swerve and being a coward ('chicken'), or to risk a deadly crash. Two dead heroes evidently are an outcome that both would see as very bad, (point 0, 0). On the other hand, if they both swerve, (point 5, 5), then each one in hindsight would regret that he was not bullying reaching a point with payoff 10. Note that the strategic situation differs from the prisoners' dilemma only by the fact that the lower right-hand payoffs now are smaller than all other payoffs. In this game there are two Nash equilibria and what will happen clearly depends on the assumptions concerning the expectation formation processes of the two opponents. The interesting opening question is what happens if this game becomes a repeated game? If both die, then there is no repetition. If both turned out to be cowards, then for each of them there is the temptation to assume that the other one will be chicken again next time. Note what happens if both strictly assume that the opponent acts as oneself (introspection). Then one will live together as two cowards forever - under the menace of dying simultaneously. But once a repeated game had started and one of the two Nash equilibria occurred, then it became manifest who is the bully and who is the chicken. In other words, reputation is being built and might be used for expectation formation in the next round. The chicken might remain chicken for several rounds. Remember the steps of the advance of NATO to the east? But with each experience of being chicken again a stock variable indicating emotional (or economic) frustration might be accumulating. And at some level a sudden behavioural break might occur: the alltime coward might stage a bullying attack. (Kilgour and Zagare 2007) is another variant of such a story. It is remarkable how a formalized retelling of an extremely simple story can illuminate what might have happened.

A further well-known twist of the story can be added. If one of the two drivers tears the steering wheel out and throws it out of the window, so that the other driver can see that, then this other driver suddenly has a clearly better option, namely, to swerve. This metaphor can be understood as the action to declare oneself *visibly* as a *madman* who will never stop to bully. Does Wladimir Putin style himself as such personage? If this action is believed, if it is considered to be correctly observed, a credible threat, then the opponent has no other choice than to become chicken.

A final point on the interpretation of game theoretic models is needed: The considered **agents** usually are only described by the actions they can take, most of their properties are left open to the interpreting application. Contrary to that the field of international relations often takes for granted that the agents considered are 'nation states'24. In most of this literature the attribute of 'nation' is taken to be the most significant glue that keeps a group of human individuals together. Nationalism is seen to be the strongest motive for human movements. Opposed to that, in game theory a large part of theory building falls prey to the prejudices of neoclassical microeconomics, namely that the single, 'rational' human individual, the homo economicus, should be the role model after which agents in game theory should to be formed. Both approaches fall short of the superior opportunities that **classical political economy** offers: There is a rich description of class dynamics in each society. A ruling class, eventually a few ruling classes, are the main decision-makers concerning the behaviour of a state. The state itself achieves its own dynamic nature by its internal feedback loops that link economic and ideological processes to the governing top. In today's globalized production system national ruling classes usually

<sup>&</sup>lt;sup>24</sup> Mearsheimer constructs his dynamics of ,Great Powers' on the background of a globally 'chaotic anarchy of nation states'. Hegemony then is always achieved by a nation state that manages to dominate all the others, mainly by military force.

are tightly interlocked. Instead of an anarchy of nationalisms there is a monolithic structure of global value chains that organizes exploitation. At the points where profits from this exploitation chains reach a certain local peak, at these points local ruling classes form a 'state'. Due to historically grown infrastructure (geography, language, etc.) such a state might consider itself to be a nation state. Only then, there is ideological feedback from the top level of governance to the citizens of the state (the false homo economicus), feedback in which personal welfare and national pride are mixed to produce nationalist movements. It is clear that this much more sophisticated approach of political economy calls for a much more sophisticated design of game theoretic models.

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