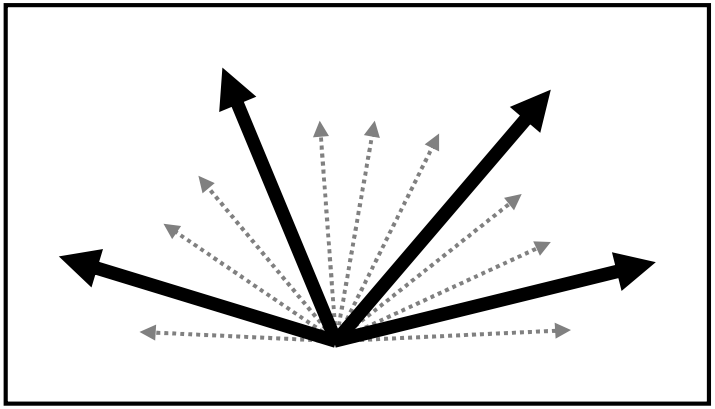
THE BEST POSSIBLE POLITICS?



Introduction to multi-dimensional democracy

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Based on the original edition in Finnish language:
Parasta mahdollista politiikkaa?
Johdatus moniulotteisen demokratian perusteisiin.

Preface

Europe is slowly integrating into one continental state, setting the trend for a future world where small states merge into gigantic mega-states, and everything in politics becomes bigger and bigger. Also **political minorities grow larger and larger – too large to ignore any more as a meaningless and powerless margin**, where the doctrine of majority rule democracy has rejected them.

In small ancient Greek city-states it may have made sense that the small minority of the small population has no greater purpose in life than obeying the wise and fair decisions of the democratic majority. But the larger the populations have become, and the larger the minorities without political power have become, the more obvious it is becoming that **it is neither necessary nor morally legitimate for the majority to rule over large minorities**, which may have millions of members, and which are perfectly capable of deciding about their own political affairs.

Majority rule democracy is becoming one of the most oppressive and risky political forces on the planet. People's voting behaviour is too easily influenced by fake news, censorship of true information, and carefully timed fabricated moral scandals, which mislead people to vote with emotion rather than reason. Modern democracy is tyranny of a self-centered and cynical majority. Tyranny of the 70%.

Let us imagine that your political party participates in elections, with the campaign slogan "equality and justice to all". But some other party promises "richer life" to some 70% of population (by leaving the remaining 30% of people in deeper poverty). Your party will quite certainly lose the elections, because 70% of voters have a reason to believe that this other party will create a richer life for them than you would. We can repeat this experiment year after year, election term after election term, and the other party would win every time. **Inequality is a basic feature and a design flaw of majority rule democracy. It is the tool with which election victories are manufactured**, from a mathematical perspective.

Many minorities are starting to perceive that majority rule democracy is not the answer to their needs and dreams in life, and probably never will be. It is against the laws of statistical probability that majority rule democracy would serve the interests of small minorities. Or is it? Actually there are some reasons for minorities to believe in a brighter future. But we need to look beyond the traditional version of majority rule democracy. **We need to adopt a more multi-dimensional perception of what democracy is, and what it is supposed to achieve.**

The best kept secret of majority rule democracy is that majorities don't actually even exist. In the classic fairy tale it was a public secret that the emperor has no clothes. In modern democracy the public secret is that the emperor does not exist at all. Political majorities are statistical

myths, products of imagination. In any country where the political scene functions freely and naturally, and reflects the full variety of opinions that exist among the population, it is rare for any party to receive more than 50% of votes. Even in United States, the promised land of two-party politics, voters have failed *six times in a row* to give more than 50% of votes to either of the two main parties (!), in the biennial Senate elections 1992 – 2002. **A majority did not exist for 12 years.**

The table below shows the distribution of votes (as percentages) between the eight most popular parties in recent general elections of five greatest nations in continental Europe. The most successful party in these elections, the election winner of Poland, received only 38% of votes, which is far below the 50% threshold of a ruling majority.

Elections	1.	2.	3.	4.	5.	6.	7.	8.
2015 Poland	**38**	24	9	8	8	5	5	4
2016 Spain	33	23	21	13	3	2	1	1
2018 Italy	33	19	17	14	4	3	3	1
2017 France	28	16	13	11	7	4	4	3
2017 Germany	27	21	13	11	9	9	6	1

The fact that majorities don't exist is good news for minorities. It means that your minority is not the only one that is unable to implement its political will in life. Nearly

every political party in the world is in the same situation, because nearly every party is a political minority.

But majority governments are formed nevertheless, even if majorities don't really exist. This is done by negotiating a deal between the largest parties to form a coalition, whose total vote count surpasses the 50% limit. But in these negotiations each of the "ruling" parties needs to make compromises with other parties, who have different opinions about various political topics, to form a consensus policy that is not exactly in line with anyone's will. Also later on, when the coalition government will vote about various issues, each governmental party will be unable to fully implement its will, as other parties may vote against their proposals. Politicians of different parties are sitting in power, but they don't really have all the power that they would like to have.

Majority rule politics is often a frustrating pilgrimage of **constant shortcomings and disappointments, for everyone involved – including the ruling parties**. The ruling parties are in a better position than opposition parties, but even the ruling parties cannot completely fulfill their political objectives, because they are married to coalition partners whose political opinions differ from theirs.

Would it be possible to liberate minorities from tyranny of the nonexistent majority? Dictators will not give up their power just because people want them to go away. They

continue to rule because they can, and because they benefit from it. The same is true for the majority that now has the power in our current form of democracy. They will not give up their power just because minorities want it. **They want to continue to rule because they can, and because they benefit from it.**

However, a dim ray of hope for peaceful and mutually beneficial transition from majority rule democracy into a less oppressive form of multi-dimensional democracy lies in the fact that majorities don't exist, and even the illusion of their existence is temporary – it might last for one election term only, until a defeat in the next elections causes the current ruling parties to be dethroned into the political opposition. **Political life is frustrating and insecure, even for the most successful parties.** A more multi-dimensional version of democracy would alleviate these problems, if we leave behind the traditional majority rule democracy, and implement autonomy of minorities.

As an example, we can think about the recent political struggles in Venezuela. For the past 20 years the situation in Venezuela has been such that roughly half of the population support the Bolivarian Revolution, and the other half hate it. The margin between the popular support of these two political trends is so small that nobody can guarantee for sure, which party will win the next elections. Or the next elections after that. **Every election day is an existential threat to the Bolivarian Revolution.**

Is this preferable for political parties, and the people who support them, to have such risks threatening their political achievements and future dreams? Organizing elections between Nicolás Maduro and Juan Guaidó would be a bit like sitting around the poker table, each one putting all their property at stake on the table, and then the cards are dealt. **It is not common wisdom to risk all what you have in a winner-takes-it-all game.** It would be a safer move for both parties to turn Venezuela into a multi-dimensional democracy, whose territories and natural resources are governed with full legal autonomy by each political party that gets a specified minimum threshold of votes in elections. This would remove the existential threat from both political ideologies that struggle for power in the country and region. It would make Venezuela the role model of a future world, where politics may look very different from what we are accustomed to today.

In other countries the political scene may not be so dramatically polarized, but the general idea remains the same: **multi-dimensional democracy offers political parties a safer and more reliable access to political power than is available under majority rule democracy**. It is an attractive option worth considering, no matter how powerful your party is.

Majority rule democracy has been a useful phase in the evolution of human civilizations. But it is obviously becoming obsolete, as the size of civilizations grows. We need to reject the obsolete idea that 51% of humans have an

imaginary moral-philosophical right to make political decisions on behalf of the rest of humans. They don't have such a right.

But if they don't have, then who has? This question needs a clear answer. Should we allow every crime boss to found a legally autonomous fiefdom for his gang? Such a proposal would not gain much political support from the mainstream population. We need to define a reasonable electoral threshold, the minimum size that a minority must reach, before it has the right to political and legal autonomy.

One option would be to define the electoral threshold as a percentage. One percent, for example. Such a definition would be nicely scalable for all circumstances. But scalability would bring also its own moral-philosophical problems. One percent of the population of India or China is 14 million people. That would be quite an electoral threshold. Is it credible from a moral-philosophical point of view, if we say that a minority of 10 million people in India does not have the moral right to political autonomy, while in smaller countries like Iceland the same principle of electoral threshold would give minorities of 4,000 people the right to legal autonomy?

I am inclined to think that a specific number of people would be a more credible electoral threshold than a percentage of population. It would emphasize the moral-philosophical aspect that **the growing size of populations is what makes majority rule obsolete**. It would define the

threshold of population size, beyond which majority rule becomes obsolete and moral-philosophically objectionable.

An electoral threshold of 1 million votes would be something to consider. If a country has fewer than 2 million citizens, political minorities of 1 million members cannot exist, and it would be morally acceptable to govern the country with majority rule democracy. But any country that has more than 2 million citizens, should enforce an electoral threshold of no more than 1 million votes, which entitles a political party to have legal autonomy in all other affairs than military defence, the basic human rights, and transregional issues such as pollution of air or water (which can flow between regions controlled by different political entities, and therefore is not the private matter of one political entity).

These principles would lead to the following **Declaration of the Rights of Minorities**:

> "Every political movement, which is voted by at least one million eligible adult voters, has the right to legal autonomy, and the right to control a share of the territory and natural resources of its country that corresponds to their statistical share of all given votes nationally."

In all its shortness and simplicity, this declaration would result in **decentralized multi-dimensional democracy, with an electoral threshold of one million votes**. This would be a giant leap upwards in the evolution of human civilizations – considering that many parts of the world still today live under primitive authoritarian political models, which were invented in the bronze age.

This booklet discusses even more advanced forms of multi-dimensional democracy than decentralized autonomy of the major political parties. But they are hardly the next step to take for humankind, from where we are today. We should not try to run before we learn to walk. I believe that decentralized multi-dimensional democracy is a safe, reasonable and moderate next step that human civilizations should take, and probably will take sooner or later, on the road to greater respect for individual freedom of conscience and freedom of choice – which are the basic ingredients that happiness is made of.

1. Theory of multi-dimensional democracy

Unlike the original 2005 edition of this work, this 2019 edition begins with the chapter that was originally the last one, which defines the theory of multi-dimensional democracy. We get more quickly to the most essential concepts that may be something new and interesting to the reader. However, it is good to keep in mind that the other two chapters are very helpful (or indeed necessary) for precisely understanding the full meaning of many concepts that are used in this first chapter. And for understanding why democracy needs to be multi-dimensional at all. Reading the other two chapters first is an idea that is well worth considering.

centralized or decentralized multi-democracy

Multi-dimensional democracy (or more shortly, multi-democracy) means such forms of democratic decision-making, where the notion is acknowledged that **also some other alternatives than the most supported option are probably worth implementing**. In contrast, the ideology of traditional majority rule democracy makes the basic assumption that humans have a reason (and a moral right) to seek one option that should be implemented. Majority rule democracy asks, which one option should be implemented because it is the best one? Multi-dimensional democracy asks, how many different options should we implement in order to make the whole population (not only the majority) as happy as possible?

The simplest way to increase multi-dimensionality into democracy is *decentralized multi-democracy*, **distributing the decision-making to several minority groups**, which make their own decisions independently. For example so that each party that receives at least 1% of all given votes, gets an autonomous region from the territory of the country or city, whose size is relative to the share of the votes received by the party of all votes. Parties would also get the right to access natural resources of the country by the same ratio.

In this case **citizens get some tangible freedom of choice**: each person has the opportunity to move to live in the autonomous region of his preferred party, into the sphere of influence of the policies of that party. This would be a great leap forward in the possibilities of an individual to affect his own life politically, compared to traditional majority rule democracy, where the choices done by an individual often remain completely meaningless.

Centralized multi-democracy would be a yet more multi-dimensional alternative, where an individual might have the opportunity to choose his preferred option from among hundreds of different combinations. The rest of this first chapter analyzes the theory of centralized multi-dimensional democracy, which is remarkably more complex than decentralized multi-democracy, and makes it

possible for individuals to achieve **very extensive and detailed freedom of choice** in various political, cultural and religious matters of opinion.

Decentralized majority rule democracy is not multi-dimensional democracy, because it **lacks the principle that also some other alternatives than the most supported option are probably worth implementing**. United States and European Union are decentralized majority rule democracies, to the extent that the states or countries have the right to write their own legislation.

In multi-dimensional democracy an alternative that receives 20% of all votes, would probably be implemented with 20% of common resources, or in 20% of the common territory. In decentralized majority rule the 20% of votes that an alternative might receive in each separate voting district (such as a state or country) would not qualify the alternative for being implemented anywhere, if it does not reach majority position in any of the separate voting districts (receiving more than 50% of votes in at least one state or country).

The repeated requirement of majority in each of the separate voting districts is what distinguishes decentralized majority rule democracy from multi-dimensional democracy. Such circumstances would allow minorities with tens or hundreds of millions of members to exist without the political power to decide about their own affairs.

If a political ideology existed in United States, which is supported by some 20% of population quite much everywhere, it could theoretically be a powerless political minority in every state of United States. Yet its total number of supporters would be 65 million. On a global scale, a political ideology supported by 20% of humans could theoretically be a powerless political minority in every country, yet its total number of supporters would be 1.5 billion.

Multi-dimensional democracy acknowledges the thought that minorities of such a remarkable size morally deserve the right to decide about their own affairs in life. Moral respect for the right of minorities to political and legal autonomy is something that the basic theory of majority rule democracy fails to acknowledge at all. **Tyranny of the majority is not a moral-philosophical problem, according to the theory of majority rule democracy.**

Decentralized multi-dimensional democracy is **autonomy of open political minorities**. *Autonomy of ethnic minorities* would be a form of decentralized majority rule, not multi-dimensional democracy, because **ethnic groups are closed minorities**: a person cannot "join" an ethnicity, people are born into ethnicities. The definition and size of open political minorities is defined by national or global voting results, while the definition and size of ethnic minorities is not affected by voting much or at all.

Each autonomous minority can make decisions with majority rule among themselves in multi-dimensional democracy. Even if this is the case, the revolutionary aspect remains that the autonomous minorities represent all major political opinion trends in the society (or in the world), and each individual has tangible and extensive **freedom of choice** to choose, what kind of a political ideology he wants to live under.

interests of majority or the common good?

If two strong cavemen force a third caveman to be their slave, the will of majority gets done, and contentedness is distributed in the population 100% – 100% – 0%. But if they all remain free from slavery, contentedness is distributed approximately 75% – 75% – 75%. Implementing the will of majority distributes contentedness unequally in the population, and the hidden effect of standard deviation lowers the average of contentedness. Thus we can conclude that in the latter example was implemented **the common good** of the whole population, but in the first example were implemented **the interests of the majority** only.

In the chapters concerning one-dimensional democracy we will analyze the problem that the interests of the majority are often a vague concept – and even when the interests of the majority can be clearly indicated, it does not necessarily serve the common good *of the whole population* in the best possible way. Now we ask, what serves then?

the benefits and disadvantages of synergy

With centralized decision-making it is possible to achieve **synergy benefits**, an advantage caused by the efficiency of cooperation. When the state obliges individuals into a carefully planned cooperation – such as paying the taxes – people can be offered high-quality basic services, which make people happier on average than if nobody paid taxes and nobody received any services from the state.

Under complete anarchy, contentedness would be distributed extremely unequally among the population, and the average of contentedness would crash to record-low levels. By maintaining the state and order we achieve undisputable synergy benefits – but also cause synergy disadvantages:

- Forcing individuals to cooperation and limiting their freedom **reduces** their contentedness.
- The benefits achieved as the result of cooperation **increase** the contentedness of individuals.

These **two opposite synergy effects** vary in their magnitude, depending on the topic. Sometimes a centralized decision produces a lot of benefits and very little disadvantages, but sometimes it can cause a lot of disadvantages and only a little benefits.

In one-dimensional decision-making we ask: Will the most supported solution bring more benefits than harm? If the

benefits are greater than the harm, then the solution will be implemented with a majority decision. If the harm is greater than the benefits, then the majority will reject the proposal, and maybe no option will be implemented.

In multi-dimensional democracy we ask instead: How many different solutions should be implemented, in order to achieve as much synergy benefits as possible and as little synergy disadvantages as possible?

- With the **extensiveness (many people being involved)** of partial solutions we achieve synergy benefits, and thus increase people's contentedness.
- With the **number** of partial solutions we achieve freedom of choice, and thus reduce discontent.

The greater a number of different alternatives are implemented, the more freedom of choice individuals will have, and the fewer reasons they will have for discontent due to being forced or their liberties being restricted. On the other hand, the *fewer* alternatives are implemented, the more effectively the cooperation produces synergy benefits (such as economic development), which increases the contentedness of individuals.

These two opposite synergy effects contradict each other, in inverse proportion, so that one factor becoming more favourable causes the other factor to become less favourable.

How many different alternatives should we implement then, so that the total amount of achieved interests would be greatest possible? This question is affected most by the **saturation threshold of synergy benefits**, i.e. *the smallest* possible number of people, whose mutual cooperation achieves *the greatest* possible synergy benefits per person.

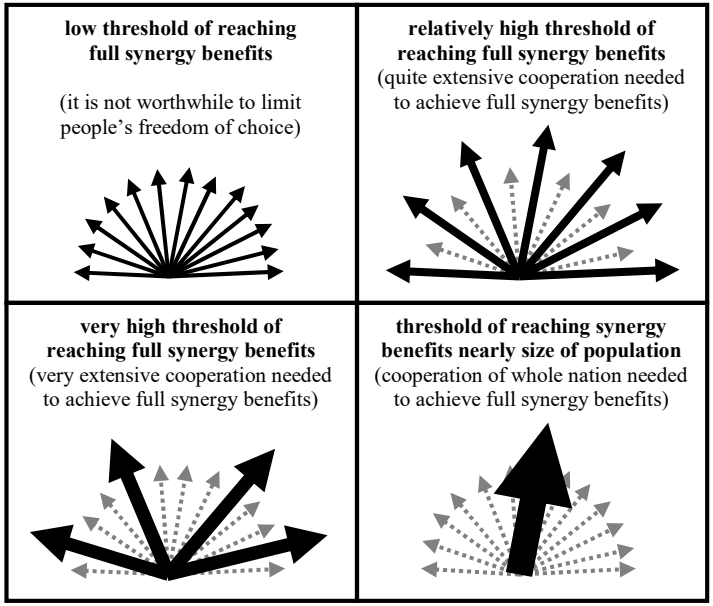

Diagram 1: The threshold for achieving full synergy benefits affects the number of partial solutions that should be implemented, in order to maximize the total amount of interests achieved by the various parties.

If the nature of the topic at hand is so complex that more than half of the population is needed for cooperation, in order to achieve full synergy benefits, then it might be worthwhile to implement one alternative only. But many topics handled in politics are so simple and affordable, what comes to technical implementation, that full synergy benefits are achieved already when much less than half of the population of a country participate in the cooperation. In such a case we can act in two different ways:

A) We implement one solution only, and achieve a lot of synergy benefits, but also cause quite much discontent to individuals by restricting their freedom of choice.
B) We implement several different partial solutions, and achieve **as much synergy benefits** as afore, but cause **less discontent**, because the freedom of choice of individuals becomes restricted to a smaller extent.

Of these two thinking patterns, "A" represents one-dimensional democracy and "interests of the majority" (which can be an illusory majority for example, or a consensus majority that is swallowing a compromise). Thinking pattern "B" represents multi-dimensional democracy and common good of the whole population.

optimization of partial solutions

For it to be possible to implement different partial solutions simultaneously, the topic at hand must naturally be of such nature that **the partial solutions do not mutually exclude each other**. For example, a president cannot be sliced into five parts – unless we want to hire five presidents for the same office term. On the other hand, the budget of the state can be sliced into smaller parts, if the objectives of different parties contradict each other significantly.

The optimal number of partial solutions can be detected based on the threshold of achieving full synergy benefits, as has been demonstrated afore. The best possible number of implemented alternatives is usually smaller than the number of all proposals, so some of the proposals need to be eliminated in an impartial manner.

Completely impartial elimination of proposals is easiest when the topic at hand can be measured *in numeric form*, for example as sums of money. Then the best possible set of solutions can be quite easily found with mathematical methods, as is demonstrated in diagram 2. The implemented partial solutions would then be the **weighted averages** of proposed solutions, which represent a compromise of opinions within the sphere of influence of each partial solution. None of the proposed alternatives might be implemented as such, but the implemented alternatives will be formed by mathematical calculations.

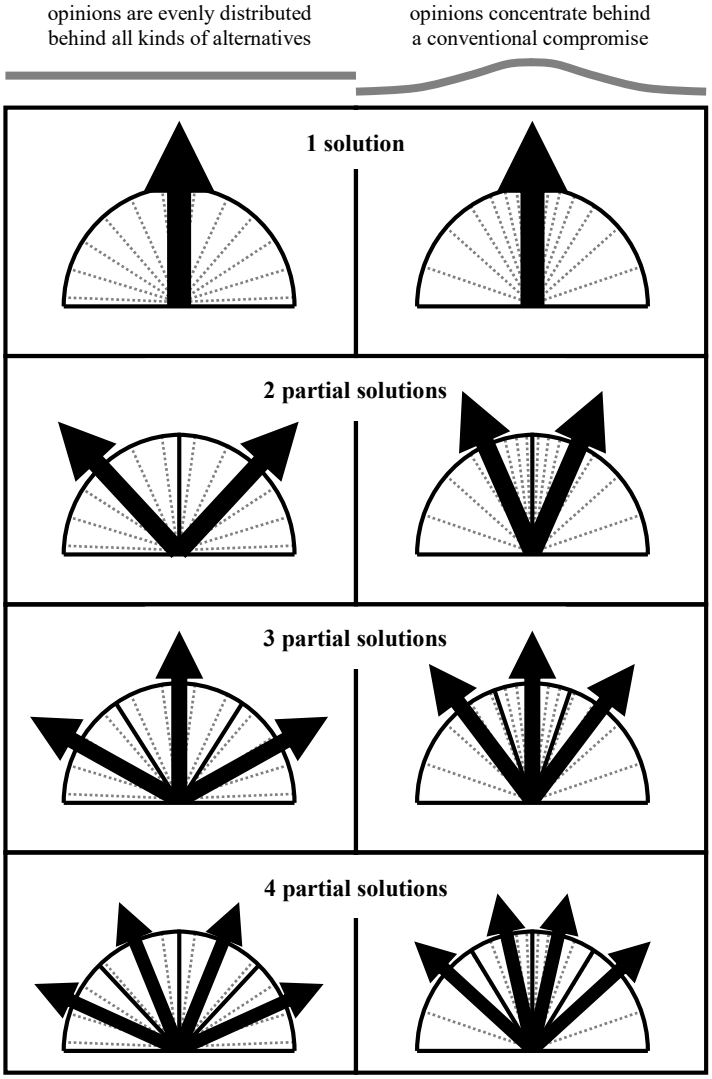

Diagram 2: The best possible group of partial solutions, when opinions are distributed either evenly or by normal distribution, and the optimal number of partial solutions (according to the threshold of achieving full synergy benefits) is 1, 2, 3 or 4.

Impartial elimination of proposals is a bit more problematic, when the topic at hand cannot be measured in a numeric form (in a way that has relevance for the intuition of humans). The situation would be such for example when the handled topic is a colour, taste, or some other concept that is abstract for mathematics. In that case we need to find out the **preference order** of voters, for all the proposed alternatives: which colour or taste is the best in the opinon of each voter, which is the second best, and so on. By analyzing such a matrix we may find **concentrations of opinions**, and we can mathematically indicate that *the average of contentedness is highest and standard deviation smallest*, when we choose to implement the proposals, behind which the opinions are concentrated most heavily.

Such a complex statistical analysis is necessary in some abstract topics only, for example person elections. (In one-dimensional democracy, person elections are usually based on finding out the will of the majority – which is natural, because the philosophy of one-dimensional democracy focuses on majority in other aspects too. In multi-dimensional democracy we attempt to take into account the will of the whole population more completely, which makes it natural that also the results of person elections are

evaluated from the viewpoint of statistical optimization of the contentedness of the whole population.)

The basic nature of the partial solutions for a point of contention can be **virtual**, **public** or **indivisible**. Of these the indivisible solution model rules out all other alternatives, and a virtual solution model does not necessarily rule out any other alternatives.

a virtual solution model

If **money** has a central role in the topic at hand, then we can probably use *a virtual solution model*, where the partial solutions do not exclude each other much or at all.

For example, if the majority of population supports keeping the taxation at current level, but a significant minority would like to raise the taxes remarkably (in order to offer the people free public transportation, free television programs, free restaurant services and free sports hobbies), it would be possible to implement **a virtual partial solution** for this minority, where their taxation is higher than that of the rest of population, and they will get these services "for free". All other citizens, who pay less taxes, would buy those services with cash.

Such a partial solution would be virtual in the full meaning of the word, as money is invisible and moves at the speed of light, and this partial solution would not necessarily be

publicly seen at all in everyday life, otherwise than maybe in the colour of the payment card used in the shop.

Money is naturally not a *completely* virtual concept, and money can sometimes collide with another money. Socialism and capitalism have contradicting interests: the victory of one can be the loss of another. Nevertheless it is possible to implement more than one different alternative simultaneously, and the partial solutions will not be mutually exclusive – though **the partial solutions will compete against each other** nearly always.

cumulative synergy benefit and the free-rider problem

In the financial world it is typical to invest and expect profit. In taxation the investment is the paid tax, and the profits are the services received from the society. Sometimes there can be a rather long **temporal delay** between the investment and the profit: most notably pension is such a synergy benefit where the service is received from the society only a very long time after paying the taxes.

The temporal delay between participating in cooperation and receiving the synergy benefit causes some ethical obligations, and loopholes big enough for a free-rider to go through, which deserve special attention. What should we think about the following situations, and how should we *prepare in advance* for them:

A) People pay a high income tax for several decades, expecting to get a proper pension in return for the taxes, but the next working-age generation votes to *cut* public services – which causes also the pensions of the previous generation to crash down.
B) A working-age person lives for decades in a tax haven, to avoid the high taxation of his home country, but in old age returns to his home country – to enjoy a pension and other social benefits.
C) A person who has just reached adult age and voting rights, votes in favour of lowering the taxes, to avoid paying for public services – which he himself has benefited from for nearly two decades already, without paying any taxes yet.

The temporal delay between the investment and the profit should be taken into account, and certain social benefits should be defined as **cumulative**: if a person wants to enjoy of a certain level of pension or social security, he is obliged to pay a corresponding level of income taxes, in which case **the state becomes indebted to him**. The next working-age generation cannot shed from its shoulders by voting the social security of the previous generation, because it is the debt capital of the previous generation, **legal property** just like any other property. The next working-age generation (and each individual separately) can make their own personal decision, how abundant social security they want to accumulate *for their own future*: this personal and voluntary tax pot can be added on top of the debt that is paid to the previous generation.

The years that a person has lived abroad **under the taxation of another country** can be reduced from the cumulative social security of the person, which would mean that a person who has lived in a tax haven will not get hardly any social security when he returns to his home country, until he starts to gather cumulative social security for himself – from zero level. (On the other hand, the person should have the legal right to raise social benefits from the country where he has paid his taxes in working age, no matter in which corner of the world he lives in pensioner age.)

It would be a quite bizarre situation, if some state (or a partial solution in multi-dimensional democracy) would not build an education system at all, and instead would attract workers from other countries – preferably as highly educated as possible, such as medical doctors, for whose education some other state has invested large sums of money. As a luring decoy they could use a higher salary – now as they have saved a lot of money, if they have refrained from building an expensive education system.

A person who has enjoyed free public services during all the years of his youth could be regarded as having become **indebted** to his society: for example education is an investment done by the society, for which the society expects profit in the form of income taxes. Legally it would be possible to justify collection of the debt (that is, collection of taxes) even in case the person moves to work

in the territory of another country (or in multi-dimensional democracy, into the sphere of another partial solution).

These aspects will be particularly important in the societies of the future, where people are increasingly free to choose their workplace and place of residence, also from abroad. The level of taxation and public services can vary remarkably between states – and in multi-dimensional democracy also within a state.

reorganizing virtual partial solutions

The ethical obligations related to cumulative synergy benefits set some limitations for how low taxes it would be possible to implement in a partial solution based on the doctrines of capitalism, for example. The right-wing ideology perceives high taxation as a handbrake of market economy, and they would like to cut the public services heavily, to make it possible to lower the taxation.

These two themes, taxation and public services, can potentially be seen as two totally separate topics, which have no direct relation to each other. Cumulative obligations can be seen simply as **debt**, a sum of money that must be paid to the creditor within a certain time. This is an example of free reorganizability of virtual solutions: if two topics are not inseparably related to each other, it is not necessary to *imagine* an inseparable connection between them either.

Based on the current economic trends and legislation it would be possible to calculate, how much payable obligations each population segment would have during the next five years, for example, if the economy will develop according to the forecasts. This debt could be agreed to be paid as such, without specifying from where each population segment will collect the required sum, and what kind of taxation policy they will implement within their own partial solution. If the economy of their partial solution grows more strongly than was forecast, their obligations will not grow nevertheless – or if their economy regresses, their debt will not become smaller.

Thus the continuity of the current interests of different parties would be secured, and also the multi-dimensional will of the people would get implemented – as each party would get the chance to implement its own view of economic policy and employment policy.

If there are no remarkable differences in the economic competitiveness of different ideologies – nor differences in efficiency compared to the current economic policies – then the only change from the current situation would be that the supporters of socialism would divide their own cake more equally than now, and the supporters of casino economy would play poker for their own winners and losers more unequally than now.

Each ideology claims to be better than the others, however. If these claims are true, then some partial solution will have

greater prosperity than others, and all parties will have something to learn and consider, if they want to avoid their supporters starting to migrate to some other, more successful camp.

Would in such a situation the sum of the actions of different parties be more than their average? At least the claims of various ideologies are conspicuous. Capitalism promises economic growth through low taxation and increasing consumption. Socialism promises full employment through redistribution of the economy. Both of them can be right, or both can be wrong. Typical for the present moment is only great ignorance and chronic discontent.

combining virtual partial solutions

Advantages of a virtual solution model are relatively low costs, and **the possibility to freely combine** various partial solutions on top of each other. This latter aspect is especially important when we remember that in politics there are many different contentions, and the opinions of people often criss-cross so completely that hardly any politician can implement "the will of his voters" – because his voters disagree about nearly all topics!

In the previous example, taxation and public services were separated into two partial solutions, which were handled completely separately, and the total sums were just added up. Likewise, any other virtual points of contention can be handled in such a way that each person indicates his opinion about only one topic at a time, and we implement in each topic as many different partial solutions as is necessary from the viewpoint of the common good. Eventually all virtual partial solutions of different topics will be implemented on top of each other.

With virtual solution models it is possible to manage employment policy, education, health care, and nearly anything that is not seen in the public street view: the point of contention is not *public*.

a public point of contention

A point of contention is *public*, if partial solutions cannot exist simultaneously in the same geographical area, because the contested issue has a remarkable impact in public places.

Alcohol and drug policy is one of the major public points of contention in western countries. Other notable public points of contention around the world are prostitution (Far East), clothing (Middle East), and religious disputes.

The harmful effects related to intoxicants have an impact **in public places** as noisy or reckless behaviour, vandalism, and sometimes even a threat of violence. Intoxicants reduce behavioral inhibitions, drunkards tend to act first and think later. Drugs cause a remarkable addiction and a constant

need for money, which leads to desperate criminality. In addition to this the society needs to pay yet the treatment costs of various health problems caused by intoxicants, sick leaves from work, and disability pensions.

Who will pay all this – in a multi-dimensional democracy? The population of those partial solutions, whose policies allow retail sale and private possession of intoxicants. A detriment tax (Pigovian tax) included in the prices of intoxicants can help the society to recover some of the costs from the intoxicant abusers themselves, but the share that cannot be recovered from them, remains to be paid from the total budget of the partial solutions that favour free retail sale.

Opinions about intoxicant policy are distributed on the full scale from total prohibition all the way to legalization of cannabis drugs. Each intoxicant can be treated in public places according to three basic stances: free retail sale (which makes abuse possible), licensed private possession (which makes moderate use possible e.g. in restaurants), or total prohibition.

A public partial solution is based on defining geographical mandate areas for various interest groups. The mandate area can be a block of houses, a suburb, a city, or an even larger area. Within the limited geographical area it is possible to allow or prohibit the retail sale of specific intoxicants, their private possession, or serving them in licensed restaurants. Also being intoxicated in a public

place can be criminalized with a commonly agreed tolerance – in case a person who has used intoxicants elsewhere arrives to the mandate area of stricter intoxicant policy.

The greatest problem in a public partial solution is that at the moment when the decision enters into force, probably also such persons live in the area, who would have hoped for a very different policy. This may cause some persons **pressure to move to another region**, especially if one's place of residence turns into the mandate area of some extreme ideology, and the person happens to represent a completely opposite ideology.

The most suitable mandate areas for a public partial solution are such regions, of whose current population the majority supports the ideology in question. Also new construction to uninhabited areas offers convenient possibilities to implement public partial solutions, without causing anyone pressure to move and the discontent related to it.

The benefit from a public partial solution gets to its full potential only in the long term, when people start to take the mandate areas into consideration when buying a home – if the topic is so important in their opinion that it affects their residence decisions. It is reasonable to require greatest possible stability from a geographically implemented partial solution: yearly changes of a few percentages in the

support of different opinions should not cause constant fluctuation in the geographical division of mandate areas.

combining public partial solutions

Public partial solutions cannot be freely mixed on top of each other, in the same way as virtual partial solutions can. Public partial solutions concerning two different topics can be combined only by implementing a separate mandate area *for every possible combination of partial solutions*. If we had several public points of contention, the number of needed mandate areas would grow exponentially.

Fortunately there are not many public points of contention in western politics that stir an extensive debate. The possibly high costs of public partial solutions, their poor combinability, and the grievances caused by pressure to move give us a reason to conclude that in most public topics it serves the common good best, if we minimize the number of implemented partial solutions, or even handle the point of contention as *indivisible* in the area of the whole city or country.

an indivisible point of contention

A political point of contention is *indivisible*, if only one solution is implemented in the area of the whole country. In multi-dimensional democracy a point of contention is left as indivisible only if this is found out to be the best option

from the viewpoint of the common good. This can happen if nearly all citizens agree about a topic, or if the costs of implementing partial solutions would cause more discontent than the increasing freedom of choice would cause contentedness.

If remarkable differences of opinion exist among the population, but a point of contention is left as indivisible because of high costs, or because the topic at hand cannot possibly be divided into parts (for example a person election), then it is possible to implement partial solutions as a sequence, for example as one-year mandate terms.

multi-dimensional democracy in history of mankind

Having read until this page, you probably have formed a perception that multi-dimensional democracy is something new and unheard-of, which has never been implemented anywhere extensively. The term may be new, but human-kind has practiced something similar to multi-dimensional democracy for thousands of years, in some circumstances.

International politics has similarities with the principles of decentralized multi-dimensional democracy. Countries can negotiate and vote, and form economic or political alliances. But a state cannot easily be dictated by a majority decision taken by other states. Every state is a minority that is judicially free from tyranny of the majority – at least *de jure*, if not always *de facto*.

2. Will of the people and the common good

multi-dimensional will of the people

In democratic decision-making we usually vote to discover the most supported alternative. This procedure is thought to represent will of the people – or at least will of the majority.

Will of the people is **multi-dimensional**, however, while will of the majority is **one-dimensional**. Therefore one-dimensional democracy based on majority decisions cannot very completely serve the will of the whole population.

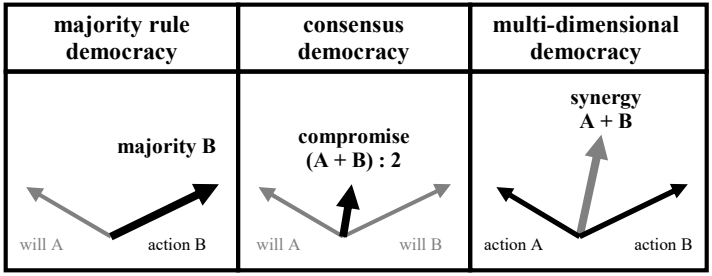

Diagram 3: Comparison of different democratic power-sharing models: is will of the people best described as the will of the majority, the average of individual wills, or the sum of individual wills?

The multi-dimensional nature of the will of the people is described in diagram 3, where group A has a common objective towards the left, and group B has a common objective towards the right. We can call these two groups socialists and capitalists, for example.

In traditional **majority rule democracy** we would implement the alternative B only, because its support is slightly greater than of alternative A at the moment of voting. This solution is "the will of majority" – but very far from will of *the whole population*, as nearly half of the citizens have a sharply different opinion on this topic.

In traditional **consensus democracy** we would implement some kind of a compromise between the interests of various groups, "no-one's will". This solution is more peaceful than majority rule democracy, because the implemented decision does not radically contradict with the interests of any party. On the other hand, it can be so that the implemented solution does not very well represent anyone's interests: *no-one's will is done*. This has happened also in the example of the diagram, where the compromise of wills A and B is not very close to anyone's will.

Majority rule democracy and consensus democracy are examples of **one-dimensional democracy**, whose basic idea is to find one single solution model, which would represent as good as possible the will of the people – or at least the will of the majority.

In this work we discuss also a third alternative, in addition to the two afore-mentioned ones, which we call **multi-**

dimensional democracy. In this mindset we try to impartially implement the multi-dimensional will of the people, by implementing several different solutions at the same time, and by optimizing the number of implemented alternatives in such a way that *the total amount of achieved interests* is the greatest possible.

In the example of diagram 3 we would implement both proposals A and B, which enjoy wide support (if they are not mutually exclusive alternatives): group A implements their own solution independently, and group B implements their own solution. Thus the multi-dimensional will of the people gets done more completely than in one-dimensional decision-making, and a greater share of the population will be politically happy with the situation.

In the example of the diagram, the majority decision B would divide the population sharply into the contented and the discontented, and there would be only a bit more contended people than there are discontented people. A compromise solution between the wills A and B would leave all parties relatively discontented, as no-one's objectives would be achieved. Implementing the proposals A and B at the same time would bring relatively much contentment to all parties, and the motivation to prove with their action in real life that their own solution will turn out to be better than the solutions of its critics.

Majority rule democracy leads to the triumph of one party and the disappointment of all other parties. Consensus

democracy may lead to political frustration of all parties. Multi-dimensional democracy leads to free competition circumstances between ideologies, in which all relatively large opinion groups get to implement their objectives in practice – and also to bear the full responsibility for their decisions.

We present the question, is the sum of the interests of all population groups more than their average? Will it cause more contentment, if several large opinion groups implement each their own will independently, or if we implement only the average of all opinions – which may not be specifically anyone's will?

In some cases the answer to these questions is yes, and sometimes it is no. Also in multi-dimensional democracy we may sometimes come to the notion that the total sum of achieved interests is the greatest possible, when only one solution gets implemented.

We have become acquainted with the theory of multi-dimensional democracy in chapter 1 of this work. In the two other chapters we analyze the power-sharing and mindset of one-dimensional democracy, which create a basis for understanding multi-dimensional democracy.

We start analyzing the topic by defining, what we want to mean with such basic concepts as will of an individual, interests of an individual, and common good of the whole population.

will of an individual

If a person buys a new product only because it has been advertised on television recently, **whose will** is done then: the will of this person, or the will of the advertiser? We answer that the will of both of them is done, because both parties seem to be contented with the situation. One party *influences* the opinion of the other party, though, but that is unavoidable in any case in this world that we live in.

Influencing people's opinion is permissible, legal, and often even recommendable, if the objective is to offer the other party a solution that will make him contented – and if the means do not include forcing, threats or intentional misleading (distorting the truth).

When we talk about people's "will" in politics, we mean **an opinion that can be documented at a certain moment**, and is based on sufficient knowledge of the facts, and has been presented voluntarily, consciously and without illegal forcing or threats by any party.

interests of an individual

A person's will and interests are not always the same thing. A person can sometimes want things that are not in his own best interests. A baby wants to touch a stove, without understanding that it is hot and would burn his hand, if he were not prevented from touching the stove.

How do we define the interests of a person – and who defines them? We answer that **a person's interests are defined by the person himself**, excluding individuals who are under guardianship, whose interests are defined by the society in cooperation with the guardian. (Guardians of an underage child are normally his father and mother.)

If a person's interests are defined by the person himself, can a person's will then contradict his own best interests? Yes, if a person does not understand the consequences of the action that he desires – he wants to commit action X, without knowing that it will lead to thing Y which he does not want to experience. If the person knew that the thing X that he wants leads to the undesirable thing Y, then he might not want to do thing X after all.

A person's will and interests have the difference that **interests are an objective** that the person wants to achieve, and **will is a means for achieving the objective**, by which the person *imagines* to reach the desired objective. This imagination can sometimes be a mere delusion, an unfortunate misunderstanding, in which case the will and interests of a person contradict each other, at least temporarily.

The will of a person or ethnic group can be a **relatively unstable factor**, which can change dramatically within a short time. A person may want the ice cream of company A, but then the ice cream of company B is advertised on television. After seeing the advertisement, the person starts to want the ice cream of company B, but after buying one

of them he does not like its taste – after which the person starts to want the ice cream of company C.

A person's interests are a very stable factor, which can remain nearly unchanging for several years, even decades. In politics we mean with a person's interests *the pursuit for as great contentedness as possible*. Politics is aligned with the interests of an individual, when it leads to his contentedness in the best possible way.

A person's interests change relatively seldom – only when his perception of the basic fundamentals of happiness changes. But a person's will can change nearly every day, whenever he discovers a new different way to pursue the basic fundamentals of happiness, which are his interests and moral objectives.

patronizing politics

If a person's interests are defined by the person himself, excluding the persons who are under guardianship, in that case a person can be regarded as being patronized when his interests are being defined by someone else than himself.

The state is an institution that is maintained for the sake of patronizing people. Most notably the police force is an authority that is necessary for maintaining a civilized state, as it patronizes the so-called "criminals", which means persons who disagree with the state about whether some action is permissible or not.

Some ideologies are opposed to the role of the state as a patronizer of citizens, and would like to dissolve states altogether. But turning also the other cheek to a drunkard brawling with a shotgun is not as effective means for solving the problem as is calling the police. Neither does turning also the other pocket to a thief solve social problems very far-sightedly.

Nearly all politics is patronizing, because the political system makes decisions that concern the interests of individuals, and these decisions are always contrary to the opinion of some individuals. Politicians can decide that wearing a seatbelt in car is obligatory, for example, and failing to obey this rule is a punishable act.

It is a political point of contention, which opinion we want to have about patronizing the use of drugs, alcohol or tobacco. These issues can be argumented from the same point of view as wearing a seatbelt. During the past 100 years all of these have been sometimes patronized with a total ban – and sometimes they have all been permissible without control.

If individuals are patronized sometimes more and sometimes less, who decides about the patronizing? Practically anyone who happens to have the legal right to decide about some issue. In one-dimensional democracy **the largest opinion group** often patronizes everyone else, more or less consciously.

Multi-dimensional democracy is less patronizing than one-dimensional democracy, as various opinions are usually implemented more than one – which leaves an individual with more freedom of choice to find from among the offered patronizing alternatives the one that least contradicts with his own opinions.

In multi-dimensional democracy the main objective of the patronizing performed by the state is not to make some lifestyle obligatory, but rather to protect different lifestyles from vandalism by differently thinking people.

common good of the whole population

It is possible to derive from the definition of the interests of an individual a definition for common good, as *pursuit of greatest possible contentedness for the whole population.*

> *definition of the common good:*
> Common good of the whole population is the action model, which results in the **highest average** and **lowest standard deviation** of the contentedness of individuals in the whole population.

In political examples, standard deviation tends to be somehow included in the concept of average. This is because many political factors, which cause inequality between individuals (deviation of contentedness), usually cause *more discontent* to one group than contentment to another group. Thus an increase in standard deviation of contentment causes the average of contentment to decrease.

This rule applies to income level, for example: if the income of an individual rises to be 100% above the average income of whole population, it causes contentment to the individual – but if the income of an individual falls 100% below the average income (to zero), it causes *more* discontent to the individual than a similar rise of income level would have caused contentment. Appetite comes with eating, and affluence beyond one's basic needs does not increase one's contentment as much as poverty below the basic needs reduces one's contentment.

Due to this phenomenon, it is usually not necessary to analyze separately both the average and the standard deviation of the contentment of individuals in a population. Analyzing the average only is usually enough, because it is influenced by the hidden impact of standard deviation.

In the examples of this work we estimate the contentment of people to be 75% when their will is done as expected, full 100% when their wishes come true beyond expectations, and 0% when their *most unwanted scenario* comes true. These percentages are naturally mere allegories drawn out of a hat, but they depict the phenomenon in politics that people tend to pay more attention to negative aspects than positive ones. (There are also some logical practical reasons for this, what comes to standard of living for example: a too low standard of living can be a matter of life

and death, while a high standard of living can be met with a remarkably more relaxed attitude.)

3. Distribution of power in one-dimensional democracy

Democracy is a governance model, whose basic idea is to implement will of the people – and not only the will of an autocratic dictator, for example. In daily politics we easily end up implementing **the will of the greatest opinion group**, however, which can be different than **the will of majority**, and nearly always is different than **the will of the whole population**. We will now analyze the meaning of these concepts, and how they are related to each other.

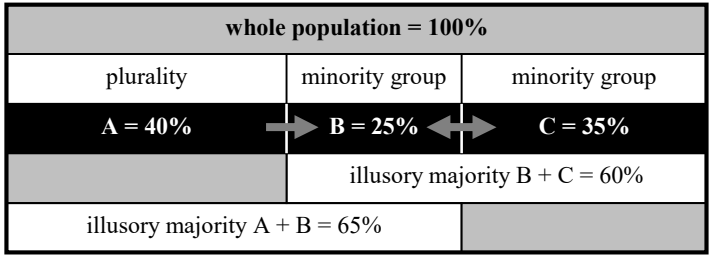

Diagram 4: Division of the will of the people into smaller statistical shares. The arrows indicate the secondary preferences of voters, if their primary favourite will not be among the solutions that can possibly get implemented: the voters of alternative A would support B next, the supporters of alternative B would support C next, and the supporters of alternative C would support B next.

plurality i.e. the largest opinion group

Let us assume that in a political dispute the opinions of citizens are divided between three alternatives with the ratio 40% – 25% – 35%. In such a case we often end up implementing the will of *the greatest opinion group* – the option that has most supporters, but not necessarily more than 50% of all votes. A plurality vote would lead to this conclusion, for example: the alternative that has received most votes is declared as winner of the vote. In the example of diagram 4 we would implement option A, which is supported by 40% of voters – *a minority of the whole population* (less than 50%), but yet the greatest opinion group, more populous than any other opinion group.

A democratic vote would in this case be won by an alternative that is opposed by 60% of people, and supported by only 40% of people. (B and C think that A is the worst alternative, which should not be implemented in any case.) However, the basic ideal of democracy is not to implement the will of a small minority only, but the will of at least the majority – and in the best case the will of the whole population. A plurality vote does not guarantee very water-tightly that the basic ideal of democracy will be fulfilled.

the plurality paradox:
The most supported alternative can be contrary to the will of the majority of population.

Plurality is sometimes called “simple majority”. This term can seem a bit misleading, because plurality is not always the majority of population (over 50%): simple majority is quite often *a minority group* (under 50% of population).

The terminology can get seriously entangled, if a group is at the same time both a minority and a majority, so we avoid using the term “simple majority”, and instead we favour expressions such as “plurality” and “the largest opinion group”.

true majority and illusory majority

If plurality is not also the true majority – the most supported alternative does not get more than 50% of all votes – then the majority of population has voted other alternatives, and we cannot be sure that the majority of population approves the most voted alternative.

The presidential elections of Finland use a limited plurality elimination, if none of the candidates get more than 50% of votes in the first voting round, where all candidates are available to be voted: the two most voted candidates continue to the second round, and people are asked to vote one more time, which of these two candidates is the lesser evil in their opinion. In the example of diagram 4, the supporters of option B would support C in the second voting round, and these two voter groups would decide the election victory to C, by forming *an illusory majority*, more than 50% of voters.

It is not a *true* majority, because the supporters of option B don’t in reality regard C as the best alternative. (The supporters of B are not fully satisfied with the election victory of C, as they would have preferred B to win the election.) The illusory majority B + C votes C to election victory, but in reality the wishes of only a small minority come true: the supporters of option C are only 35% of all voters, and the wishes of the great majority of population fail to come true, at least for the most part.

With this example we immediately noticed that the will of plurality, the largest opinion group, is not necessarily the same as the will of the majority of people. The largest opinion group thought that A is the best alternative – but the illusory majority B + C considered C to be the best alternative.

The will of an illusory majority turns out to be a surprisingly vague concept, when we analyze it more closely. Afore we already noted that the will of the illusory majority B + C was not in reality the primary will of voter group B, it was the primary will of minority group C only. It must also be noted that B + C is not the only possible illusory majority, which can be formed from the opinion groups in this example.

We have just voted alternative C as the president of Finland, because in the last voting round the illusory majority B + C regarded this candidate as a smaller evil than candidate A. This illusory majority was not formed accidentally, however, in circumstances of natural freedom, but the rules of the vote had an impact on the outcome. The election victory of candidate C is partly caused by the rules of the election, not exactly by the will of the people, as we will indicate soon.

Candidate A cannot become the president, because he cannot gather the support of even an illusory majority. It is therefore interesting to analyze, what would happen if the last voting round were between alternatives B and C – now as we know that A cannot possibly win the election.

If the last voting round were between candidates B and C, then the supporters of option A would start to support B, and these two voter groups would form *an even greater* illusory majority than C received in the previous example (!). In this case candidate B would rise as winner of the election, even though B had fewest supporters of all candidates, only 25% of voters. Nevertheless, this candidate is able to gather the support of a greater illusory majority than any other candidate.

This example sheds light on the problem that "will of the majority" – the alternative that enjoys the greatest possible support – is not at all a simple concept, and it cannot be

reliably detected with just some randomly chosen voting system.

> *the paradox of illusory majority:*
> If the largest opinion group is not majority of the whole population, then the decision of the illusory majority is not necessarily their own will, and there can be several different possible illusory majorities, which have several different wills.

Our example of Finland's presidential elections has also the additional aspect that the candidates of different political parties will not fall randomly into the setting discussed in the example: alternative B, which courts both of the more radical alternatives, represents most probably the political center.

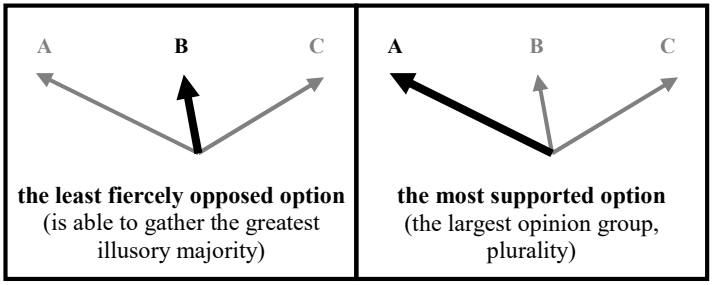

Diagram 5: Is the greatest amount of direct support, or the least amount of fierce opposition, more relevant for implementing the common good?

These examples give us a reason to contemplate, what we want to understand with the concept "majority"? Option A has the greatest number of supporters (40%), but also *the greatest number of fierce opposers* (60%). Option B has least supporters (25%), but also by far least fierce opposers (0%)! Option C is not the best according to any criteria that has been presented so far – it does not have most supporters, nor least opposers, neither can it gather the greatest illusory majority behind itself. *Yet C managed to win the presidential elections (!).* We promised to indicate that C rose as the election winner only because of the rules of the election, not because of being the best option according to the criteria that are measured in elections. Now we fulfil that promise:

- If the criteria is the greatest number of direct supporters, the best alternative is A.
- If the criteria is the potential support of greatest possible illusory majority, the best alternative is B.
- If the criteria is the least number of fierce opposers, the best alternative is B.

(The greatest possible illusory majority and the least number of fierce opposers are opposites of each other as concepts, so it may not be necessary to analyze both of these concepts separately.) Which is more important for implementing the common good, a proposal having many supporters, or a proposal having as few fierce opposers as possible? It would be easy to show with practical examples that bad politics destroys more than good politics builds.

Particularly bad politics leads in the worst case to war, or at least the national economy to ruins, but particularly good politics is not able to achieve equally dramatic positive results. That is why opposing particularly bad politics is a more important objective for the common good than supporting particularly good politics.

If the presidential election were based on the least amount of fierce opposition (or greatest possible illusory majority), the political center would probably win the elections nearly every time. The political center is always closer to *the will of the whole population* than the political left or right.

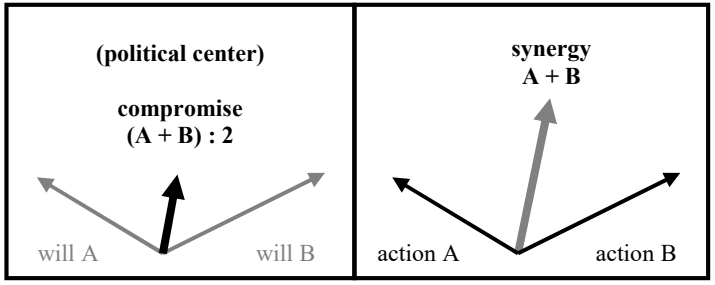

Diagram 6: The political center represents a one-dimensional and relatively passive approximation of the multi-dimensional will of the whole population.

The political center is the favourite darling of consensus democracy, which strives approximately to the same direction as the average of the wills of all parties. Yet the political center does not represent *the will of the whole population* even approximately, only its average. Will of

the people is multi-dimensional, and can properly blossom only when also the political decision-making is sufficiently multi-dimensional.

consensus majority

The compromise of wills A and B in diagram 6 is *a consensus majority*, i.e. a majority that has a quorum and has been formed by negotiating a compromise between the interests of two or more parties. This setting differs from an illusory majority in the aspect that all parties that participate in forming the majority get some influence on the negotiated decision, as a condition and reward for joining the coalition. (An illusory majority represents *the will of one party only*, which other parties start to support reluctantly and without influencing it, only to avoid a yet worse option being successful in the vote.)

Consensus majority has the feature of a true majority that its participants are aware that their decision is the best alternative *from the viewpoint of political realism*, but on the other hand, their decision is to some extent clearly *contrary to the will of its voters*. The solution gets "support of the majority", yet it is not the actual will of the majority of individuals, only a reluctantly swallowed compromise.

Nearly every true majority could be said to be actually an illusory majority. In a true majority all persons have the "same opinion" – but if we analyze more closely the reasons why a large group of very different persons have

the "same opinion" about something, we notice that people have the tendency to give up unrealistic personal wishes, and join to support objectives that enjoy broader popularity and seem politically realistic at least to some extent.

The "will" that an individual expresses in politics is thus not always the actual opinion of the person, it can be a politically realistic compromise between the person's own objectives and objectives that enjoy broader support. Nevertheless we maintain such a definition for the concept of "will", that the publicly expressed will of a person is his political will, if the person's will has not been influenced by illegal means. Therefore a clear difference remains between the various types of majority:

- In a *true majority* more than 50% of people indicate (still after the decision has been made) that the decision is nearly perfectly in accordance with their will.
- In a *consensus majority* the decision has been formulated by negotiating a compromise between the interests of the participating parties, and many of its voters indicate (still after the decision has been made) that the decision is not fully in accordance with their will.
- In an *illusory majority* less than 50% of all voters consider the decision to be in accordance with their will, but the option receives more than 50% of votes nevertheless, because some persons vote for the lesser evil due to lack of better alternatives.

summary of different majority types

From the aspect of the will of people getting done, *true majority* is the only majority type from which we can directly conclude, how many percent of citizens are contented with the decision. All other majority types give to the public a slightly embellished impression of how great popularity the decision actually enjoys among its voters – but the reality can be very different. Most "majority decisions" can in fact be contrary to the primary will of the majority of voters.

Any majority type can turn into a true majority immediately after the decision is made, or later in course of time, if citizens change their opinion to be more realistic, and announce that the prevailing situation is consistent with their will – even though before the decision they may not have considered this option to be the best alternative.

People also get used to some circumstances over time, and after fierce change resistance the attitudes can get remarkably warmer. A ceremonial president without much political power can become the pet of the whole nation in a few years, regardless of who voted him and who not. Election victory is always associated with a certain halo of glory, whose advertisement value is notable. It is easy to smile for the winner, and it is easy to join the camp of the winner to celebrate the success.

Diagram 7 summarizes the support base of various majority types, and fulfilment of the objectives of each party.

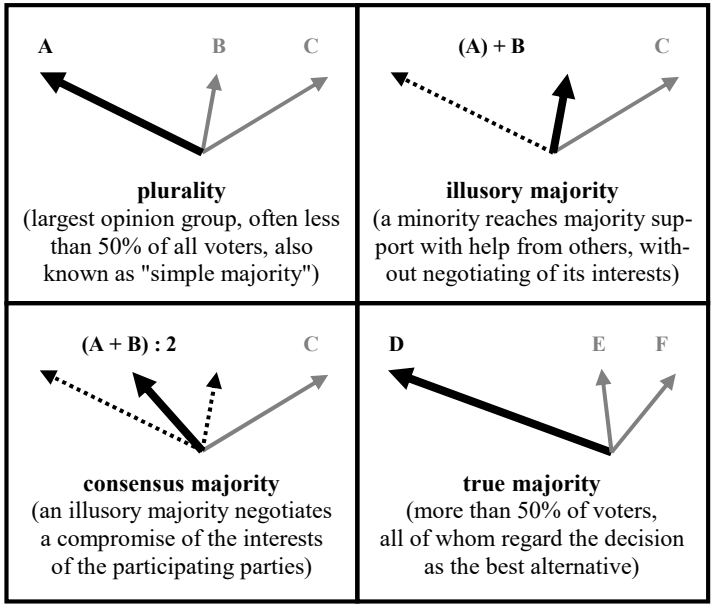

Diagram 7: Comparison of the support base and political objectives of various majority types.

absolute deuce between candidates

There are many situations in which voting can result in an absolute deuce, between two or more proposals. The

simplest absolute deuce happens when there are two proposals and two voters, and each of them votes his own proposal. The votes are tied 1 – 1, and we have no logical arguments for declaring either of the proposals to be a more complete "will of the majority" than the other.

When there is an absolute deuce between two proposals, the vote results in **an undecided tie** – if the voting method is not based on random factors, and the voting method is not partial in favour of either alternative. In an undecided tie it is possible to perform **a lottery** between the proposals whose votes are tied. A Solomon's judgement can be declared also by many other methods, but none of such methods would lead to implementing the will of *the whole population* any better, because the will of the people is multi-dimensional, and in this case also the will of the majority is multi-dimensional.

One of the most famous examples of an absolute deuce is the paradox presented by the Frenchman Antoine Condorcet in 18th century, which includes three candidates, and each of them enjoys an absolutely equal support of voters (diagram 8 has an adaptation of the Condorcet paradox). From the viewpoint of one-dimensional democracy, all alternatives are equally good or bad, but from the viewpoint of multi-dimensional democracy *only one* solution is the best possible: implementing all three alternatives!

In the example of diagram 8, a workgroup of three persons plans to build an area of detached houses for their families. In the opinion of person A, all three houses should preferably be painted yellow, or if that is not OK then white, but rather not red ochre. Person B thinks that white is the best colour, and also red ochre is OK, but he does not want a yellow house for himself. Person C appreciates red ochre colour most, and he would not mind yellow either, but he is not interested in white colour at all.

Condorcet paradox	preferences of person A	preferences of person B	preferences of person C
option x: yellow	**1.**	**3.**	**2.**
option y: white	**2.**	**1.**	**3.**
option z: red ochre	**3.**	**2.**	**1.**
contentedness, if option x is implemented only	**100%**	**0%**	**50%**
contentedness, if all options are implemented	**75%**	**75%**	**75%**

Diagram 8: The Condorcet paradox, an absolute deuce between three proposals. A workgroup is choosing the paint colour for detached houses: the ordinal number indicates the preference of each person for the option that is on the horizontal row. For example, person A thinks that yellow is the best option, white is the second best option, and red ochre is the worst option.

If a majority decision will be done (which requires a lottery in this case), then contentedness will be distributed among these three persons unequally 100% – 0% – 50%, where the average of contentedness in the whole population is 50%. We would reach the same outcome also by various illusory majority decisions, for example if person A agrees to support the wish of person B to paint all houses white, to ensure that all houses will certainly not be painted red ochre.

If all three partial solutions will be implemented, and each person paints his own house with the colour that he wants, then contentedness will be distributed equally among these three persons, and also the average of contentedness in the population is higher than in previous scenario, some 75%.

an alternating majority share

When we analyze a sufficiently complex decision-making scenario, which includes several different points of contention, and each point of contention has several different suggested solutions, we may find out that nearly all persons are more often in the opposition than in the decision-maker position with their own opinion. This is because the so-called "majority" is often actually an *illusory* majority, and only a minority of people in reality regards the election-winning proposal as the best alternative.

> *the paradox of one-dimensional democracy:*
> A decision based on majority rule is with a high probability *contrary to the will of the majority*, if the handled issue includes several solutions that might be worth implementing.

In this Condorcet paradox three different options worth implementing were proposed for the paint colour of the houses, and all these alternatives enjoyed an equal support of the voters. A decision based on majority rule would have been *contrary to the will of the true majority* in any case.

In politics there are several different points of contention, and when the debated topic changes, also **members of the majority change**. A uniformly thinking "majority" does not exist, which would have the "power" in the society. If power has been transferred to a government by voting, this government cannot even theoretically implement in all topics the will of its voters, the majority – because their voters disagree with each other about nearly every possible topic (!), maybe excluding a few favourite topics, based on which the voters have chosen their favourite politicians and party.

The perception that a decision made by the "majority" would automatically conform to the common good, or even to *interests of the majority of people*, is based an a statistical illusion: even a true majority is not a specific group of people, but a personless and faceless mathematical concept, a set of citizens chosen *for one moment at a time*.

Every person agrees in some topic with over 50% of citizens, but in some other topic *disagrees* with over 50% of citizens. The situation is also often such that no opinion gets over 50% support, in which case any majority is *illusory*, and in reality all persons are in the minority with their own opinion.

the problem of one-dimensional democracy	heating energy	roof material	garden trees
opinions of person A	**electricity**	tin	alder
opinions of person B	**electricity**	bitumen	birch
opinions of person C	oil	**bricks**	spruce
opinions of person D	wood	**bricks**	rowan
opinions of person E	groundheat	straw	**pine**
opinions of person F	sun energy	clay	**pine**

contentedness, if only one option implemented	**A** 35%	**B** 35%	**C** 35%	**D** 35%	**E** 35%	**F** 35%
contentedness, if all options are implemented	**A** 75%	**B** 75%	**C** 75%	**D** 75%	**E** 75%	**F** 75%

Diagram 9: The problem of one-dimensional democracy: when members of the largest opinion group change in various topics, *every individual* in the population can be in opposition in most of the handled topics. (A workgroup of six persons plans to build an area of detached houses for their families.)

Will of the people and the common good are multi-dimensional concepts, and implementing them with one-dimensional decision-making is not only difficult, it is often nearly *impossible*.