



# The Red Trousers. About Confirmative Thinking and Perceptual Defense in Complex and Uncertain Domains of Reality

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This article is not about red trousers. The title points to a political foolishness that killed more than 100,000 soldiers. The discussion of this foolishness is an introduction to a general discussion of the reasons for political foolishness. - In her book 'The March of Folly - From Troy to Vietnam', Barbara Tuchman said that in the last 3,000 years mankind has made large progress, primarily in science, but also in medicine, architecture, economy, agriculture, etc. Only in politics, in the art of managing a state, nearly no progress is visible. Others share this opinion. The Swedish Chancellor in the time of Gustav II Adolph, in the time of the 30 Years' War, Axel Oxenstierna, said to his son, who was elected for an important political position and had doubts, whether, with his 18 years, he would be able to cope with this difficult task: "If you would know, my son, with what low degree of intelligence the world is governed . . . ." - In surveys about the reputation of professions, politicians normally get low ranks. Why is that so? - In this article we try to give an answer to that question. The answer is very simple. Foolish decisions are reducible firstly to a low or wavering self-esteem. Secondly, they are based on a lack of phantasy; politicians have difficulties in finding new solutions for problems. - This answer is not at all new; already Platon and - nearly at the same time - the ancient Indian Bhagavad Gita gave the same response. In this article we develop a theory about political foolishness.

Keywords: Thinking, Decision-making, Politics, Errors, Foolishness

"Le pantalon rouge c'est la France!"

Eugène Étienne, minister of war of France in 1913 in a parliament-debate 1912 about the uniforms of the French army

Figure 1 shows a French infantryman in the uniform in which – in autumn 1914 – he marched into the war. Even in those days the uniform was outdated. Many armies had changed already to a camouflage-battle-dress; the English soldiers wore khaki, the Germans preferred light grey ("feldgrau"), the Russians green uniforms.

Especially the red trousers give rise to concern. They make the soldier a well visible target. (At least the red cap got a blue coating when the French army went to war, showing a certain concern about the inappropriateness of the uniform.) As Tardi (2013) writes,



Figure 1. French infantry soldier in battle dress, 1914.

the French soldiers themselves called their dress an operetta- or circus-dress, which made them look like jumping jacks in uniforms. In his book, Tardi uses the memories of his grandfather about the Great War. Therefore, the novel seems to be authentic; the stories make a genuine impression.

Figure 2 shows a line of German soldiers at the beginning of the war (the figure is taken from the graphic novel 'Miserable War' ('Elender Krieg' by Jacques Tardi and Jean-Pierre Verney, 2013, p.10).

Figure 3 shows a company of French soldiers preparing a bayonet-attack on the German line (see Fig. 2). One can see the start and the end of that "attaque brusquée". If you compare the French and the German uniforms, equipment and tactics, you will understand the reasons for the French defeat.

Within the first five months of the war, 350,000 French soldiers lost their lives in combat, but "only"

**Corresponding author:** Dietrich Dörner, Otto-Friedrich-Universität, Institute of Psychology, Economic and Organisational Psychology, Markusplatz 3, 96047 Bamberg, Germany. e-mail: dietrich.doerner@uni-bamberg.de 1 "The red trousers, that is France!"







250,000 German soldiers. The difference in the numbers of killed soldiers is not only due to the outdated uniforms of the French soldiers, but also to differences in tactics and the armament.

For instance, at the beginning of the war, the French army had nearly no heavy artillery at its disposal. Heavy artillery, in the eyes of the French generals, did not suit to the French maxime "l'attaque, l'attaque, toujours l'attaque"; it was considered as too slow, too awkward to move, and therefore was abandoned.

(However, only heavy artillery, with mortars and howitzers, made it possible in those times to fire "indirectly" over hills and walls. Therefore, the abandonment of heavy artillery was foolish<sup>2</sup> to a high degree.) Moreover, the French soldiers were not equipped with pickaxes and shovels in sufficient numbers, because their fiery assaults should not be hampered by clinging to the soil. Additionally, the French army had much fewer reconnaissance-planes than the Germans, who used them for guiding and controlling the (indirect) fire of the heavy artillery on long distances. The French infantrymen complained that grenades were poured over them and they could not even identify the source of the fire. (See Tuchman, 2007, p. 266.) The French also had fewer light machine-guns than the Germans, as they considered the machine-gun as a pure "defense-weapon" (see Fig. 2). All that resulted in the French attacks often ending as depicted in Figure 3 (lower panel).

What was the reason for such a silly preparation of a possible war? The "red trousers" and all the other regulations for "l'attaque, l'attaque, toujours l'attaque" had not happened accidentally. They were based on a "philosophy of war" which was the result of reflecting about the reasons of the German victory in the war of 1870/71.

For centuries, the French Armed Forces were considered to be the foremost ones in Europe. Although





Figure 3. French infantry prepares for an assault on the German lines. – And below it is shown, how it ended.

the victorious time of Napoleon Bonaparte ended with Napoleon's defeat, the great reputation of the French army remained untouched. Hence, the defeat of 1870/71 was an unexpected catastrophe for the French generals. Soldiers and politicians were usually keen on honour and reputation, and thus the defeat of 1870/71 greatly affected the self-esteem of the French generals and not only of them. What could be done? Well, a good method to repair a wounded self-esteem is to deny the insult! Has the defeat of 1870/71 and in the Franco-Prussian war anything to do with the abilities of the French army? Not at all.

The commander-in-chief of the French army in 1870 was Napoleon III, a nephew of Napoleon Bonaparte. Napoleon III had an education as an artillery-officer. But contrary to his uncle, he did not have very much military experience and obviously was not at all a gifted army leader. In 1870/71, France intended to attack (and to conquer) Baden and Württemberg. However this plan failed: The Prussian-German armies attacked Alsace and the French army was forced to defend central France. Therefore, after the defeat of 1870/71, the French generals explained that the French army was deployed only defensively and this was not in accordance with the "real" talents of the army.

In 1806 Napoleon defeated Prussia within a fortnight. – What was the reason for the disastrous defeat in the 1870/71 war? Not the low quality of the French army, of course! The French army had been excellent (also in 1914), but it was forced by an ungifted general to fight defensively. This, however, was not in accordance with the spirit of the French army, which in the glorious days of Napoleon I was offensive! The

 $<sup>^2{\</sup>rm The~term}$  'foolish' is understood as thinking or reasoning distorted by emotions, whereas 'silly' means a low-grade thinking because of low cognitive capacities.

quality of the French soldier and hence of the French army was the offensive. – Even biological factors were discussed in this context. Bergson said that humans are characterized by different levels of an "élan vital", and French have a much greater level of "élan vital" than Germans, as it is shown (or not shown at all?) by Figure 2 and Figure 3. (See Tuchman, 2007, p.39.)

And therefore, in a future war, the French army should fight offensively, which always had been its real strength. Thus, equipment and manoeuvers were adapted to the idea of a permanent offensive. The words 'defense' or 'defensive' were banned from the French military vocabulary. Even in the war-schools, officers did not learn how to organize defense. And all that happened although Clausewitz, who has been read in France, too<sup>3</sup>, had stated that defense is "the stronger mode of fighting". (See Figure 2.)

The French generals, preparing for a possible war with Germany, made the mistake not to think about soldiers and fighting and equipment, but were busy repairing their hurt self-confidence by remembering the great days of Napoleon. And, unfortunately, the manoeuvers and uniforms of those days, too. Remembering past glory replaced thinking. — So they lost their methodical flexibility by hallowing the doctrine of the offensive. Questions about life or death of the French soldiers were replaced by questions about how to repair the self-esteem of the French generals. And so the Germans won the border-battles in autumn 1914 through a strategical offensive, which however, was carried out by a tactical defense (see Figure 2).

In 1912, the French Minister of war, Alphonse Messimy, after having visited Bulgaria in the first Balkan war and having observed Bulgarian soldiers in camouflage uniforms, found it necessary to introduce camouflage dresses for the French army, too. This, however, caused considerable protest votes in the French military, as well as in the French public. It was argued that the French soldiers would feel "humiliated" to be dressed in "dirty grey" uniforms.

However, it was quite obvious that the red trousers were rather conspicuous. But this argument was rationalized away. The French army in manoeuvres experimented with attacking infantry. A French infantry attack was expected to be initiated by an artillery assault on the enemy. (The French army in 1914 was equipped with an extremely effective light artillery, the soixante-quinze-cannons, calibre 7.5 cm). After the end of an artillery assault, the respective enemy, according to experiments and calculations of the French army, would need about 20 seconds to be prepared for defense. In this time a well-trained French infantryman could run about 50 m and before the enemy was able to defend himself, he was already confronted with the French bayonets. Therefore, whether the French infantrymen wore red or grey trousers during the assault was completely insignificant. (Later measurements showed that the available time for an unhindered approach was not 20 s, but only 8 s. See Tuchman, 2007, p. 247.) Such "unconfirmed" ideas, however, had no chance to be considered by the French military command.

In the first five months of the Great War, the French lost 100,000 soldiers more than the Germans, because of silly and foolish decision-making. This had serious consequences for the morals of the French army.

During the entire World War 1 (WW1), 25 deserters and mutineers were sentenced to death and executed in the German army. In the British Army, this number was 48; but in the French army this number was 645.

In the French army in 1917, half of the divisions mutinied (which did not happen in any other army of WW1). This was, in accordance with reports in Tardis work, the consequence of the French soldiers being unsatisfied not only with the conditions of fighting, but with their command, too. Contrary to the public, in the trenches they did not love General Joseph Joffre. In the famous 'Chanson de Craonne', the chanson of the mutineers, the Germans are not mentioned as enemies. The enemy is the war, "l'infame guerre"! In Tardi's novels, this plays a central role for the mutiny Stanley Kubrick directed a movie about of 1917. this mutiny ("Paths of glory"; in German "Wege zum Ruhm") featuring Kirk Douglas. It was forbidden to perform this film in France until 1975. And the 'Chanson de Craonne' was forbidden, too. (This verifies Tardis assumptions about the causes of the mutiny. It testifies that indeed the mutiny of 1917 was considered as extremely dangerous for the French morals.)

#### An Explanation

What was the reason for these foolish forms of thinking by the French generals before and at the beginning of WW1? Here is an answer:

The reason for this kind of thinking is fear – or rather the effort to overcome fear.

In war (and mostly in politics), the state of reality is not completely known, or better, is unknown to a high degree. Even what you believe to know is uncertain; it might be true or false. Additionally, there is a second-order uncertainty; you do not know what you do not know.

The reality can be described as a large set of variables, forming a network with complex forms of dependencies. Therefore, it is rather difficult to predict the development of the whole system. Nevertheless, a politician or a general has to decide – in spite of the state of reality being unknown to a high degree. (We focus on decisions rather than on actions, because the politician could decide not to act, which would be an "action", too, as "no action" has certain consequences as well as "action".) – Often people in a highly uncertain situation feel the urge to act as the ability to act creates a feeling of competence and certainty. To be able to act means that one is able to change the state of reality, and this gives a feeling of power. That

 $<sup>^3{\</sup>rm General}$  Foch, later commander-in-chief of the Allied Forces in France, was an admirer of Clausewitz.

is what people desire when exposed to a situation of high uncertainty.

However, in politics it is often unclear, whether an action had any consequences at all. For instance, at this very moment (September 24<sup>th</sup> 2021, the German Minister of health declared that a "vaccination week" was successful. The success, however, is not visible in the numbers of newly infected or hospitalized persons. It could be that this 'no change' means, that without the vaccination week the numbers would have been greater and that they have been constant only because of the vaccination week. Or the numbers of newly infected will decrease in the next weeks. This would be a long-term effect. Obviously this is an unclear situation, not a success.

Very often in war and in politics it is difficult to identify the results of an action. And often – when some positive consequences are visible – side and long-term effects are not (yet) visible. – The "optimism of the direct effect" results in a strong tendency of decision-makers to overrate the direct effect and to underestimate side- and long-term effects, which will often be visible only after months or even years. What immediately may be identified as a great success, may however hide the monsters of the side and long-term effects in the future.

How to cope with uncertainty? Well, it might be appropriate to launch some activities to explore uncertain parts of the respective domain. How could that be done? Well, for instance by launching reconnaissance activities. Or by thinking about the unknown domain; how could the unknown terrain be shaped? Such activities produce information, even though they usually do not provide a complete picture of the current state of reality. Therefore, thinking is necessary. In particular, phantasy is necessary – the ability to raise hypotheses about the structure of the unknown state of reality. And this is the reason why, for instance, Platon demanded that a politician should be thoughtful. That does not only mean that one is able to devise a plan by means of reasoning. Thoughtful means that an actor is able to think about his own thinking. He must be able to criticise himself. He must be able and willing! - to identify his own mistakes and errors. Here, however, a problem arises: Should General Joffre tell his soldiers: "Hello comrades, unfortunately I must tell you that we had rather wrong ideas about infantry attacks, the necessity of heavy artillery, the necessity of reconnaissance-airplanes, the necessity of pickaxes and shovels and about the role of offensive and defense. So sorry!"

It is known, what General Joffre really told his army: "The division commanders and some army-commanders, too, for instance General Lanrezac, have not understood the plan XVII. And so we have to replace these commanders!" (See Tuchman, 2007, p. 438.)

There are two simple but deceptive methods of altering the subjective reality; for identifying the actions which are appropriate to change the image of the current state of reality. These methods are:

- **Perceptual defense** (PD): Information about the state of reality one does not wish to see is not perceived.
- Confirmative Thinking (CT): Those aspects of the current state of reality that are necessary or would be helpful, but definitely do not exist, are "perceived". The reaction of General Joffre to the failure of the French army in the border-battles, as mentioned above, is an example of CT: "The division-commanders have failed."

PD and CT presumably are phylogenetically old mechanisms, which may give courage in hopeless situations. They result in the tendency of an organism, not to give in, which is better than giving in, because the latter means the end of all efforts. If one does not give in, a certain amount of hope may remain.

We believe that PD and CT developed from safe-guarding behaviour, which often can be identified with animals and humans, too. The blackbird I observe on my balcony, periodically switches to safeguarding behaviour and looks around, whether something useful or something dangerous might be close. PD and CT are internal forms of safeguarding behaviour. This safeguarding behaviour is done by checking what else, apart from the objects in the center of attention, exists or does not exist or may develop in the situation one thinks about.

PD and CT mislead decision-makers with high probability. We will now show some rather common CTs and PDs that can be found rather frequently in military and political thinking:

- Denial of Side and Long-Term Effects: If decision-makers consider only the positive effects of a measure while forgetting or suppressing the idea, that there might be unwanted side- and long-term effects, they very likely commit a severe error. This form of PD is very frequent. (Dörner,1996)
- Rumpelstiltskin Planning (or neglecting conditions): Rumpelstiltskin, a character from the tales of the brothers Grimm, planned in the following way: "Today I shall bake, tomorrow I'll brew and the other day I'll marry the Queen's child!" But for baking it is necessary to have firewood, flour, yeast, and so on. Rumpelstiltskin did not consider that. And he did not check either, whether the firewood would be sufficient for baking and brewing. And so, in the end, Rumpelstiltskin failed. (Well, he did not fail because of the firewood and so on, but because, when dancing around a fire, he sang his name and so the Queen became to know the name of Rumpelstiltskin. And not being able to find out the name of Rumpelstiltskin was the condition for the transfer of the Queen's daughter.) – Anyway: Rumpelstiltskin failed because he disregarded the conditions of actions. - To solve a problem it is not

sufficient to have a goal. It is necessary to dispose of the actions, too. And this is only the case if one knows whether the condition for a certain action is given. Otherwise, the respective action will not work.

- Thinking in Goals: The goals, one is striving for, are great for one's self-esteem. Because if we reach them this will mean happiness and welfare for mankind. "We should decrease the  ${\rm CO}_2$  level by 75% to be on the safe side with respect of global warming." Clear goal. - However, it is not enough to have goals, but it is necessary to know (or to find out) how to reach them. Forgetting to think about that is an example of PD. The reasoning is incomplete then. - Immanuel Kant (1965, p. 10) meant with respect to 'thinking in goals': "To make plans is a luxuriant and boasting mode of thinking, it is claimed what cannot be done, it is demanded, what is unclear, it is sought after, what is unknown." - This form of "making plans" can be found quite frequently during election campaigns and in the programs of political parties.
- Methodical Rigidity: You have experience in your field and you know a lot of methods by which you will reach the goal you aspire. But unfortunately for military and political realities a complete set of methods that allows to solve each problem, does not exist. And it will never exist. - In chess you know all the methods how to move and use the pieces. And your knowledge is sufficient for all the purposes of the game. This, however, is not true for political or military realities. There you can never know all the methods for different purposes, because their number is infinite. This is due to the "incompleteness-theorem" by Kurt Gödel (see for instance, Hoffmann, 2012): A calculus (i.e. a set of action methods or information processing methods) to solve every problem of a certain reality, does not exist. It is always and for infinite times necessary to be prepared for self-criticism and therefore to be prepared to think about new modes of thinking. The belief to believe all the necessary methods is called Methodological rigidity and that is a frequent form of CT. - Even if you can show yourself and others that you are able to solve a certain problem, this does not mean that you are able to solve every problem in the respective field.
- Groupthink: Normally, a military or political leader has a "staff", a couple of people, whose task is to give advice to the commander-in-chief. If, with respect to a proposed solution of a problem, all the advisors agree with the commander, this will be considered as an indicator that the solution is adequate. However, the agreement might be the result of the tendency of the advisors to share the opinion of the commander in order to get the image of a loyal follower. Those who do

not agree, run the risk to be identified as opponents of the commander-in-chief or even as opponents of the group. And this could endanger their career. Therefore, they agree publicly, although they do not personally agree! This is "group-think" as Janis (1972) described. —It is important to have independent persons in advisory groups. Persons who have their own standpoint and do not give it up just to be in agreement with the chief. An agreement of "loyal" group members is not at all an indicator for an adequate solution. — Groupthink is a — probably frequent — form of CT. "We are right!"

• "Make it Simple": Not everybody understands complicated explanations. If one does not understand an explanation one will normally get angry and will try to avoid the respective topic. Therefore, if you want to persuade somebody that your ideas are true, if you want him as a follower, then it is wise to cast your ideas into simple forms. So Marx and Engels wrote the 'Communist Manifesto' to persuade uneducated workers that communism is the right idea. Bertolt Brecht wrote a poem about communism; it begins with

"Communism is simple, everybody can understand it!"

Unfortunately, the poem ends with:

"Communism is simple, but difficult to accomplish."

What does this mean? Is communism simple? Why then is it difficult to accomplish it? We will come back to this.

The Swedish historian Peter Englund states:

"Reality, well! Certainly reality has something to do with the problem. Without any doubt politicians, generals, and others act in a strict logical manner. However, they do not cope with reality. As they never care about what we call reality, but act according to an image of reality, which they have created; however this image often is not even similar to reality." (Englund 1993, p. 42.)

With PD and CT it is extremely simple to get wrong ideas about reality and hence wrong ideas for the solution of a problem. However, there are conditions favouring the use of CT and PD. If somebody runs out of new ideas, CTs or PDs are possible resorts. It is very easy to ignore the side and long-term effects of an action, especially when these effects are not yet visible. – An action that produces positive effects immediately and negative effects only with a delay is a trap. But if you are caught in a trap because of having decided for a certain action, it might be very difficult to get out again, to avoid the (negative) long-term effects.

A new image of the world, which does not mirror reality, is the result of using CTs and PDs! Has the decision of the French generals to adhere to the

red trousers been stupid for the French infantrymen? Well, not at all. The French military command invested a lot of reasoning – experiments and calculations (see above) – to arrive at the answer that the red trousers should be maintained. It was not stupid, it was foolish!

There is a difference between foolishness and stupidity. People are stupid if they use false forms of deduction or other incorrect forms of reasoning. Or they use data that are obviously wrong. – Foolishness means not to think at all about topics one should think about. For instance, it is foolish not to consider side and long-term effects when planning actions. Or it is foolish to assume that the conditions for a certain action are given without checking, whether this is true. The basis for ignoring topics one should consider in the given situation, is the premature assumption that certain events cannot happen or that certain conditions do exist (or do not exist). The tendency for confirmatory thinking or for perceptual defense are well known in psychology and not at all uncommon to human thinking. Confirmatory thinking and perceptual defense have the function of creating courage. Many philosophers and writers stress the importance of CT and PD. Schopenhauer (2011, p. 246.) for instance, writes: "An adopted hypothesis gives us lynx-eyes for everything that confirms it and makes us blind to everything that contradicts it."

CT and PD are often the reason for people to continue trying to solve a problem although all the odds are against them. Often this tendency to continue a difficult task is necessary, and confirmatory thinking and perceptual defense deliver an optimistic view on reality and its development.

Sternberg (2004) believes that foolishness is due to

- unrealistic optimism,
- egocentrism; only the effect for oneself is considered and not the difficulties other people have to cope with,
- illusion of omniscience,
- illusion of omnipotency,
- illusion of invulnerability.

This is a good list! However, we interpret it in a different way than Sternberg. Unrealistic optimism is not the *cause* of foolishness, but the *result* of counterfeiting reality by confirmatory thinking and perceptual defense. The illusions of knowing everything and of being omnipotent again are not the *causes* of foolishness, but the *result* of foolish thinking (viz., "nonthinking").

Back to invulnerability and omnipotence in connection with the "red trousers": the Commander-in-chief of the French army in 1914, General Joffre, sent a message to the French Minister of war, Alphonse Messimy, in the evening of  $20^{\rm th}$  of August 1914, immediately before launching the plan XVII: "We have every reason

to expect the development of the operations with confidence!" – This, however, was definitely wrong: The development of the next four days demonstrated that the French attack according to the plan XVII failed completely. – Now the Germans believed they had won the war and saw the French divisions in a headless flight. But this, again, was confirmatory perception and not at all true. The French fell back – not at all headless, but in good order! – in the direction of the Marne region, east of Paris. Therefore, the German assumptions about the French withdrawal from the border-battles, were as wrong as the French assumptions before launching the Plan XVII.

Examples like this are relevant for a psychological investigation because we use theoretical consistency as a method to corroborate our theory about foolishness and mistakes of military leaders. This method is recognised in all sciences. It concerns the explanation of single cases or events, which are empirically inaccessible. The method simply consists in proving that the event or the behaviour, in our case the mistakes and the foolishness of military leaders, can be deduced from a theory. -- This method is quite common in science. For instance, Darwin's theory of evolution could only be proven by this method for a long time. Physicists use this method to prove that their theories about the Big Bang is true. It has been shown that the series of events of the Big Bang can be deduced from some basic physical assumptions. In psychology, where single cases often have to be explained (for instance, Hitler's or Stalin's behaviour) this method could be very useful. But it is rarely used in the discipline. A fact that could be explained by the nonexistence of a Theoretical Psychology.

Let's now have a look at another example of foolish thinking with devastating consequences. This time we look at the German army.

#### The Schlieffen-Plan

The "red trousers" are a good example for foolish behaviour. As this was a French foolishness, we will – to get a balance! – now turn to a German one at the beginning of WW1; no, not only – of course! – for the sake of balance, but because this example shows us aspects of foolishness we have not encountered in the French examples.

We will examine the so-called Schlieffen plan. The Schlieffen plan was a reaction of the German military to the political situation that resulted from the cancellation of the "Reinsurance Treaty" between Germany and Russia in 1886. In the aftermath of that cancellation, Russia looked for a close relation with France which looked for a possibility to revise the result of the war of 1870/71. With French money, a Russian network of railways was constructed, particularly concerning the connection between the center of Russia and the German eastern border.

For Germany, this development meant the risk of a two front war against France and Russia; and this possibility raised fear in Germany. The German general staff tried to find a double sided strategy, but none of the proposed plans was convincing. In that situation, General Schlieffen's plan of having two *successive* wars emerged. First, the French Army should be destroyed in a campaign of about 40 days, afterwards Russia should be attacked.

For quickly defeating the French army, the idea of the German general staff had been to attack the left wing of the French army with a very strong right wing through the neutral Belgium, to pass Paris in the West, then to destroy the rest of the French army by pressing it against the left-wing of the German army (see Figure 4). This idea was a strategical repetition of one of the battles of Frederick the Great. In 1757, Frederick the Great defeated in the battle of Leuthen (village in Silesia, near Breslau/Wroclaw) an Austrian army, which was about 70,000 men strong, with an army having about half the strength of the Austrian army, by using the so-called "oblique order of battle", an idea invented in the antique by Epaminondas of Theben. – (Tuchman writes: "Past battles and dead Generals keep the military spirit in a deadly grip and so Germans, and the others, too, plan the past war!")

The idea of the Schlieffen Plan appeared unorthodox to the German general staff and was accepted with relief. This was a possibility to win the war – after eliminating the French danger in the west, nearly the complete German army would be at disposal in the East to defend Germany against the Russian "Steam Roller". – On the other hand: The Schlieffen plan was first considered to be extremely risky. What would happen if the idea to outflank the French army in the West would not work? Then one would get a two-front war against France in the West and Russia in the East. (That is exactly what happened in August and September 1914.)

But as all the other alternatives seemed to be still worse, the German military leaders agreed to elaborate the Schlieffen plan. It may be, that the conviction that the offensive mostly is the right method, played a certain role in this decision, because the 19<sup>th</sup> century had been a nearly uninterrupted series of successful attacks for Prussia.

What happened then is, in my eyes, characteristic of the fate of plans when their elaboration begins. The Schlieffen plan had seen 20 years of elaboration when it was realised in August 1914. Railway lines were built for the plan of General Schlieffen and the plan was more and more refined with respect to its execution. The more the Schlieffen plan was refined, the more the members of the German general staff appreciated it. Each improvement of the plan increased the estimation of its success and, hence, the German general staff overestimated its probability of success. "Past battles and dead Generals ....!" Above all, the general staff forgot Platon's reminder to stay thoughtful, to think about one's own thinking. So over the course of time, what some authors called the 'Mythos of the Schlieffen Plan' developed. "Schlieffen saves us all!"

When the Germans began to carry out the Schlieffen plan, it soon became apparent that none of the conditions was met which were considered as prerequisites for success. Belgium did not concede the Germans passage, but became a French ally and defended the Belgian country with furor. England, initially showing not much enthusiasm to engage in a war against Germany on the side of France and Russia (both traditional enemies of England), decided to do just that.

The French army was defeated in the border-battles and the French plan XVII found a quick termination. However things began to develop in a different direction than had been planned by the Germans. The French army managed to escape in good order to the West, to the Marne region. And so the so called 'Miracle of the Marne' became possible. In the beginning of September, the French armies were able to defeat the completely exhausted German troops. (As far as we know even the probability of exhaustion was not considered in the Schlieffen plan. For instance, it was reported that the horses of the German cavalry were not even able to trot.)

Additionally, the Russians appeared in East Prussia much earlier than expected by the Germans. And so the Germans had to send troops to East Prussia to stop the Russian invasion. (There are discussions whether it was really necessary to send these troops from West to East. However they were sent and they were lacking in the West.)

All that could have been considered by the German military command; it was well known that the Russians had built railway-lines to the West with French help, which made it possible for them to invade for instance East Prussia much earlier than it had been expected. Additionally, the Russian army had improved qualitatively a lot since the catastrophic defeat the army had suffered in the Russian-Japanese war in 1905; and the Germans knew that!

The behaviour of the French army after its defeat during the border-battles, was – as already mentioned – well-organized. It did not have the character of a headless flight. This, however, was not regarded by the Germans; the leader of the 1<sup>st</sup> German army, General Kluck, decided not to pass Paris in the west, but to directly attack the allegedly half ruined French army east of Paris, to destroy it finally (see Figure 4). So the French troops around Paris were able to attack the right flank of the German 1<sup>st</sup> army and the Germans lost the battle of the Marne.

To summarize: The Germans overestimated themselves and underestimated the French and the Russians. As with the red trousers, in this case the Germans did not live in the "actual" reality but in a selfmade, illusionary reality. Schlieffens plan was overrated. "Past battles . . . . .!"

The clarity and the logical structure of the Schlieffen plan was one of the reasons for its overestimation. Decision-makers often misinterpret the clarity of a plan as an indicator of its adequateness. However, an idea that is simple and clear and therefore is un-

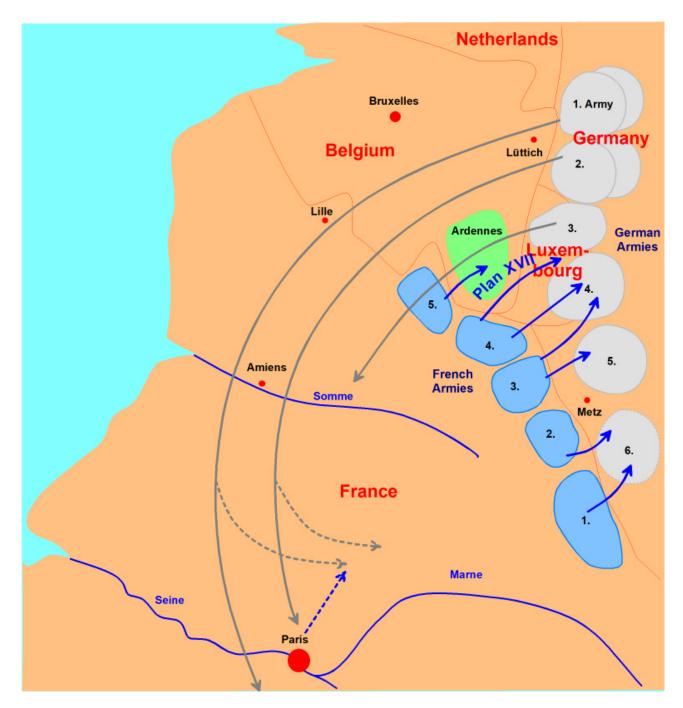


Figure 4. The Schlieffen Plan.

derstood by everybody, can still be wrong because it might be too simple.

For instance, the simple form in which Friedrich Engels cast the ideas of Karl Marx (see Sperber, 2013, p. 356) promoted the attractiveness of the communist ideas, but concealed their shortcomings. In the Communist Manifesto by Marx & Engels, one can find a list of measures to create the communist system. Fourteen measures were proposed. The list begins with the famous request that the expropriators should be expropriated.

- 1. Expropriation of the landowners.
- 2. Hard progressive taxes.

- 3. Repeal of the law of inheritance.
- 4. Confiscation of the propriety of all emigrants and rebels.
- 5. . . . . . (see Marx & Engels, 1946, p.24.)

We will not discuss these measures in the particular case, but we want to indicate that any discussion of their side and long-term effects is missing. This means that it remains quite unclear what in particular these measures, when carried out, will result in. It seems necessary at this point to cite Machiavelli, who said: "...., that always something evil is close to the positive effect, which easily is generated together with it, so that

it is impossible to avoid it if the positive effect is striven for." (Machiavelli, 3<sup>rd</sup> book, 37., p. 369.)

"Communism is simple!" we learned from Bertolt Brecht. This list of measures in the Communist Manifesto seems to be simple. However, it is a black box; nobody knows what it contains. The core of the communist Manifesto is PD, "perceptual defence".

## More foolishness! And what could be learned from it?

General Lanrezac, commander of the French 5<sup>th</sup> army on the outermost left-wing of the French army (see Figure 4), had been immediately confronted with the very strong right wing of the German army, which passed through Belgium. He was surprised and horrified by the great strength of the Germans at that place, which he could reliably identify by his reconnaissance-cavalry.

He found it necessary to inform General Joffre, commander-in-chief of the French army, about the unexpected strength of the German troops in Belgium. However, General Joffre was occupied with launching Plan XVII, which meant crashing through the German centre and crossing the Rhine near Mayence. The news from Lanrezac therefore did not find much resonance in the French headquarter – it was just a nuisance. Taking it seriously would have meant to stop Plan XVII immediately to concentrate on the defense against the German right wing. In the mind of General Joffre, however, the Plan XVII had top priority. Therefore, Joffre (and his headquarter) reacted to Lanrezac's news between the 10th and the 20st of August 1914 in the following way:

- "Lanrezac is wrong; it is impossible that the Germans have so many troops in this region!"
- "The German troops in Belgium have a special order!"
- "We have the impression that the Germans have no troops in that region!"
- "General Lanrezac exaggerates!"
- "General Lanrezac is a coward!" (See Tuchman, 2007, p. 233 ff.)

These are impressive examples of PD, are they not? Here are some more significant examples of perceptual defense and confirmatory perception in the time of the beginning of WW1:

- "The only task cavalry could serve for in a future war is cooking rice for the infantry!" (General Ian Hamilton, British Army, observer of the Russian-Japanese war in 1905).
- "Obviously the sun of the orient has burnt the brain of General Hamilton!" (reaction of the Supreme Command of the British Army).

• "The machine-gun as a weapon is completely overrated!" (General Haig, British army in 1908<sup>4</sup>)

In 1910, General Ruffey, French army, proposed to buy 3,000 reconnaissance-airplanes for the French army. The reaction of General Joffre was:

• "Airplane!? This is a piece of sports equipment!" (Cited from Peter Englund, 1993)

General Haig later became the Commander-in-chief of the British Army in France. Ironically, Peter Englund noticed, that the only idea of General Haig demonstrating a certain degree of originality had been the decision to introduce lances for the British cavalry. These proved to be very useful for hunting wild boars in India.

The preparedness to launch a war would have been far lower if generals and politicians had possessed a better image of what a war in 1914 would mean. But politicians and generals refused to develop an idea about what a war with machine-guns, airplanes and quick firing artillery meant. Or more likely, phantasy was lacking to construct an image of a "modern" war.

We easily could continue the list of foolish ideas in the dawn of the Great War. An overview about these ideas can be found in the book by Barbara Tuchman. With this book it can be shown, that it is not only possible to shake one's head about the foolish ideas politicians and generals had hatched, but that it is possible as well to alter one's behaviour.

The book was published in 1962, and John F. Kennedy, president of the US in those days, read it during the second Cuba crisis in 1963. The book altered Kennedy's behaviour when coping with that crisis, which menaced to end in an atomic war between Russia and the United States. Kennedy not only stated that Chruschtschow had installed atomic missiles on Cuba, but he asked himself, why the head of the Soviet government had acted in that way? He found out the reason of Chruschtschows behaviour.

A great agro-technical project had proved to be a failure, and this jeopardised Chruschtschow's position in the Politburo. So in his eyes "throwing a hedgehog into Uncle Sam's trousers" was the right way to re-establish his standing in the Politburo. When Kennedy was informed about that, he decided to help Chruschtschow! Yes, he brought help to the man who just had installed atomic missiles in Cuba, deadly menacing the United States!) – Kennedy withdraw missiles in Turkey (which where outdated anyway). So Chruschtschow could decide to dismantle the atomic missiles in Cuba on his side.

Additionally, Kennedy commanded the Navy units, who had to control the sea around Cuba, not to sink Russian vessels trying to break the blockade, but to destroy only the helm and the propeller of the respective

<sup>&</sup>lt;sup>4</sup>In a similar way, Helmuth von Moltke, chief of the general staff of the German army, reacted to a corresponding report of the colonel Max Hoffman, Prussian army, who, like General Hamilton, was an observer of the Russian-Japanese war in 1905.

ship in order to save the life of the crew. – This was very wise once more, as killing men certainly would have intensified the crisis. The idea of *revenge* will emerge! – Ask yourself! If you had been in the situation of Kennedy, would that idea have emerged in your mind? – As far as we can remember, this idea is without any example in the past.

Kennedy's advisory board comprised not only persons who shared his view, but also persons with deviating opinions. So he diminished the effects of "groupthink" (Janis, 1972), reduced the dangers of a distorted view of reality by perceptual defense or confirmatory perception. The dangers of groupthink Kennedy himself experienced in the Bay of Pigs fiasco 1½ year before the 2<sup>nd</sup> Cuba crisis. Here an American charge on Cuba failed because an all too homogeneous planning group, without a "devil's advocate", made too much planning errors. Kennedy had learned from the Bay of Pigs fiasco.)

So – fortunately – the Cuba crisis came to a peaceful end. – Kennedy followed Platon's advice "Be thoughtful! Criticize your own thinking!" – for his first plan after detecting the Russian atomic missiles in Cuba was: "Bomb them!"

Kennedy shows that it is possible to learn from history although the situations and problems will never be the same. But the *meta-methods* to find the right methods for the problem at hand can be learned. It can be learned that homogeneous boards of advisors are a bad idea. And it can be learned that it is a bad idea *not* to check whether the conditions necessary for a certain action are given. And it can be learned, that side- and longterm-effects of actions are not exceptions, but the rule in complex environments. And it can be learned to be thoughtful; it is a good idea to have a critical distance to one's own thinking. Platon knew that.

When it is discussed whether a certain person was able to serve as a minister (or similar positions), it is often discussed whether the person has "political experience". However, it is meaningful to understand that "political experience" may have disastrous effects. -Hitler did not have any political experience, but he managed that the Saarland remained a part of Germany. He managed that the Rhineland was liberated from French occupation (1936), he managed that the Sudeten territories became a part of Germany (1938), he managed that Austria was unified with Germany, he managed to defeat Poland in a short war, he managed to defeat France (1940) in a short war. - Field marshal Keitel called Hitler the "Greatest General of all Times" ("Größter Feldherr aller Zeiten"); this name later was abbreviated to "GröFaZ") and the German soldiers used this term – especially after the battle of Stalingrad – not at all as a honorary name.

Unfortunately however, due to his successes, Hitler was convinced of his "political experience" and this played an important role for his decision to begin a war against nearly half of the world. "To the German soldier nothing is impossible!" – Political experience may be nothing but an overgeneralization and may

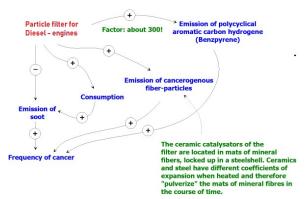


Figure 5. Diesel and Cancer. See Text.

thus result in sticklers for methods. Gilbert Parker said: "Memory is man's greatest friend and worst enemy." Think about that, if you ask for "political experience". – The movie 'Der Untergang' ('Downfall' in the English version) raised criticism because it did not show Hitler as a monster, but as a – with respect to his immediate environment – nice yet rather helpless man. This is how Traudl Junge, one of Hitlers secretaries, remembered Hitler. Her book was used by the author of the movie, Oliver Hirschbiegel, as a source of information about Hitler.

#### And today?

All that, the Great War, Hitler, and even the Cuba crisis are long gone. Nobody would recommend red trousers for soldiers today. But look at Figure 5! An engineer of a well-known producer of cars had an idea how to improve the filter to reduce the emission of the diesel engine of the BMW cars. "Wonderful; we will use this filter for our cars!"

Fortunately enough, another engineer looked at the filter more closely. In Figure 5 you can see what he detected. This particle filter reduced the emission of soot. As the emission of soot causes cancer this means that the filter reduces the danger of cancer! Wonderful!

However, the filter increased the output of polycyclic aromatic hydrocarbon particles. This in turn increases the danger of cancer. Additionally, the particle filter increases the emission of fibre particles, which again increases the danger of cancer. Additionally, the particle filter increases diesel-consumption, therefore the emission of soot is increased, too. (Bartsch, 2004)

The filter had some positive, but many more negative effects. It is typical for planning that people consider only the positive effects and not the negative ones. Here we have another example of PD (perceptual defense): the negative effects of an action have not been taken into account.

As mentioned above, war and politics are uncertain and complex realities; one never knows exactly how a development will continue. Most of the time, it is unknown and difficult to explore what really is the case. Such realities cause anxiety, promote worry; they are alarming. However, a politician, a general, or an engi-

neer has to do something. And to get rid of increasing concern by studying the reality, perceptual defense and confirmatory cognition "help" a lot - especially in politics, where the consequences of poor acting are normally not visible immediately: Negative side-effects frequently are longterm effects.

Look into your daily newspaper and examine the degree to which negative consequences are not considered in political decision-making, to what degree it is assumed that necessary conditions are given instead of verifying them. Please check, how frequently politicians plan "methodically" or "in goals" only and do not invest any thought in how the goals could be reached.

It was already Platon (Timaios 69d, in Platon VII) who stated that failures in political decision-making may, to a high degree, be attributed to overestimation of one's own strengths. And this overestimation is the result of confirmatory thinking and perceptual defense.

In this very moment (August 2021), in Germany and elsewhere in the world the debacle of Afghanistan is discussed. Within a very short period of time, the Taliban had managed to re-establish their political power in Afghanistan. During approximately 20 years, the Western world had tried to create something like a foundation for a modern state in Afghanistan and had established a 300,000-man army with modern weapons. Not in years, but in some weeks all that collapsed and some thousand soldiers of the Taliban on mopeds and armed with Kalashnikov rifles, re-established their political power in Afghanistan. In June 2021, the German Minister of Foreign Affairs, Heiko Maas, explained: "... That in some weeks the Talibans will seize the power, is not the basis of my assumptions; '

And afterwards, in August 2021, the minister explained: "We all have erred!" This was wrong, because some of the multinational forces in Afghanistan had understood well what was going on, for instance the French. And for years there had been reports about the sluggish or even negative development in Afghanistan, recognizable to each reader of newspapers. At least for them it was quite clear that the whole mission was not a progress at all. - In the meantime we know that the Minister of Foreign Affairs had been informed about the development in Afghanistan by the German ambassador in the United States, Emily Haber. She had a talk with the Chief of the CIA about 1½ weeks before Kabul was "freed" by the Taliban on August 23, 2021. The chief of the CIA informed the German ambassador that the Afghan government could collapse far more quickly than expected.

Therefore, the ambassador recommended that the emergency plans for the German embassy in Kabul should be activated at any rate. However, nothing seems to have happened. The German Minister of Foreign affairs seems to have done nothing.

In a session of an investigation committee of the German Bundestag in the beginning of September 2021, the minister explained that this had been one of the frequent wire news the Ministry of Foreign Affairs

is getting daily. – Obviously, this important message had not altered the minister's view of the situation in Afghanistan. – This is an example of PD with serious consequences.

Please try to identify the cases of neglecting side- or long-term effects, the cases of abandoning the analysis of conditions for actions, the cases of planning through goal-setting only, without considering whether activities for reaching the goals are known. Or look at those cases in which the appropriateness of the plan is accepted only because all the members of a group agree. Or consider those cases in which the members of a committee are selected with respect to their agreement with the opinion of the leader of the group.

#### Closing remarks

I (DD) was about to put a book about the Seven Years' War (Archenholtz, 1973) back into the bookshelf. Not very skilfully, I tried to grab it, so the book opened on page 68. And there I found a remark on Friedrich II (Frederick the Great, king of Prussia) after the battle of Kolin (June 18, 1757). This was the first battle Frederick lost. In a letter to his friend, the Lord Marshal, Friedrich wrote: "The fortune, dear Lord, often produces unjustified self-confidence. Twentythree battalions were not sufficient to remove 60,000 men from an advantageous position".

Here you find the confession of Frederick that he had overestimated his capabilities and therefore made mistakes. The uninterrupted series of military successes of the Prussian king in the first two Silesian wars had produced an (inappropriate) feeling of superiority in him. The result were the mistakes of Kolin. And so Frederick concluded: "Next time we will do better;" This succeeded: He won the next battles near Rossbach (November 5, 1757) and at Leuthen (December 4, 1757), not least because of a number of new and creative ideas about the conduct of war.

So the Prussian king identified the dangers of confirmative perception, the generalisation of successes. A series of successes produces sticklers for methods, produces the conviction of having identified *all* the secrets of warfare. (Please remember the Gödel-Theorem here!) And this was the reason why the king failed at Kolin. However, he was able to criticise himself and so he learned.

But shortly after the battle of Kolin and after giving up the siege of Prague, Frederick tried to make his younger brother, August Wilhelm, responsible for the failure. Many historians believe that this was unjustified. And August Wilhelm died one year later. It is said, that his brother's accusations played an important role for his untimely death. – Frederick's 14 years younger brother Heinrich later constructed an obelisk in the park of Rheinsberg, which was devoted to the remembrance of his brother August Wilhelm and other officers, who in his opinion were treated unfairly by Frederick the Great (You can still pay a visit to that obelisk today).

The stories are similar: Joffre and Lanrezac, Frederick and August Wilhelm. A General overestimates himself, makes mistakes, and declares others responsible for the failure. Different places, different conditions, but a similar course of events.

If we try to identify the psychological background of foolish behaviour in politics, two causes for inappropriate decision-making may be identified: Unstable self-esteem may be one cause. And the other one is a lack of phantasy, the inability to generate *new* ideas for the solution to a problem. These two reasons seem to be the central factors being responsible for foolish behaviour.

Low self-esteem spurs the search for signals of competence. The acting person wants to prove that abilities exist that allow to do something, to solve problems. If this search for signals of competence is successful, and if the new idea works and produces solutions, then what Friedrich (the Great) experienced may happen: It is not improbable that the own strengths and capabilities will now be overrated. – This however, produces mistakes, generating a feeling of helplessness again. It is not known what could be done! However – as mentioned above – persons with an unstable self-esteem do not ask for advice in such a situation to avoid admitting that the own capabilities are low. Sometimes people try to find signals of competence in other fields. In August 1914, General Joffre drove at a speed of 100 km/h (high speed in those times!) from division headquarter to division headquarter in order to control whether each commander did what he was ordered to do. (For this purpose Joffre's car was driven by a professional racing driver.) Being able to control the division-commanders unexpectedly and frequently demonstrated competence! Obviously, in Joffres eyes a general should be a kind of bloodhound, biting the legs of the sub-commanders, to lead them in the right direction.

Without phantasy, it is very difficult to find new ideas. For someone without phantasy, it would be difficult to think about how one could *help* Chruschtschow instead of fighting him. – Without phantasy, advice will come from perceptual defence or confirmatory thinking. This, however, mostly is poor advice.

Joffre for instance to whom Barbara Tuchman (2007, p. 400) ascribes no capabilities of having new ideas, did not ask for advice and was not willing to accept advice from others. So he repelled general Lanrezac's warning to consider the strong right wing of the Germans, passing through Belgium westward. – Why? Well, we explained it earlier: If you ask somebody else for advice this means that you have no ideas, that you cannot produce new ideas. And Joffre tried to avoid this impression.

The "Order of the Day" before the battle of the Marne, the order General Joffre delivered to the French army on September 6, 1914, contained the following sentence: "a troop not being able to advance further should, whatever it costs, keep the conquered ground, and should die in their position rather than falling back". This sounds very heroic: "Win or die!"

However, this maxim often is inappropriate. There are enough examples in military history where falling back or evading have been appropriate methods to escape the defeat, even to win a war.

Fabius Maximus Cunctator (Fabius the waverer) succeeded in winning the  $2^{\rm nd}$  Punic war against Hannibal by a flexible, evasive behaviour; a French example is the flexible behaviour of Bertrand du Guesclin in the Hundred Years' War between England and France. Guesclin ruined the English forces by a flexible and evasive conduct of war.

"Win or die!" is a very rough maxim, and it seems to mirror Joffre's problems. It means "Here I am again!" And a sentence right before the "Win or Die"- order testifies this: "This is not the moment to look back!" Joffre said. — Not to look back? Not to look back on what? — Not to look back on the lost border-battles? Not to look back on Plan XVII and its failure? Not to look back on the missing heavy artillery and the missing airplanes? Not to look back on the decision of not replacing the red trousers by a camouflage-dress? Not to look back on the failure of not listening to the warnings of General Lanrezac?

By "Win or die!" Joffre repaired his self-esteem. However "Win or die!" would not have been necessary if Joffre had acted more prudently in the early days of the war. But Joffre was Joffre and not Gallieni. In 1915 Joffre continued the basic idea of Plan XVII: offensive! Obviously for Joffre this was the only appropriate strategy to give the war a different direction. (See Verney in Tardi & Verney, 2013, p.54.)

In 1915, Joffre launched attacks at Compiègne, then north of Arras at the Vimy-heights, and repeated the battle of the Champagne in September 1915. In the whole year of 1915 the staff-divisions intensified the former tactic: "L' attaque ...". The result were minimal territorial profits for the allied forces, but 100,000 French, 60,000 British and (only) 65,000 German soldiers were killed. The attacking allied soldiers died because of the obstinacy of their leaders. The political price was that Sir French as supreme commander of the British Expedition Corps had to leave the command to Sir Douglas Haig. — Joffre as the "Victor of the Marne" was still untouchable (for the public!). However, his reputation was violated (see Purseigle, 2013, p. 148 and 154-156).

Joffre is a great example of Methodical Rigidity, because of his craving for glory and his lack of phantasy.

Verney (Tardi & Verney, p. 54) asks: "Did Joffre see the superiority of the German heavy artillery and the prudent German defence-tactics? Did he know the exhaustion of the soldiers; did he see the real causes for the flaw of ammunition?" These are rhetorical questions. The answer to all these questions is: "No!" Joffre was a master of perceptual defence! — Joffre saw nothing! Why?

Joffre's tendency to continue a behaviour although it had proved to be not successful, in this case *not* to change the strategy of "l'attaque, l'attaque, toujours l'attaque!" is typical for people with low self-esteem and a low degree of phantasy. Errors are denied –

they are not perceived as errors. At the most some details went wrong or some sub-commanders failed. But the general idea remained untouched and the belief in its validity was even strengthened. For persons like General Joffre everything else, for instance admitting a substantial error, would be considered as an indicator of weakness. So a strategical change is obdurately refused. For such people there is no way out because of their wavering self-esteem and their lacking phantasy. – (Today, such a behaviour is called the Kruger-Dunning-effect, see Kruger & Dunning, 1999)

The necessity for self-criticism and to think always anew at war and in politics is illustrated by nobody else as well as by Clausewitz:

"War, in general terms, does not consist of an infinite number of events, the differences of which balance each other and therefore are mastered by a better or worse scythe better or worse. War consists of single problems, which should be handled individually. War is not a land of stalks which, without respect to the features of a single stem, with a better or worse scythe is mown better or worse. But it consists of big trees, to which the axe should be used with reflection according to the quality and direction of each single tree. (Translation from: Clausewitz, 1880, p. 130 f.)

You may replace "war" in the first line of the Clausewitz quote by "politics". For Clausewitz war is politics - with different means. - Undoubtedly, Platon would have agreed with Clausewitz immediately. For a political leader it is necessary to be thoughtful; he must be prepared for self-criticism. – Those however with an unstable, wavering self-esteem avoid self-criticism. For them self-criticism is a danger, a danger to lose self-confidence. They like fixed rules. A fixed system of rules appears them to guarantee success. They like confirmation and not critique. "This is not the moment to look back!" - Such persons should not become politicians or should not be admitted to leading positions in an army. They do not strive for success in the long term, but for immediate success, immediate glory. Unfortunately, just this kind of persons seem to strive for political careers. – And this is the reason why Platon (Politeia, 520 c,d) recommended not to admit such people to political careers. And Clausewitz recommended the same for people whose main motive is boosting their self-esteem ("Eigensinn" as Clausewitz, 1880, p.64, calls it). As such persons cannot cope with failures, they will exhibit a strong tendency to avoid self-criticism.

Interestingly, you will find nearly the same description of persons not suitable for politics in the Bhagavad Gita, part of the ancient Indian epic of the Mahabharata. In the 18<sup>th</sup> chant you will find the verses 23 to 25, which summarise the action-theory of the Bhagavad Gita. Here they are, translated by the authors from a German edition of the Bhagavad Gita (Mylius, 1997):

23. The necessary action, done without clinging,

Without passion and hatred,

Without striving for glory, Is a good action.

24. But the action done because of striving For sensuality or for self-satisfaction Which causes great grievance, Is called the passionate action.

25. However an action without regard of the consequences,

own losses, damage to others and the own strength,

Done because of blindness, Is called the mode of the dark.

It is important not to understand these verses as part of a religious hymn or as a moralising sermon. They are practical recommendations for the organisation of action and you should ask "why"? Why, for instance, is it recommended to engage only in actions that are *necessary*?

An action should be necessary to reach a goal. The goal must be a political one, not a personal goal such as revenge or retaliation. The goal should be necessary to install a better reality or to prevent a bad reality to come into being. –

Why should necessary actions be done without attachment? Well, you should not cling to your methods, you should not be a stickler for methods. You should be able to alter your methods if these have proven unsuccessful. – Why should you act without passion and hatred? Well, because passion and hatred blind you!

Why should a commander not strive for glory? Because striving for glory is contradictory to the preparedness for self-criticism. – It is very simple to act in the right way, isn't it?

The next two verses 24 and 25 describe how one should not act.

Passion and hatred will blind you and you will not find the right way. You will not act for the right goals and you will not find the right methods of acting. Because there is a high risk that passion and hatred will suggest inappropriate views of reality and methods.

Verse 25 recommends not to leave the command to people whose mind is "dark" and without light, hence to people, who are not very intelligent and often cannot take into consideration side- and long-term effects.

In the first years of the Roman Republic the higher-degree officials, the praetors and consuls, were elected in Rome by the People's assembly. However, those who were admitted to the election were selected by a commission that tried to keep off the above mentioned persons! – A good rule?

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### inflated Self-assessments. *Journal of Personality and Social Psychology*, 77(6), 1121-1134. doi: 10.1037/0022-3514.77.6.1121

- Machiavelli, N. (2010). Vom Staate Vom Fürsten Kleinere Schriften. Hamburg: Nikol Verlagsgesellschaft.
- Marx, K. & Engels, F. (1946). *Manifest der kommunistischen Partei*. Berlin: Verlag Neuer Weg.
- Mylius, K. (Ed.) (1997). *Die Bhagavad Gita: Des Erhabenen Gesang.* München: DTV.
- Platon (1990). Werke in 8 Bänden (I VIII). Darmstadt: Wissenschaftliche Buchgesellschaft.
- Purseigle, P. (2013). Vom Artois bis zur Champagne kein Durchkommen. In Bruno Cabanes & Anne Duménil (Ed.), *Der Erste Weltkrieg (pp. 147 156)*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schopenhauer, A. (2011) [1844]. The World as Will and Presentation, vol. 2. New York: Routledge.
- Sperber, J. (2013). Karl Marx Sein Leben und sein Jahrhundert. München: C.H.Beck.
- Sternberg, R. J. (2004). Why Smart People Can Be So Foolish(3).  $European\ Psychologist,\ 9(13),\ 145-150.$  doi: 10.1027/1016-9040.9.3.145
- Tardi, Jaques & Verney, Jean-Pierre (2013). *Elender Krieg*. Bruxelles: Editions Moderne. Casterman.
- Tuchman, B. (2001). Die Torheit der Regierenden. Von Troja bis Vietnam. Reinbek: Rowohlt.
- Tuchman, B. (2007). August 1914. Frankfurt am Main: Fischer.

#### References

- Archenholtz, J.W. von (1973). Geschichte des Siebenjährigen Krieges in Deutschland. Krefeld: J. Olmes.
- Bartsch, C. (2004). Die dunkleren Seiten des Partikelfilters. Frankfurter Allgemeine Zeitung, 142.
- Cabanes, B. & Duménil, A. (Ed.) (2013). Der Erste Weltkrieg Eine europäische Katastrophe. Darmstadt: Wissenschaftliche Buchgesellschaft.
- von Clausewitz, C. (1880). Vom Kriege. Berlin: Dümmler.
- Dörner, D. (1996). *The Logic of Failure*. New York: Metropolitan Books
- Englund, P. (1993). *Die Marx-Brothers in Petrograd*. Berlin: Basis-Druck.
- Hoffmann, D. W. (2012). Die Gödel'schen Unvollständigkeitssätze: Eine geführte Reise durch Kurt Gödels historischen Beweis. Berlin: Springer.
- Janis, I. (1972). The Victims of Groupthink. Boston: Mifflin.
- Kant, I. (1965). *Prolegomena zu einer jeden künftigen Metaphysik.* Felix Meiner: Hamburg.
- Kruger, J. & Dunning, D. (1999). Unskilled and Unaware of it. How Difficulties in recognizing one's own Incompetence lead to