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SOME METHODOLOGICAL REFLECTIONS ON THE EFFICIENCY OF "POLITICAL AND MILITARY DECISION-MAKING" IN A HYBRID REALITY

ABSTRACT: The aim of this paper is to present some methodological reflections on hybrid activities (spaces, knowledge about spaces, comparison of spaces, dynamic spaces, coordination of hybrid activities, efficiency of "hybrid activities").

HYBRID NATURE OF REALITY

In this paper I follow the opinion of C. von Clausewitz that "war is a continuation of political activities, carried out by other means" (Clausewitz, 1958, p. 32).

I will focus on "hybrid war" (Szałek, 2017; Szałek, 2018; Wrzosek, 2018; Piątek, 2019).

According to (Webster, 1993, p. 1106), "hybrid" means "marked by heterogeneity in origin, composition, or appearance…".

Present attempts to win in a hybrid reality of our world have a long history (Szałek, 2015a). One could distinguish at least two approaches to this problem.

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First, there are sets of praxiological advices/recipes concerning specific domains or spaces. Second, there are various sets of specific spaces/domains (Cebrowski, Garstka, 1998; Doktryna, 2015; Lorenz, Biermann, 2003; Sienkiewicz, 2009; Sundar, Singh, 2003; Szałek, 2015; Szałek, 2017; Szałek, 2017; Szałek, 2018).

For example, Kautilya, an ancient (4th century BC) Hindu political adviser distinguished 6 methods of foreign policy (Kautilya, 1992, pp. 249–250; Mroziewicz, 2017):

1) peace and alliance based on a treaty,
2) war,
3) neutrality,
4) preparations for war with the declaration of war,
5) search for protection,
6) simultaneous peace with one enemy and war with another enemy.

Kautilya understood "war" as a complex of conventional war, psychological war, propaganda and omens (Mroziewicz, 2017, pp. 336–337).

As for the omens: Sun Tzu, an ancient Chinese strategist (ca. 500 BC) stated that: "What is called "foreknowledge" cannot be elicited from spirits, nor from gods, nor by analogy with past events, nor from calculations. It must be obtained from men who know the enemy situation" (Sun Tzu, 1963, p. 145). Sun Tzu recommended (Chapter XIII: Employment of Secret Agents) "5 sorts of secret agents to be employed. These are native, inside, doubled, expendable, and living" (Sun Tzu, 1963, p. 145). According to Sun Tzu, "when these five types of agents are all working simultaneously and none knows their method of operation, they are called "The Divine Skein" and are a treasure of a sovereign".

It is striking that C. von Clausewitz did not share Sun Tzu's opinion about "secret agents".

There were numerous attempts to determine a set of rules / principles of the Art of War.

For a example, Sun Tzu said: "Generally in war the best policy is to take a state intact; to ruin it is inferior to this" (Sun Tzu, 1963, p. 77). This opinion is not compatible with the opinion of C. von Clausewitz.

D. Strasburger presented in his "Principles of the Art of War", the following set:

 1) aim,
 2) concentration,
 3) economy of efforts,
 4) manoeuvre,
 5) simplicity of activities,
 6) aggressive / offensive and unhesitating / firm character of activities,
 7) surprise,
 8) liberty of action,
 9) unity of command,
10) cooperation (Strasburger, 1996, p. 192).

In 2001, D. Lau and Redlawsk presented a set of 5 "political heuristics" allegedly useful during the presidential electoral campaigns: party affiliation, ideology, recommendations, horse races and appearance (Lau, Redlawsk, 2001). Other North-American political scientists presented slightly different sets of their own (Szałek, 2012).

Of course, such sets have much in common with "marketing and/or logistic mix" (for example – 4P: product, promotion, price, place; there are mixes comprising even 8 domains/spaces).

However, there are books on management and marketing based on the Art of War, written by Sun Tzu 2500 years ago (Sun Tzu, 1963; Gagliardi, 1999). However, the general concept of Sun Tzu reached beyond simple sets of praxiological advices.

For example, Sun Tzu referred to "operations of the extraordinary (ch'i) and the normal (cheng) forces" (Sun Tzu, 1963, p. 91).

Nowadays, the Chinese hieroglyph depicting "cheng" is transliterated as "zheng" and has a number of interpretations / meanings: straight, main, right (as side, proper), upright, just, regular, principal, positive (Collins, 2005, p. 505).

The Chinese hieroglyph depicting "chi" is transliterated as "qi" and interpreted as: strange, unexpected, surprise, unusual (Collins, 2005, p. 308).

According to S. B. Griffith, the translator of the Art of War: "The concept expressed by cheng…, "normal" or "direct") and ch'i, "extraordinary" (or "indirect") is of basic importance.

The normal (cheng) force fixes or distracts the enemy; the extraordinary (ch'i) forces act when and where their blows are not anticipated. Should the enemy perceive and respond to a ch'i manoeuvre in such a manner as to neutralize it, the manoeuvre would automatically become cheng" (Sun Tzu, 1963, p. 91; Sun Zi, 2011).

Sun Pin, another Chinese strategist (4th century BC, great-grandson of Sun Tzu) also dealt with "cheng" and "ch'i". R. D. Sawyer, translator of his work, interpreted "cheng" as "orthodox" and "ch'i" as "unorthodox" (Sun Tzu, Sun Pin 1996; Sun Pin, 1998, p. 230).

According to Sun Pin: "When the unorthodox is initiated and is not responded to, then it will be victorious. One who has a surplus of the unorthodox will attain surpassing victories" (Sun Pin, 1998, p. 231).

However, 2200 years later, C. von Clausewitz only analyzed in his book "On War" the determinants of successes and failures in land operations (his opinion regarding military intelligence was pessimistic) (Clausewitz, 1958).

The mentioned principles of successful warfare, presented by D. Strasburger, are also based on land forces. He never tried to compare the rules regarding the land forces with naval and air forces. However, according to Th. Kinni and D. Kinni, success in military operations depends on total/complete integration of all kinds of forces (Kinni, Kinni, p. 80).

It is obvious, that comparative analyses of praxiological rules / principals and other issues between various spaces may lead to a greater efficiency of hybrid activities.

And what about heuristics?

Traditional heuristics is connected with creativity, unconventional solutions (Osborn, 1957; Gordon, 1961; Prince, 1970; De Bono, 1977; De Bono, 1994; Zwicky, 1969; Nolan, 1990). In this sense they belong to "unorthodox" activities discussed 2300–2500 years ago by Sun Tzu and Sun Pin.

According to J. Biermann: "Heuristics have been shown time and again to serve as fundamental tools in political decision-making, most

notably the vote" (Biermann, 2003, p. 1). However, J. Biermann belongs to a group of political scientists who treat heuristics as "short-cuts" (Kahneman, Slovic, Tversky, 1982; Wajzer, Staniucha, 2014; Cherry, 2019; Mousavi, Gigerenzer, 2014).

For instance, according to J. Biermann: "…heuristics are simple mental shortcuts meant to decrease the amount of information required by an individual to make an acceptable decision" (Biermann, 2003, p. 2).

According to K. Cherry: "A heuristic is a mental shortcut that allows people to solve problems and make judgements quickly and efficiently. These rule-of-thumb strategies shorten decision- making time and allow people to function without constantly stopping to think about their next course of action. Heuristics are helpful in many situations but they can also lead to cognitive biases" (Cherry, 2019).

Let us name some of these "shortcuts": recognition heuristic, judgement heuristic, imitation heuristic, representativeness heuristic, availability heuristic, anchoring heuristic, adjusting heuristic (Young, 2013).

These "heuristics" , born on the grounds of psychology and sociology, help explain human behavior, but are hardly useful in regard to such problems as unemployment, poverty, natural catastrophes, military attack, etc.

The followers of this "school", such as B. Vis, even speak of "two traditions on heuristics": (1) the heuristics and biases (H&B) tradition pioneered by Kahneman and Tversky and (2) the fast and frugal heuristics (F&B) tradition pioneered by Gigerenzer et al." (Vis, 2018, p. 1).

Yet, there is another, "traditional" school, represented by such researchers as Zwicky, Gordon, Nolan, De Bono. For instance, E. de Bono doesnot deal with the so-called political heuristics meant to explain behavior of people. He wants to solve problems – instead of finding out why people do what they do. His heuristic has nothing to do with psychological and sociological tricks beloved by such North-American researchers as Kahneman and Tversky.

Two concepts elaborated by E. de Bono seem to fit the problem of hybrid activities: "lateral thinking" and "parallel thinking" (De Bono, 1977, 1994).

"Lateral thinking" is opposite to "vertical thinking": it is better not to dig deeper but to dig at various places.

"Parallel thinking" is connected with "parallel possibilities /options" (a complete range of ideas, variants (fuzzy boundaries)).

However, there is a difference between the traditional approach to solving a problem (parallel exploration of the issue, consequences) and the decision-making in a dynamic hybrid world.

SPACES

Literature on "hybrid activities" presents a conceptually chaotic picture of the problem. Hybrid activities comprise a more or less complex set of various ("hybrid") spaces (or domains, spheres), described according to "local rules" (Arquilla, Ronfeldt, 1993; Benoit, Lauer, 2012; Clarke, Knake, 2010; Jacobsen, 2014; Łuczuk, 2017; Sienkiewicz, 2009; Staten, 1998; Wrzosek, 2018; Szałek, 2015a; Szałek, 2016; Szałek, 2017; Szałek, 2018; Vitali, 2015; Son, 2012).

Usually, one can find publications on cyberspace, information space, financial space, energy space, military space, geophysical space (e.g. huge caldera in Yellowstone, active volcanoes at Naples), diplomatic space, terrorism space, communications space, health space, etc., Kościelny, 2019a, b; Haliżak, 2007).

However, there are to be considered such spaces as space of lies (e.g. comprising "Polish concentration camps", "weapons of mass destruction in Iraq, etc.), drug space, intelligence and counterintelligence spaces, corruption space, space of interests – in short – all politically relevant spaces.

The complex of mutually interconnected spaces (interesting from the viewpoint of politics (distinguished for the sake of politics) could be named: political topology (Szałek, 2015a, b).

It could be heuristically productive to compare these spaces from the viewpoint of terminology, invariants (Thom, 1972), common points and

specific differences (cf: military attack, financial attack, cyberattack, geophysical attack, legal attack, information/disinformation attack).

One of the basic approaches to the analysis of spaces is general system theory and its set of such parameters as: predictability, potential, resources, structures, mechanisms, stability, steerability/controllability, inertia, vulnerability, ability to learn, flexibility, reliability, efficiency, and ability to: destabilize the enemy, reduce the control, efficiency, increase vulnerability, inertia. For example, predictability, controllability and efficiency in financial space, cyberspace, energy space.

Useful hints offer traditional spaces – for instance "military space": friction, vulnerable points, declared war/undeclared war, offensive, defence, critical point, point of choice, breaking point, starting point, strong point, skirmish, low/high-intensity conflict, surprise, ambush, support, deployment, security, surprise, gravity centre, hinge factor, black swans, Schlauchstellung.

The concepts of "military intelligence space" and "military counterintelligence space" can be expanded to energy space, financial space, economy space, monetary space, telecommunications space, transportation space, etc.

The concepts of "military war" (security, defense) can be expanded to cyberspace (see for example the Art. 5 of North Atlantic Treaty and cyberattacks (Wrzosek, 2018, p. 274; Łuczuk, 2017), financial space, information space, economy space, etc. (Song, 2012).

Let us take cyberspace as an example. Activities in cyberspace can be described by means of:
1) structures, mechanisms, organizations,
2) potential, resources,
3) predictability, threats (ranking of threats), opportunities / possibilities (cf the Overton window of political possibilities (Szałek, 2013),
4) stability, controllability, vulnerability,
5) strategy, operations, tactics,
6) enemies, allies (cyberattacks, cyberdefence),
7) diversion, disinformation.

The legal issues (attack, defense, provocations, consequences, weak points, strong points) can be combined with cyberspace, financial space, economic space, health space, social space, etc.

KNOWLEDGE ABOUT SPACES

Our knowledge about relevant spaces should be actual, complete, interdisciplinary, coherent, appropriately aggregate, properly protected. However, our enemies' knowledge about spaces should be based on disinformation and misinformation (Bernays, 1928; Friedman, 2009, 2011; Bower-Bir, D'Amico, 2013; Fortunato, Stevenson, Vonnahme, 2016; Szałek, 2016; Szałek, 2017).

'Quality of information' is an obvious problem in political and military decision-making. Let us pay some attention to a number of opinions on this subject.

For instance, according to K. Doubravsky and M. Dohnal: "complex decision making tasks … are based on vague, sparse, partially inconsistent and subjective knowledge" (Doubravski, Dohnal, 2015, p. 1).

According to J. Biermann: "In military command and control a most accurate situational awareness of the battle space is essential prior to all decisions and activities" (Biermann, 2003, p. 7; Lorenz, Biermann, 2003). In order to emphasize this problem, let us recall that some authors of works on the praxiological aspect of military activities (published in the 19th and 20th centuries) focused on land forces – totally ignoring the naval (Clausewitz, 1958), or the naval and air forces (Strassburger, 1996). On the contrary, Gen. MacArthur, the Commander-in-Chief in the Pacific in the World War II stressed the problem of coordination between the land, naval and air forces (Kinni, Kinni, 2005). Th. Kinni and D. Kinni regard "victory" as "triumph of the concept of integration of three dimensions of war – air, land and sea" (Kinni, Kinii, p. 80).

The space of partial political and military knowledge could be named: "foggy".

J. Biermann emphasizes the problem of incoherent information (e.g. the Polish problem of Wspólna Informacja Rządowa: Common Informa-

tion for the Government): "Topical information about the situation given by reports may be imperfect in various respects and it is typically incomplete, imprecise, uncertain, and vague and the sequence of incoming reports will not necessarily be in chronological order" (Biermann, 2003, p. 7.6).

J. Biermann tries to emphasize the role of heuristics: "The presented approach of knowledge based information fusion is focusing on the heuristic human evaluation process" (Biermann, 2003, p. 7.1). However, what he has in mind, are heuristics beloved by North-American psychologists, sociologists, political and military scientists (Lau, Redlawsk, 2001; Gilens, Murakawa, 2002; Goldstein, Gigerenzer, 2002; Gigerenzer, Gaissmaier, 2011; Steenbergen, Hangartner, De Vries, 2011; Bower-Bir, D'Amico, 2013; Mousavi, Gigerenzer, 2014; Vis, 2018), and understood as "shortcuts" used (for example) by "ignorant voters" during presidential electoral campaigns in the USA. On that occasion, according to Lau and Redlawsk, the set of political heuristics comprises: party affiliation (as a rule: Republican: Democrat), ideology (conservative, liberal, etc.), endorsements (by actors, singers, politicians), horse races (polls) and appearance (general impression, eloquence, etc. (Lau, Redlawsk, 2001)).

It must be stressed that these heuristics are fuzzy, they create a fuzzy/foggy space of "knowledge" (for instance: party affiliation today and 2 years ago, ideology now and 3 years ago, endorsements by pop-stars, horse races /polls (here and there, today and tomorrow, now and earlier), appearance (a selfsure and talkative politician is not necessarily the best candidate for the presidential seat).

Explaining the behavior of voters by such sets of shortcuts is one thing, but making a right decision is something else.

J. Biermann rotates round the concepts of "space" and heuristics: "Intelligence cells have to process and evaluate current information to deduce timely and most reliable and appropriate picture of the battle space. The presented approach of knowledge based information fusion is focussing on the heuristic human evaluation process" (Biermann, 2003, p. 7.1.). However, his fascination with the psychological and sociological interpretation of heuristics (shortcuts) is misguiding.

Conventional / traditional heuristics are connected with creativity. The problem is to gather any information indispensable for creative decision-making.

It is time to return to the concepts of "space" and "hybrid activities". In fact, hybrid activities are connected with activities in various interconnected "spaces".

Of course, a "hybrid approach" may be applied ad hoc, in a chaotic way – but in that case its efficiency cannot be satisfactory.

For the sake of politicians, the mentioned issues could be called: 'political hybrid topology' (Szałek, 2016).

Political topology (in Greek: "topos" denotes "place, sphere, territory, issue, realm, field" (Jurewicz, 2000/2001) is meant to deal (in a coherent and holistic manner) with all spheres /places of significance and importance to political decision-making.

Political topology (as a concept) surpasses the concept of geopolitics (which solely focuses on our planet) (Haliżak, 2007; Szałek, 2015a).

Omission of certain spaces (*perfectio per omissio*) does not mean that they cease to exist (e.g. the problem of black swans, Factor X, undeclared war under the pretext of rationalization / improvement (e.g. the concept of Multi-Level Governance in the European Union (Szałek, 2013).

Analyses based on an incomplete or irrelevant sets of spaces can lead to political decision-making in a unreal world (one thing is a space of lies created for the enemy, and another thing is self-delusion based on group-think and the like; space of illusions, low predictability of consequences).

Looking from a wider perspective – there is a constantly changing ranking of spaces (e.g. with regard to their impact on the outcome of hybrid activities).

For instance:

1) "space of political correctness" > "space of elite's clues" > "space of ignorant voters". According to M. Gilens and N. Murakawa: "It is well established that the American public is woefully uninformed on political issues…, and may fear that this widespread political ignorance threatens democratic processes" (Gilens, Murakawa, 2002, p. 15). Gilens adds: "hence the need for the appropriate cue-giving

environment in order to have democratic governance: (Gilens, 2002, p. 37). Similar opinions presented E. Bernays (Bernays, 1928). My impression is that neither Gilens, nor Bernays knew what "democracy" means. According to Doubravski: "One important problem related to realistic decision making tasks are incomplete data sets required by the chosen decision making algorithm" (Doubravski, 2015, p. 1). The problem is what are the elite cues based upon. According to Gilens: a "common heuristic is the elite cue" (Gilens, 2002, p. 16). He adds: "If elite cues and other decision shortcuts lead citizen to the same agregate preferences that they would form if they had the time, interest, and expertise to reason through the substance of each issue, then the public can fulfil its democratic role while remaining largely ignorant of the substantive complexity of government policy" (Gilens, 2002, pp. 42–43).

2) "space of illusions" (lies, misinformation, disinformation, lack of information, extrapolation (e.g. the problem of predictability in the space of illusions, based inter alia on extrapolations) (Morris, 2010; pp. 687–688, Friedman, 2009; Szałek, 2013).

3) "transparent space" > "fuzzy/foggy/ambiguous space" (e.g. "the range/extent of fuzzines/ambiguity in individual spaces" ("general fuzzines" – "general transparency")).

Efficiency of hybrid activities depends on knowledge about spaces – but also on the ability to use this knowledge in a proper way (coordination, synchronization of activities; in other words, it is important to change the approach (static approach (basic theory; some authors are satisfied with static, basic definitions of hybrid activities) > poorly coordinated dynamic approach > fully integrated dynamic approach). "Orchestration of hybrid activities" directs our attention toward "space-time" (time factor (appropriate phases, moments, sequences, stages heuristics)).

In the most simple case the attacking party must consider some defensive activities of the party under attack (the question of symmetry/asymmetry of knowledge about spaces and ability to use it (for example: party A = 10 spaces (military, information, economy, geophysical etc.), party B = 1 space (military); relation of potential: party A, space X = 90 points,

party B, space X = 10 points; level of integration: party A = 95 points, party B = 0 points (in fact – lack of coordination)).

Binary approach may be far from reality (for example: one party/country under hybrid attack carried out by more than one enemy).

In fact, the situation can be much more complicated. Let us recall the financial activities of the Rothschilds during the continental wars in the 19th century. Another example: certain Muslim states support terrorist activities in the European Union with money paid by the EU states for natural gas and oil from Muslim states. Russia's activities against Ukraine are financed by European buyers of Russian natural gas and oil (cf the problem of sanctions (the European Union > Russia)).

These problems suggest the need for a deep reconstruction/remodeling of political/military decision-making.

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