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GEOPOLITICS, POLITICAL TOPOLOGY AND HYBRID WARFARE

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ABSTRACT: This paper deals with the concept of political topology in the light of geopolitics and hybrid warfare. Traditional geopolitics can be regarded as a point of departure for the search for better tools for political decision making. Comparison and confrontation of different, theoretical and practical, concepts of hybrid warfare can be heuristically inspiring and lead to a compact system of politically relevant knowledge – to political topology.

GEOPOLITICS

"Geopoliticians" try to explain and predict political activities by means of geographical variables (Mackinder, 1904; Szałek, 2015). This approach was reasonable, to some extent, in the beginning of the XXth century when civilizational level was relatively low. In the following decades it became clear that geography / geopolitics is only a part of a wide spectrum of relevant factors / variables (cf: geoeconomics, astropolitics, petroleum politics, water politics, energy politics etc.) (Essex, 2013; Dolman 2005). "Geopolitics" is associated with "geographic space". Similarly other "-politics" can be associated with respective spaces. However, there is some discrepancy

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between astropolitics and geographic space in geopolitics. In some publications "geographic space" is understood as "global space" (according to A. Kukliński (2005), this space includes 4 megaspaces (America (the United States of America – B.Zb. Sz.), Europe (the European Union – B.Zb. Sz.), China, India (of course, one could add here the Russian Federation – B.Zb. Sz.)). A. Kukliński defines a megaspace as: "a grand geographical area, representing a big demographic, political, economic, scientific, cultural and military potential recognized very clearly in the global scale. The megaspace is a regionally differentiated area with no barriers limiting the free flows of persons, commodities, information and capital" (p. 357).

In 2009 Nayef al-Rodan (2009) proposed another discrepant framework named "meta-geopolitics" based on 7 dimensions of (state) power: domestic politics, international diplomacy, military and security problems, economics, science and human potential, social and health issues, environment.

M. Bond (2007) proposes another set of elements of national power: diplomatic, military, economic, informational (p.18).

POLITICAL TOPOLOGY

In my opinion, there is a better approach to this problem based on the classical Greek word "topos" (place, range, sphere, area; "topoi": places, ranges, spheres, areas etc.). In other words, "political topology" deals with all places / spheres / areas of political importance. These "topoi" belong to different yet interdependent / intertwined spaces (eg geographic, military, financial, economic, information etc. spaces). My understanding / perception of these "topoi" differs from that of N. Castree (2003) and A. Domański (2005), who regard these "places": "rather as "nodes" or "switching points" in various networks of linkages". My understanding of these "topoi" also differs from that of R. Zenderowski (2011) (he defines "topos" as a "specific kind of space"..."strongly intertwined with ethnic aspects" and "penetrating administrative-political structures" (p. 31–32).

Some geopolitical opinions and concepts are erroneous or at least obsolete. For example, according to the Heartland theory of H. Mackinder (1904; 1996) the area named by him "the geographical pivot of history" stretches from the Arctic to the Himalayas, and from the Volga to the Yangtze". According to Mackinder, this area generated (between the 5th and 16th centuries AD) several invasions of barbarians directed at Europe. This is partly true, as far as the Huns, Avars, Mongols and Turks are concerned. But invasions from the northern part of this "pivotal" area? From the arctic coast?

Some researchers totally reject Mackinder's theory (Kisielewski 2002), and others present their own versions (Dugin 1997; Sloan 1999; Megoran, Sharapova 2005). Fascination with traditional geopolitics leads to such opinions as: "(geography is) the mother of strategy" (Gray, Sloan, 1999, p. 3). Z. Brzeziński (1986) is more precise with regard to the adjective "geopolitical": "geopolitical reflects the combination of geographic and political factors determining the condition of a state or region, and emphasizing the impact of geography on politics" (p. 40).

Geopoliticians use such terms and expressions as: hot spots (of the world), key to the country, bottlenecks, choke points (eg Hormuz Strait, Strait of Malacca), axis (eg of evil), arc of instability (in connection with the domino effect), shatter belts, fault lines, ethnic / religious seams, cordon sanitaire, buffer state, back country, core-periphery, accessible area, disputable area, multipolarity, hegemony, regional hegemony, hyperpower (>superpower), potential superpower, regional power, zone of influence / interests.

Moreover, one could mention here such effects as the domino effect (cf the chain, cascading and avalanche (> the snowball effect) effects / reactions), and the reverse domino theory (Wright, 2003).

Some geopolitical events and phenomena can be described or explained by means of "feedback" (positive, negative) and "feedforward", vicious circle, window of opportunities (cf the Overton Window of Political Possibilities and the annexation of Crimea) (Szałek, 2013).

Some geopoliticians (Jean, 1995) find K. Boulding's concept "[The lossof strength gradient is] the degree to which military and political power diminishes as we move a unit distance away from its home base" (Boulding, 1964, p. 245; Finley, 1987, p. 200) heuristically fruitful / inspiring (this concept can be expressed by means of a simple formula: $\Phi = S \ge R$ (S: strength, R: distance, Φ : a constant value; $S = \Phi / R$). Geopolitical activities use to be described by means of such expressions as: geopolitical games / rivalry / races, deterrence, containment, balance of power, (massive) retaliation, priority-setting.

Some heuristically inspiring concepts (from the viewpoint of geopolitics) offers mathematical topology (Sierpiński, 2000; Hart, Nagata, Vaughan, 2004; Munkres, 2000). For example: topological invariant, continuity / discontinuity, attractor, singularity, local and larger (global) topology, topological completeness (> globalisation), topological structures (such as interdependent networks).

The chaos theory and the "butterfly effect" direct our attention to "sensitivity to initial conditions" (necessary and sufficient causes) and "sudden shifts in behaviour caused by tiny changes in circumstances" (eg the situation in Tunisia > Libya, Egypt) (Lorenz 1979, 1996; Gleick 1987; Letellier 2012; Kiel, Elliot 1987, Stewart 1990).

The catastrophe theory (Thom, 1972; Zeeman 1976, 1977; Castrigiano, Hayes 2004) offers a set of 7 elementary catastrophes (fold, cusp, swallowtail, butterfly, hyperbolic umbilic, elliptic umbilic and parabolic umbilic catastrophe) in order to explain sudden changes of a system (small changes of factors / parameters can cause large and sudden changes of systems (eg: stability > instability, anxiety > anger, avoiding > attacking). This approach is a qualitative one, but may be heuristically inspiring and fruitful.

Let us illustrate the usefulness of the above-mentioned geopolitical and topological (mathematical) concepts with regard to other spaces of political topology.

Deterrence occurs not only in the political and military spaces, but also in the financial and economic ones (cf the opinion that financial market is capable to punish such a country as Poland for "wrong policy": it is capable to lead Poland to bankruptcy within 2 hours) (Rykiel, 2011; Thurow, 1999).

In the case of economy, containment can assume the form of economic embargo. In the case of "organized crime space", deterrence and containment can assume the form of reintroduction of death penalty.

The domino, avalanche or cascading effects can be observed in tightly connected financial systems and national economies.

A financial feedback exists between China and the USA (North America borrows money from China – China acquires for this money North American assets).

Retaliation (tit for tat) in "energy and economic" spaces may assume the form of higher oil / gas prices in case of higher transit fees (eg: Russia – Belarus).

Containment in "energy space" can assume the form of diversification of suppliers and alternative fuels (eg shale gas, renewable natural resources instead of non-renewable natural resources).

Before dealing with "hybrid warfare" I would like to emphasize the problem of predictability of effects of political activities (cause(s) and effect(s)) within complicated and interconnected topological spaces (eg the phenomenon of emergentness / black swans / hinge factors) (Williams, 2010; Durschmied, 1999).

POLITICAL TOPOLOGY AND THE PROBLEM OF HYBRID WARFARE

Let us shed some light on the problem of political topology by means of "warfare" (Clausewitz, 1984; Waldman, 2012) and "hybrid warfare". "Hybrid" means "heterogeneous". The concept of "hybrid / heterogeneous war" is not new. For example, Sun Tzu (1963) (a Chinese strategist) wrote around 500 BC: "That the army is certain to sustain the enemy's attack without suffering defeat is due to operations of the extraordinary and the normal forces" (p.91). The Chinese words ZHENG and QI can be translated not only as "ordinary / normal" and "extraordinary", but also as "direct / conventional / honest / straight / positive" and "indirect / unconventional / unusual / unexpected / unpredicted / strange" (Mudrov 1988) (according to Sun Tzu: "war is based on deception" (p.106), "secret operations are essential in war" (p.148; Sun Tzu recommended the employment of secret agents (chapter 13)), disruption of enemy's alliances (p.78) etc).

Let us shortly review some contemporary opinions on "hybrid warfare / operations".

According to A. Dugin (1997), "hybrid operations" encompass (among other things) subversion, destabilization, disinformation carried out by the Russian special services and utilization of Russia's energy resources in order to bully / pressure other countries.

A totally different approach to "hybrid war" presents M. Bond (2007) (it resembles the concept of "stages heuristics" ("stages approach") (de . According to her: "... this hybrid war paradigm requires a new approach to using our armed forces for a broader and more comprehensive war of scale, ranging from purely peaceful humanitarian missions as preventive measures, to the development of hostile conditions, through traditional warfighting operations employing traditional combat strategies, to post conflict reconstructions and stabilization efforts, where security and peace derive from thriving economic and political status" (Bond, 2007, p. 4).

Ph. A. Karber (Potomac Foundation) also tries to describe (on the grounds of his personal experience) the Russian version of "hybrid war" by means of the "stages approach": 1) political diversion, 2) proxy sanctum (consolidation), 3) intervention (conventional and unconventional (cyber-attack) activities, 4) deterrence (Rybczyński, 2015). His approach can be described as "narrow" and "destructive", whereas the approach of M. Bond as "broad" and "constructive".

According to Gen. V. Gerasimov (2013) (at present: Chief of the General Staff of the Russian Federation), the methods of "non-linear war" (= hybrid war) involve: " the broad use of political, economic, informational, humanitarian and other non-military measures" (such as "concealed" armed forces and a fifth column in the local population – B.Zb. Sz.) (Galeotti 2014; Roth, 2015).

L. Bershidsky comments on V. Gerasimov's concept of "asymmetrical war" (= "non-linear war") in the following way: "The emphasis in the confrontation methods employed is shifting toward the broad use of political, economic, information, humanitarian and other non-military measures, taken along with the use of the population's protest potential. All that is supplemented with covert military measures, such as information warfare activities and the actions of special operation forces. The open use of force, often under the guise of peacekeeping and crisis resolution,

only occurs at a certain stage, mainly to achieve ultimate success in a conflict" (Bershidsky, 2014).

R. McDermott (2014) focuses his attention on the following features of "hybrid war": "blurring of war and peace" (military operations in "peace time"), "highly maneuverable non-contact operations", fast destruction of critical infrastructure, simultaneous, direct and indirect activities / operations in all environments (everywhere), unified information space (p. 2).

According to Ch. Donnelly (the Institute for Statecraft): "Hybrid war is perhaps the wrong term. It is hypercompetition" (RTWT, 2015, p. 3). R. Nibleth (Chatham House) regards "hypercompetition" as an equivalent of "non-linear conflict" and postulates to find "new forms of deterrence" (cf: "nuclear deterrence", "financial deterrence") (p. 4).

A.Deep understands "modern hybrid war" as: "conventional capabilities, irregular tactics and formations, and terrorists acts including indiscriminate violence, coercion, and criminal activity simultaneously" (Deep, 2015; Hoffman 2007, p. 8). A.Deep practically repeats Sun Tzu's concept "of utilizing a combination of conventional and irregular methods to achieve a political objective" (Deep, 2015, p. 1).

M. Raska and R.A. Bitzinger (2015) (S. Rajaratnam School of International Studies) point at 3 features of "hybrid war": permanency of conflict, multidimensionality and unified effort. They emphasize the role of "invisible operations": "hybrid warfare is as much about the primacy of "influence operations", including elaborate internal communications, deception operations, psychological operations and well-defined external strategic communications in the cyber domain. These "invisible operations" subsequently pave the way for military victory on the battlefield" (p. 2).

As one can see, the above opinions on "hybrid warfare" differ, to some extent, but these differences illustrate what should / could be taken into consideration in order to win (cf the opinions of M. Bond, V. Gerasimov and Ph.A. Karber).

The postulate of "direct and indirect activities in all environments" should be understood as "direct and indirect activities in all relevant / important environments / spaces" (ie not only information warfare (>

cyberwarfare) (Carr, 2010; Andress, Winterfield, 2011; Ventre, 2010; Deibert, 2011; Carroll, 2012), but also electronic warfare (based on the use of the electromagnetic spectrum (EMP)) (Headquarters, Department of the Army, 2009).

Comparison of politically important "topoi" and spaces (political topology) with the "topoi" and spaces enumerated by Gen. V. Gerasimov is heuristically inspiring and suggests, for example, "financial warfare", "currency warfare", "energy warfare" etc. (Song Hongbing, 2012; Szałek, 2013b).

Some military researchers and commentators emphasize the problem of VUCA (volatility, uncertainty, complexity, ambiguity) in conventional military operations (Williams, 2010). This phenomenon becomes even more complicated in the case of "hybrid warfare" and politics based on "political topology" (an increased number of intertwined spaces and relevant "topoi").

CONCLUSION

The above analysis clearly illustrates that traditional geopolitics (understood as "impact / influence of geographic variables on politics") is obsolete – from the viewpoint of modern political decision making.

An alternative is "political topology" encompassing politically relevant places (topoi) and spaces, and open to new places and spaces important from the viewpoint of politics.

In other words, this concept could be described as "open political topology" (such an "openness" means adaptability to changing circumstances).

This "openness" can be illustrated by means of numerous inspiringly varying definitions of "hybrid warfare" ("war as a mere continuation of politics"; cf the concepts of M. Bond (based on "stages approach") and V. Gerasimov (based on "multidimensionality").

Of course, one thing is a comprehensive theory of "open political topology", and quite another thing is the capability to use it properly in the process of political decision making (cf the phenomenon of VUCA (volatility, uncertainty, complexity, ambiguity) and such pseudoheuristics as anchoring / fixation, availability and representativeness).

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