Geofusion – Power of Geography and Mapping of the 21st Century

Norbert Csizmadia Pallas Athene Innovation and Geopolitical Foundation; Geopolitical Section of the Hungarian Geographic Society; Corvinus University of Budapest



ABSTRACT

The paper is based on a thorough investigation regarding the recent global, social and geographical processes. This "Geofusion" guides the audience with the help of maps in the global world of the 21st century through the quest for the winning nations, communities, leaders and powers of this age. The findings of the study include a significant recognition that the scientists who are taken as explorers geostrategists of this century in this case, are expected to present guidelines of our new world full of global social and economic challenges. To do so, new maps are needed which do not miss the wisdom and tools of the old, but complement it with the new structure of knowledge. Using the lately discovered geographic and economic interrelations, the study tries to give a prognosis of the global processes. The methodology contains the survey and analysis of many recent publications worldwide, regarding geostrategic, cultural, geographical, social and economic surveys structured into global networks. In conclusion the author presents the result of the study which is a collage of the global map of the 21st century as mentioned above. In summary this study displays the results of a several year-long study giving the audience an image how economic navigation tools can help the investors and travelers to get along in the changing new world.

Keywords: creativity in geo-economy; innovation in geopolitics; geostrategy

1. NEW MULTIPOLAR WORLD ORDER – INTRODUCTION TO RE-DISCOVER GEOGRAPHY

What are our 21st century maps? How has our world changed in this 21st century new world order? What role does Central and Eastern Europe have on the geopolitical map of the world? Why is it important to understand the current global economic and political changes of the 21st century through geography While globalization was decisive between 1980 and 2010, the 2008 economic crisis has led to new forms of cooperation, new ways of thinking, new solutions and new values (Cséfalvay, 2017). From 2010, globalization has entered a new era of globalization in the era of technology and knowledge.

In this new era, we are talking about the rise of geography and economic geography, geopolitical processes are replaced by geo-economic processes, and instead of land acquisition competitions for markets are taking place. We live in the age of networks and mergers. In this interconnected world, the complex approach turns into the most important one. The pole of the global economy is shifting once again to the east and while, the 19th century was the British Empire's era, and the 20th century was America's era, the 21st century will unambiguously be Asia's century. (Khanna, 2018). The rise of Asia and the Eurasian continent within which China will play a key role and the Central and Eastern European region, which has been hitherto antagonized so far, can become the bridgehead of the

Eurasian continent. As the central gateway to the western gate of the New Silk Road, the European Union's most developed technology-led Badern Würtenberg, Bavaria, Lombardy the eastern gate and the former ancient Roman amber road (where we find today's most important automotive investments in Central and Eastern Europe) functioning as the center part Central and Eastern Europe meeting and interface between West and East (Csizmadia, 2016).

The 21st century interfaces are extremely important. (Barabási, 2014) Geography, geo-economics, geopolitics, and the global economy can be combined with a complex view of our world. In this era of fusion, we are searching for maps and to find out, with the help of geography, who will be the leaders of the winning nations and communities of this era. How we can understand the global political geographic, economic and economic geography processes around us. How can we redefine and re-draw our maps unambiguously? How do the once-peripheral areas become centers again?

The 2008 economic crisis created a new world order, a new value system with new players, new collaborations, new places, former centers became peripheral, and former peripherals could become centers. Past formulas and dogmas have failed, we need a new way of thinking and new methods. The 21st century is the era of knowledge, the genius for technology and innovation. After the era of globalization, the era of technology has risen, and one of the main questions is what role the locations will have in this technology-driven era. When technology, knowledge, and geography are formulated into a word, we get the term tech-knowled(ge)ography that is, knowledge in the geographic world of the technological era. This is the geography of knowledge and fusion, "Geofusion," which becomes a crossroad for complex knowledge and geography in the age of networks (Csizmadia 2017).

2. GEOGRAPHY IS THE TOOL FOR KNOWING THE WORLD

Geography is a tool for knowing the World, because geography is not only memorizing places on our maps, but the knowledge and skills of geography carries within itself the world's complex comprehension. Of course, not everyone agrees: Richard O'Brian writes in 1992 the book on Global Financial Integration: The End of Geography, about the role of the geographic space in our globalized world. He thinks that, thanks to modern information technology, millions of dollars can be sent from one corner of the earth to the next. So the future is not far, when "geographical location is no longer a factor for economic development. Well, we can safely say that O'Brien was mistaken. A decade later, Stratfor's geopolitical guru, Robert D. Kaplan, focuses on the recognition of territorial dominance in global processes with his book The Revenge of Geography, which he has given in response to O'Brian's work (Kaplan, 2013). Kaplan wrote, "We may forget about the power of geographic factors, but they will not disappear. Technological progress is not even able to do so, although many believed it, technological progress did not bring the death of geography but re-evaluated the importance of geography. Similarly, in a slightly different approach, Thomas L. Friedman author of the book The World is Flat, in 2013, stated that in today's world we are not talking about advanced and developing countries, but about countries that are able to move people's imagination. These countries will count in the future.

3. THE AGE OF GEOECONOMY

An important geopolitical element of the 21st century is that a multipolar world order has emerged from a former monopolar world, with three main characters, The United States,

China and Russia, the two supporting characters are Germany and Turkey. Geo-economics defines global economic processes as the fusion point of economics, social sciences and geography. At present we are witnessing the rise of geo-economics, a race that takes place in the language of trade, but in the logic of war. Although there are several wars going on in the world, from Damascus to Ukraine, the most important battle field today is economy. Military strikes are eventually replaced with economic sanctions, and military alliances are replaced with competitive economic systems. The likelihood of currency wars is stronger than that of the wars of territorial occupation. Also, the manipulation of the prices of certain raw materials (i.e. that of oil) proves to be much more effective than conventional armaments race. We can conclude from the above that we are experiencing the rise of geoeconomy, a competition which uses the language of commerce regulated by the logic of war. Geoeconomy stand for the antithesis of globalisation and for the greatest victory of globalisation at the same time. The cross-country dependence has reached such a level and interconnectedness from which the exclusion is worth up to the weight of a military conflict for all.

The geo-economic challenges highlight the vigorous trends that re-shape the world and change the conditions of competition between countries. All of these create a world in which the possession of force is as important as a chase after profit and is associated with the growing economic engagement of the state; economic warfare undermines economic integration; multilateral systems, instead of being globalized, are more regressive to regional levels; the oil price will be low and fluctuating, so competition will not be for resources, but for markets.

4. THE IMPORTANCE OF CONNECTIVITY

The map of the 21st century contains another map element that is more important than borders, and this is the line-network that crosses places and continents and connects them. These are infrastructure lines. In January 2016, during his TED lecture, Parag Khanna said that there are 500,000 km of borders, there are 1 million kilometers of underwater internet cables, 2 million kilometers of gas pipelines, 4 million kilometers of railway network and some 64 million kilometers of road network. These networks will be the most important lines on our maps. And it is not by accident that China's long-term geostrategy aims at the way of re-locating the axis of world economy to the continents from the oceans.

The New Silk Road or the One Belt One Road Initiative was launched by China in 2013. China's long-term plan is to recapture the historical, cultural, economic and commercial importance of Eurasia by building a New Silk Road. The New Silk Road consists of railway lines, development of sea and land ports, motorway constructions, the establishment and development of logistics centers, networks that are implemented through economic corridors. Since the launch of the program in 2013, substantial financial investments and plans have been made in China to make the new Eurasian economic zone really possible. The China Development Bank has allocated some \$ 900 billion to hundreds of different projects.

The main nodes of infrastructure networks that are built within the New Silk Road re-map the significance of each region and new centers emerge. The Khorgos dry harbor in Kazakhstan is also referred to as the world's largest dry harbor and is the most important Eurasian gateway and important logistics center in China's most important land route, which also has an impact on the development of Eastern Central Europe. Just as the China-Pakistan economic corridor connects China with the Arabian Sea through the Gwadar port via the Karakoum Highway, the world's highest paved international route. Gwadar's significance, among other things, is

that through it, Chinese goods can reach the European continent more quickly than through the traditional transport routes via the Malacca Strait. One of the main distribution centers of the goods is the Greek port of Piraeus, from which the goods are expected to reach Hungary on the Belgrade-Budapest railway line and depart from there to the ports of Rotterdam and Hamburg. It is no coincidence that 64 countries have joined the One Belt One Road Initiative so far, and it is no coincidence either that China intends to endow Hungary with a significant role in building the New Silk Road, since there will be 3 Silk Road networks meeting in Hungary at the same time. Therefore, Hungary is going to be one of the key points of the New Silk Road and the Eastern Central European Region can become the new bridgehead.

The former Silk Road has always been important in history, having embraced four empires and delivered the most important products of the era, technological novelties, innovations and knowledge, and quality products changed hands. The Silk Road consists of not only infrastructure networks, but also from knowledge-sharing, people to people connections, cultural and financial co-operations.

Since 2013, there have been 3673 trains running between 38 Chinese and 36 European cities, having created more than 180,000 new jobs. The port of Piraeus can shorten the length of the sea transport by 20 days, while the Xian-Duisburg railway route will take 24 days instead of the former 42 days. The railway transport centers can be located in Duisburg, Germany, in Brest, at the border with Belorussia, in Lodz, Poland, in the Greek port of Piraeus and in Budapest. Accordingly, a new axis of development emerges, which is East-West located in the North branch on the one hand, and has an NW-SE direction in the South branch on the other hand, connecting Piraeus with Rotterdam or the port of Hamburg, Germany. This will create a North-South zone from the Baltic Sea to the Adriatic and the Black Sea. These 16 + 1 member states stand for an important link with China. The Chinese conception is not unreasonable when it projects 2 hubs to emerge in this area; one is Warsaw, the northern center which is meant mainly for transportation, logistic and energy investments, while Budapest in the South zone can be the premise for financial services, cultural and intellectual co-operation. (The European Center for Bank of China is located in Budapest and the center of the Social Sciences Center of the Chinese Academy of Sciences was opened there too, in the Fall of 2016.)

5. WE LIVE IN THE AGE OF FUSIONS

We live in the age of knowledge, in the age of geoeconomy in a world of fusions. There are fusions in gastronomy, in music, in sciences and in architecture. Fusions are especially important because they come about unexpectedly at the meeting points, i.e. the hubs of networks producing innovations. In case of gastro-fusions, the fusions are said to appear when East meets West. And in this age of fusion, or Geofusion the raw material of the 21st century will be data, or big data, knowledge, creativity, experiment and service with new agents and new cooperation system. The small will be the big as it is proven in the case of the start-up companies, start-up cities, and start-up nations. We witness a new technological and entrepreneurial revolution in a new Cambrian landmark moment. If we had to highlight one map from the 21st century as the most important map, then it could be the map of the Internet with its networks and hubs.

Beside network interconnection, the most important component is the measurement of complexity. MIT researchers published the atlas of economic complexity for the first time in

2012. Ricardo Hausmann, who held a keynote speech at the Regional Studies Association (RSA) conference in Dublin in June 2017, presented the latest results of the research. The most important factors of measuring economic complexity are how one country exports and how the exported product itself relates to the global product range. The metrics have been tested since 1974 and the countries' rankings in given time intervals have also been registered. According to Hausmann, there are two factors that matter: one is knowledge and a highly skilled labor force, while the other is the export product itself, i.e. the high proportion of value-added industries in the export structure of a particular country. In this new type of economic complex competitiveness Japan is the leader of the list, followed by Germany and in the TOP 10 countries come from three regions: South-East Asia (Korea, Singapore), Scandinavia (Finland, Sweden, Norway) and Eastern Central Europe (Hungary, Austria, Czech Republic, Poland and Slovakia). That is why the rate of innovation and interconnection is important to be high in the new knowledge and technological age of globalization, which is the pledge of the area's growing prosperity in the 21st century.

6. GEOMANIFESTATION: THE RISE OF GEOGRAPHY IN THE 21^{ST} CENTURY

The leading corporations of the world are building and ever tightening network in East Europe, India, Southeast Asia so that with the creativity of the small start-ups they will be able to refresh their portfolios. Meanwhile China is building the modern Silk Road, crossing the continent from East to West. The managers of the technological mammoth companies are more and more aware of the global social issues and in doing so they exercise pressure on international political decisions like on space competition, on global warming, or on migration.

Science is also facing geopolitics. Urban studies regional issues, sustainability and social geography have appeared in the economic leadership training programs of the University College of London. Stanford launched its global leadership training program of 700 million dollars in 2015 seeking responses to economic-social issues, globalisation and technological challenges. The program of economics is supplemented with geography, communication theory, psychology and political science in the Social Science Faculty of the largest university of Asia, the National University of Singapore. Similar processes have begun at the Corvinus University of Budapest, Hungary. The world's leading economic, political and knowledge centres try to redraw the maps of the world, supplying them with their own interpretation sets and legends. The metropolitan regions, like that of Boston, San Francisco, and Bangalore, Singapore wants to turn into hubs unassignable from the data, knowledge and innovation networks influencing all global decisions.

There are always people and human decisions behind geopolitical turning points. The decision-makers, stakeholders, economic, political, scientific and technological leaders of the 21st century will be those who can see the global interconnections and can gather around themselves the hubs of creativity and information flow. Those who will be brave, curious and creative enough to draw strength from the crises and who dare to reconsider the role of spatiality in global decision-making. Those who are looking for the fusions, the new frontiers either physical, natural, or scientific. Those who are building their own networks with other creative hubs and can draw strength from intercultural exchange of experience. They will be the real explorers, global leaders, wanderers of the dynamic maps who, armed with geopolitical view, will redefine the world.

REFERENCES

- [1] Barabási A. L. (2003): Behálózva a hálózatok új tudománya. Budapest: Magyar Könyvklub
- [2] Cséfalvay Z. (2017): A nagy korszakváltás. Budapest: Kairosz Könyvkiadó.
- [3] Csizmadia N. (2016): Geopillanat, a 21. század megismerésének térképe. Budapest: L'Harmattan Kiadó
- [4] Florida, R. (2012): The Rise of the Creative Class. New York: Basic Books
- [5] Ferguson, N. (2011): Civilization: The West and the Rest. London: Penguin Books
- [6] Friedman, G. (2011): The Next Decade: Where We've Been ... And Where We're Going. New York, Anchor
- [7] Friedman, T. L. (2005): The World is Flat. New York: Farrar, Straus and Giroux
- [8] Glaeser, E. (2012): Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier. London: Penguin Books
- [9] Hausmann, R. Hidalgo, C. A. et al. (2011): The Atlas of Economic Complexity. New Hampshire: Puritan Press http://atlas.cid.harvard.edu/media/atlas/pdf/Harvard-MIT_AtlasOfEconomicComplexity.pdf
- [10] Kaplan, R. D. (2013): The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle against Fate. New York: Random House
- [11] Khanna, P. (2008): The Second World: Empires and Influence in the New Global Order. New York: Random House
- [12] Khanna, P. (2016): Connectography Mapping the Future of Global Civilization. New York: Random House
- [13] Khanna, P. (2019): The Future is Asian. New York: Simon & Schuster
- [14] Kotkin, J. (1994): Tribes: How Race, Religion and Identity Determine Success in the New Global Economy. New York: Random House
- [15] Marshall, T. (2015): Prisoners of Geography: Ten Maps That Explain Everything About the World. New York: Scribner
- [16] O'Brien, R. (1992): Global financial integration: the end of geography. London: Chatham House
- [17] Szilágyi I. (2013): Geopolitika. Pécs: Publikon
- [18] Tucker, P. (2016): The Geopolitics of the International Monetary and Financial System. Tacitus Lecture 2016 Worshipful Company of World Traders, London, 24 February 2016. http://paultucker.me/wp-content/uploads/2018/04/
 The-Geopolitics-of-the-International-Monetary-and-Financial-System.pdf
- [19] Watson, R. (2009): Future Files: A Brief History of the Next 50 Years. London: Nicholas Brealey Publishing