TOMASZ GRALAK

EAST-WEST COMMUNICATION AS THE MAIN CULTURE-BUILDING FACTOR OF THE OLD WORLD

The very notion of the "Silk Road" was introduced by Ferdinand von Richthofen as a result of his explorations in the second half of XIX century (1877). Basing on his observations and historical data he had drawn the map of communication routes from Europe through Central Asia to China. However, it must be stressed that these were by far not the only routes existing, since the Euro-Asian continent due to its size offers a lot of them (see Abu-Lughod, 2012, 227-248). So it seems that the notion of the Silk Road should rather be understood as an entire set of land connections the entire landmass between Atlantic and Pacific oceans. Accordingly, it seems that such geographical conditions had played key role in culture changes in Europe, Asia and Africa.

First of all, along such routes the fruits of so-called Neolithic Revolution had spread. Domestica animals and plants were being transported from the Middle East within a favourable climate zone (close to mild), reaching from Europe to China (Diamond, 2005). Those changes were conditioned by geography, since neolithic economy did not reach the Sub-Saharan Africa and Eurasian Taiga region. It is worth noting that the longitudinal orientation of both Americas had effectively hampered such changes in the New World.

The East-West communication intensified significantly when the first (neolithic) nomadic peoples emerged, thriving in the prairie /forest zone. This was connected with the expansion of the Indo-European population, said to originate in those areas. The exact location is the object of years-long dispute — the most often mentioned however are the steppes north of the Caspian and partly Black Sea (see Anthony, 2007). In relatively short period, people of the Indo-European language family appeared all over a vast area — from Europe through Near East, north India, Central Asia up to modern Western China (see T. Milewski). Obviously, migrating peoples were using broadly understood Silk Road routes — largely the belt of prairie spreading from Asia to Europe. The unprecedented migration had been possible only after the horse domestication, which took place exactly on the steppes. As a consequence, battle chariots as well as transport carts emerged (Anthony, 2007, 65-75, 193-202, 213-216). Horse mastery allowed for extended husbandry — a rider could watch over ten-odd times as much animals as a pedestrian. Another benefit brought about by the horse was the possibility of using far pastures

(Anthony, 2007, 222-224). Settlers no longer needed to concentrate on great rivers crossing the steppes, therefore husbandry became even more effective. Along with human genetic mutations in late Neolith (Allentoft et al., 2015), increased lactose tolerance occurred (Burger et al., 2007; Itan, et al., 2009). It is possible that this was connected with Indo-European migrations too, so that dairy products won by husbandry were utilized more effectively than by other peoples. Another noteworthy factor is the appearance of new, long-wool sheep breeds ca. 3500 BC. It allowed to weave cloth of better quality (Mallory, Mair, 2008, 209-210), offering increased protection against wind and variable steppes (prairie) weather. All these factors combined brought about a demographic explosion, which in turn resulted in rapid territorial expansion. The latter was facilitated by new means of communication, as well as new, extremely effective warfare associated with cavalry.

The Indo-European expansion directly contributed to innovations in China, such as the introduction of the horse, donkey and sheep husbandry or barley, wheat and grapewine cultivation (Mallory, Mair, 2008, 134-136, 169). In a similar manner technology of constructing and operating wagons, as well as bronze metallurgy was developed (Mallory, Mair, 2008, 324-328).

The Indo-European presence caused changes in social structures too. That ethnolinguistic group of was characterised by deities responsible for might, power and fertility. This by analogy was to correlate with social strata — the priests, the warriors and peasants/breeders (or more broadly — workers) (Eliade, 1997, 125-127). Thus a new social class emerged, whose main occupation was organized violence. Warriors became a permanent part of social life — they constituted a key element of social structure, holding religious legitimacy too. Such a type of social structure allowed for an easy incorporation of alien groups into the society. Most often they were included in class of people destined for work and the most visible example has been the Indian caste system which emerged as a result of the Indo-European invasion (Eliade, 1997, 127-128).

In the Bronze Age the continuous communication along East-West routes triggered the emergence of the Bronze Age civilization. From China, through India and the Middle East up to the Mediterranean a number of similarities can be demonstrated. In all these areas there developed an urban civilization, characterized by a strictly hierarchical social structure with considerable influence of temples and priests on political and economic life. It is even suggested that these were the first demonstrable signs of globalization processes (see Vandkilde, 2016, with further bibliography). Inter-societal contacts were driven by a necessity of obtaining raw materials for bronze production. Since outcroppings of relevant materials — copper and tin — do not exist in the same places, a good communication network was necessary already at the stage of production (Chochorowski, 1999a, 205-206).

In the early Iron Age the steppe belt used as a communication route played also a role particularly in China, India, Iran, and Middle East. Europe witnessed emerging political organizations of steppe tribes, to a large extent living off regular raiding the richer and much better organized lands of the South. Apart from lootings formal tributes have been extorted too. It seems that nomadic people were at least partially forced to act in this way due to the chronic shortage of plant-based food, which they compensated for by exploiting or robbing their neighbours (Moszyński, 1953, 31-32).

In the Middle East and Europe the earliest known marks of this phenomenon had been left by the Scythians. They arrived within the Black Sea basin as a result of so-called avalanche of tribes. According to Herodotus (VI: 3), the Arimasps had expelled the Issedons, who in turn moved west of the Scythians, who in turn pushed the Cimmerians out of their lands at the Black Sea. Most probably the information was based on the Arimaspea, a lost poem by Aristeas (Mallory, Mair, 2008, 39-42). Such migrations of large groups over the vast steppe areas do repeat periodically and are well known from the earlier times too (Moszyński, 1925, 19-23). The flight of the Cimmerians from the Pontus area then brough about raiding waves all over the Balkans — as documented by archeologic artefacts — and the Middle East, as told by written tales (Bukowski, 1979a, 192-195; Chochorowski, 1999b, 312-331, pict. 366). In the course of time the Scythians themselves arrived with their looting raids too (Bukowski, 1979b, 195-205, fig. 108, 109; Chochorowski, 1999b, 321-327b, fig. 376).

On the eastern end of the steppe belt analogical activity in the last centuries B.C. was performed by the Huns (*Hiung-nu*) (see Gumilev, 1997a, 1997b). Repelled by the Chinese, they most probably turned west, finally reaching Europe. Their migration triggered another migration, this time the Great One. It was concisely described by late Ancient writers. As St. Ambrosius wrote: "*Huns attack the Alans, the Alans the Goths, the Goths the Taifal and Sarmatians*" (Ambrosius, Expositio, X: 10). Jordanes records other tribes conquered by the Huns before Alans, as "*Alpidzuros, Alcildzuros, Itimaros, Tuncarsos et Bioscos*" (Getica 126). As a result of these events "*terrifying rumours spread abroad that the peoples of the north were stirring up new and uncommonly great commotions: that throughout the entire region which extends from the Marcomanni and the Quadi to the Pontus, a savage horde of unknown peoples, driven from their abodes by sudden violence, were roving about the river Hister in scattered bands with their families", as testified by Ammianus Marcellinus (XXXI, 4, 2). That was the root cause of great political, social and ethnic change in Europe during the Great Migration period. It is worth noting that in that time not only the Huns have reached Europe through the steppes. Shortly thereafter there came the Avars (see Szymański, 1979), as well as the Bulgars, Khazars and Pechenegs (see Dąbrowski, Nagrodzka-Majchrzyk, Tryjarski, 1975; Dudek, 2016). The great*

expansion of the Slavonic tribes (see Parczewski, 2002) was at least partly possible due to that process, too.

An example of later large migrations along the steppes were the XIII-XIVth centuries, when the Mongols had raised to power since the reign of Genghis Khan onwards. Characteristically, war disrupted traditional trade routes in Central Asia, so for vast regions the steppes became the basic communication corridor. In that period it was exactly over this route that silk was imported to Europe (Abu-Lughod, 2012, 250).

It seems that another example of political dimension embedded in East-West land corridor was the territorial expansion of Russia, including the colonization of Siberia. Since the reign of Ivan the Terrible until XIXth century Russia had been consistently annexing political structures, which in the late Middle Ages had been under Mongol/Tatar control. What is important, the expansion was directed primarily along the West-East axis (Łukawski, 1981, 59-78). It must be noted however, that since the early modern period, the East-West land connections had been gradually losing importance.

In the Middle Ages, regular use of the Silk Road caused a permanent outflow of bullion from Europe. It was clearly noted in case of Byzantine solidi, and later ducats channelled through Venetian Republic to Arabia and then further east (Nobis, 2014, 349-357, 389-396). In return, besides the imported China goods, Chinese culture's inventions were received too, with their distinct impact on the Western culture. The most important of them, and causing the most profound effects, were the gunpowder (Goody, 2012, 260), paper (Goody, 2006, 186-190; 2012, 277), the compass, print, blast furnace, the looms (Goody, 2006, 61-62, 152; 2012, 44, 282), noodles (Goody, 2006, 65) and the institution of postal service (Goody, 2012, 265-266).

Eastern trade also contributed to increasing contacts between the Europeans (mainly Italian cities) and Arab countries. As a result, many achievements of Islamic culture were incorporated, with their considerable influence on cultural and economic changes at the time of the Renaissance (see Goody, 2012, 41-43, 62-84, 140-142, 175). The Italians were able to follow the Arab ways of trade exchange with the accompanying organisation of trade companies, as well as the credit system (Abu-Lughod, 2012, 347-363).

Yet another important phenomenon were the outbreaks of the plague, caused at times of increased communication by *Yersinia pestis* bacteria. The first recognized pandemic dates back to the turn of the Neolith/Bronze Ages and can be associated with the Indo-European migration (Rasmussen et al., 2015). Due to the lack of written data it is hard to ascertain how it affected culture changes, as it was discovered by analysing skeletons found during archeologic excavations. Another outbreak occurred in history during the Migration Period under the name

of the Justinian's Plague (541–543 AD) (Wagner et al., 2014), and it considerably contributed to the decline of Byzantine Empire, as well as triggered further expansion of the barbarians in Western Europe. The biggest of these epidemics was of course the Black Death of XIVth century. It occurred all along the route from China to Europe. Noticeably, the most affected were the Arab countries (Abu-Lughod, 2012, 278-284, fig. 7). Combined with the Mongol wars, it significantly weakened all of the Islam world, which in turn allowed Europeans to take over the long-distance trade (due to political constraints increasingly concentrating on the sea lanes). Not surprisingly, another *Yersinia pestis* pandemic in the second half of the XIXth century turned global, spreading exactly along the seaways originating in China (Wagner, et al. 2014, fig. 4).

The turn to the sea trade was the reason for the ultimate abandoning of the Silk Road. It must be stressed however, that the East-West connections kept functioning, and specifically Europe-China contacts were ever increasing and intensifying. That was mainly driven by the difference in value of silver within the two realms. For the Europeans with secured continuous access to silver mines in South America, this was exceptionally advantageous and resulted in the exportation of bullion (Goody, 2006, 153, 156). That is why, subsequent Chinese inventions were reaching Europe by the sea, mainly through the journeys of Dutch sailors. These were the turnplough, used for cultivating muddy soils, and the mining drill e.g. for the natural gas and rotary winnowing fan, separating grain from chaff (Mallory, Mair, 2008, 319-320).

Today the question is, whether at the time of maritime and aviation transport as well as electronic information exchange, the land connection between the East and the West can have a similar role as it used to have in the past. Can we expect any political, cultural, ethnic, etc. changes? It seems that current conditions are completely different — so the effects have to be different too. Additionally, it must be noted that a convenient land route has existed since the end of XIXth century in the form of the Trans-Siberian Railway (P. Milewski, 2014, 299-300). The railway is very important for Russian, and former USSR economy, however it cannot be thought of as significantly contributing to global cultural and economic change and exchange. First and foremost, its importance is limited to the country which had built it. To a large extent, this is the thread that links Siberia and the Far East with the "European" part of Russia. The railway played a vital military role during the Russian Revolution (Bullock, 2009, 21-24) and the Second World War. It made it possible to maintain the crucial production potential and to move it east of the Ural Mountains (Braithwaite, 2011, 294-295), as well as to relocate troops from China's border in order to organize the defence of Moscow in 1941 (Rees, 2010, 80; Braithwaite, 2011, 294-295, 327).

If indeed such is the case, we are led to ask: is the New Silk Road a viable initiative of "changing the world", or is it just a project that largely comes down to a propaganda effect?

Obviously, there is a political dimension behind it too that cannot be overlooked and possibly this is the main reason. Convenient communication routes will certainly bring China's western provinces closer to the mainland and to the state itself. Most of all, this means Xinjiang, populated mainly by the Uyghurs, and to a certain degree Tibet, too. Also Central Asia can in this way have a tighter connection with the East. However, it is hard to imagine a fast and cheap land transport covering a couple of thousand kilometres through the territories of several countries. Thus it seems that Europe itself may represent a rather marginal element within the project. Nevertheless, it can be of much importance for the landlocked Central Asia countries which have no possibility to participate in maritime trade.

Sources:

Ambrosius Expositio Evangelii secundum Lucam 10: 10, in: Corpus Scriptorum Eclesiasticorum 34, 4. (red.), Karl Schenkl, Wien. 1902

Ammianus Marcellinus; Dzieje rzymskie, Księgi XXVI-XXXI, t. 2, Przełożył, wstępem i przypisami opatrzył Ignacy Lewandowski, Warszawa, 2002

Herodot; Dzieje. Z języka greckiego przełożył i opracował Seweryn Hammer, Warszawa, 1959

Jordanes; O pochodzeniu i czynach Gotów, in: Edward Zwolski, Kasjodor i Jordanes. Historia gocka, czyli scytyjska Europa, Lublin, 1984

Literature:

Abu-Lughod, Janet, L.; 2012, Europa na peryferiach. Średniowieczny system-świat w latach 1250-1350, Kęty

Allentoft, Morten E.; Sikora, Martin; Sjogren Karl-Goran; Rasmussen, Simon; Rasmussen, Morten; Stenderup, Jesper; Damgaard, Peter B.; Schroeder, Hannes; Ahlstrom, Torbjorn; Vinner, Lasse; Malaspinas, Anna-Sapfo; Margaryan, Ashot; Higham, Tom; Chivall, David; Lynnerup, Niels; Harvig, Lise; Baron, Justyna; Della Casa, Philippe; Dabrowski, Pawel; Duffy, Paul R.; Ebel, Alexander V.; Epimakhov, Andrey; Frei, Karin; Furmanek, Miroslaw; Gralak, Tomasz; Gromov, Andrey; Gronkiewicz, Stanislaw; Grupe, Gisela; Hajdu, Tamas; Jarysz, Radosław; Khartanovich, Valeri; Khokhlov, Alexandr; Kiss, Viktoria; Kolar, Jan; Kriiska, Aivar; Lasak Irena; Longhi, Cristina; McGlynn, George; Merkevicius, Algimantas; Merkyte, Inga; Metspalu, Mait; Mkrtchyan, Ruzan; Moiseyev, Vyacheslav; Paja, Laszlo; Palfi, Gyorgy; Pokutta, Dalia; Pospieszny, Łukasz; Price, Douglas, T.; Saag, Lehti; Sablin, Mikhail; Shishlina, Natalia; Smrcka, Vaclav; Soenov, Vasilii I.; Szeverenyi, Vajk; Toth, Gusztav; Trifanova, Synaru, V.; Varul, Liivi; Vicze, Magdolna; Yepiskoposyan, Levon; Zhitenev, Vladislav; Orlando, Ludovic; Sicheritz-Ponten, Thomas; Brunak, Søren; Nielsen, Rasmus; Kristiansen, Kristian; Willerslev Eske; 2015, Population genomics of Bronze Age Eurasia, Nature 522, ss. 167-172, (11 June 2015)

Anthony, David, W.; 2007, The Horse, the Wheel, and Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World, Princeton University Press

Braithwaite, Rodric; 2011, Moskwa 1941. Największa bitwa II wojny światowej. Kraków

Bullock, David; 2009, The Czech Legion 1914-20, Oxford

Chochorowski, Jan; 1999a, Hiperborejczycy wieku spiżu — epoka brązu poza zasięgiem wysokich cywilizacji w Europie; w: Encyklopedia historyczna świata, t. I, Kraków, ss. 202-252

Chochorowski, Jan; 1999b, Żelazny oręż barbarzyńców — wczesna epoka żelaza poza zasięgiem cywilizacji klasycznych; w: Encyklopedia historyczna świata, t. I, Kraków, ss. 304-395

Diamond, Jared; 2005, Nowa naukowa synteza historii człowieka; w: John Brockman (red.), Nowy renesans. Granice nauki, Warszawa, ss. 23-38

Bukowski, Zbigniew; 1979a, Oddziaływania tzw. przedscytyjskie, w; Prahistoria Ziem Polskich, t. IV, Wrocław-Warszawa-Kraków-Gdańsk, ss.192-195

Bukowski, Zbigniew; 1979b, Charakterystyka znalezisk tzw. scytyjskich, w: Prahistoria Ziem Polskich, t. IV, Wrocław-Warszawa-Kraków-Gdańsk, ss. 195-204

Burger, Joachim; Kirchner, Marc; Bramanti, Barbara; Haak, Wolfgang; Thomas, Mark, G.; 2007, Absence of the lactase-persistence-associated allele in early Neolithic Europeans, Proceedings of the National Academy of Sciences of the United States of America, vol. 104 no. 10., 3736–3741,

http://www.pnas.org/content/104/10/3736.full data dostępu 11.05.2017

Dąbrowski, Krzysztof; Nagrodzka-Majchrzyk, Teresa; Tryjarski, Edward; 1975, Hunowie europejscy, Protobułgarzy, Chazarowie, Pieczyngowie, Wrocław-Warszawa-Kraków-Gdańsk

Dudek, Jarosław; 2016, Chazarowie: polityka — kultura — religia: VII-XI wiek. Warszawa

Eliade, Mircea; 1997, Historia wierzeń i idei religijnych, t. I. Warszawa

Goody, Jack; 2006 Kapitalizm i nowoczesność. Islam, Chiny, Indie a narodziny Zachodu, Warszawa

Goody, Jack; 2012 Renesans Czy tylko jeden? Warszawa

Gumilev, Lev; 1997a Istoriya naroda khunnu 1, Moscva

Gumilev, Lev; 1997b Istoriya naroda khunnu 2, Moscva

Itan, Yuval; Powell, Adam; Beaumont, Mark, A.; Burger, Joachim; Thomas, Mark, G.;

2009, The Origins of Lactase Persistence in Europe. PLoS Comput Biol 5(8): e1000491.

http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1000491#s4 data dostępu 11.05.2017

Łukawski, Zygmunt; 1981, Historia Syberii. Wrocław-Warszawa-Kraków-Gdańsk-Łódź

Mallory James, Patric, Mair, Victor, H.; 2008, The Tarim Mummies. Ancient China and the Mystery of the Earliest Peoples from the West, London

Milewski, Piotr; 2014, Transsyberyjska. Drogą żelazną przez Rosję i dalej, Kraków

Milewski, Tadeusz; 2004, Językoznawstwo, Warszawa

Moszyński, Kazimierz; 1925, Badania nad pochodzeniem i pierwotną kultura Słowian, PAU Wydział Filologiczny, Rozprawy, LXII, nr 2, ss. 1-114

Moszyński, Kazimierz; 1953, Ludy pasterskie, Kraków

Nobis, Adam; 2014, Globalne procesy, globalne historie, globalny pieniądz, Wrocław

Parczewski, Michał; 2002, Praojczyzna Słowian w ujęciu źródłoznawczym, w: Andrzej Kokowski (red.), Cień Światowita, ss. 23-71, Lublin

Rasmussen, Simon; Allentoft, Morten; Erik; Nielsen Kasper; Orlando, Ludovic; Sikora, Martin; Sjögren, Karl-Göran; Pedersen, Anders; Gorm; Schubert, Mikkel; Van Dam, Alex; Kapel, Christian, Moliin, Outzen; Nielsen, Henrik Bjørn; Brunak Søren; Avetisyan, Pavel; Epimakhov, Andrey; Khalyapin, Mikhail, Viktorovich; Gnuni, Ar-

tak; Kriiska, Aivar; Lasak, Irena; Metspalu, Mait; Moiseyev, Vyacheslav; Gromov, Andrei; Pokutta, Dalia; Saag, Lehti; Varul, Liivi; Yepiskoposyan, Levon; Sicheritz-Ponten, Thomas; Foley, Robert, A.; Mirazón, Lahr, Marta; Nielsen, Rasmus; Kristiansen, Kristian; Willerslev, Eske; 2015, Early Divergent Strains of *Yersinia pestis* in Eurasia 5,000 Years Ago, Cell 163, ss. 571-582

Rees, L., Laurence; 1999, Hitler i Stalin Wojna Stulecia, Warszawa

Richthofen von, Ferdinand; 1877, China. Ergebnisse eigener Reisen und darauf gegründeter Studien. 5 Bände mit Atlas. Band 1: Einleitender Theil, Berlin 1877

Szymański, Wojciech; 1979 Awarzy, w: Wojciech Szymański, Elżbieta Dąbrowska, Awarzy, Węgrzy, Wrocław-Warszawa-Kraków-Gdańsk, ss.7-131

Wagner, David, M.; Klunk, Jennifer; Harbeck, Michaela; Devault Alison; Waglechner, Nicholas; Sahl, Jason, W.; Enk, Jacob; Birdsell, David, N.; Kuch, Melanie; Lumibao, Candice; Poinar, Debi; Pearson, Talima; Fourment, Mathieu; Golding, Brian; Riehm, Julia, M.; Earn David, J.; DeWitte Sharon; Rouillard Jean-Marie; Grupe Gisela; Wiechmann, Ingrid; Bliska, James, B.; Keim, Paul, S.; Scholz, Holger, C.; Holmes, Edvard, C.; Poinar, Hendrik; 2014, *Yersinia pestis* and the Plague of Justinian 541–543 AD: a genomic analysis. The Lancet. Infectious diseases. Published online January 28, 2014, http://dx.doi.org/10.1016/S1473-3099(13)70323-2 data dostępu 11.05.2017

Vandkilde, Helle; 2016, Bronzization: The Bronze Age as Pre-Modern Globalization, Praehistorische Zeitschrift; 91, ss.103-123