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Transport in the Beginnings of Civilizations in the Context of Symbolism and Education

Abstract

The term "transport" has a rich content related to its social functions, which determine its goals and responsibilities. It has also a long history associated with both state-building processes and civilization transformations. In principle, it is impossible to imagine economy, social life or every-day human existence without them. Their creation is the result of inspiration, searching for a way to make ideas come true, acquiring knowledge and hard work of men. The development of transport would not have been possible on a large scale if the knowledge of how to be mobile had not been passed on through generations. It enabled among others the creation of a coherent "memory bank"", which facilitated the "transport education".

Keywords: transport, religious motives, philosophical motives, civilizations, environment.

Introduction

Transport seems to be an area of human activity in which efficiency, economic calculation and the optimal use of opportunities is very important. (Akerlof, Shiller 2009, pp. 137–140) However, a closer examination of the essence of transport allows us to understand that it is based upon human thoughts and actions, the way of seeing the world and exploring the possibilities of overcoming one's limitations. It is the power of thoughts and beliefs that constitutes an important drive and inspiration, allowing to act effectively and make discoveries.

Beliefs and aspirations also lay at the basis of the development of vehicles known today such as cars, trains, ships or planes. Means of transport played the role of an inspirer and accelerator in the creation of human communities, contributing to the development of their more complex structures. (Janik 2019, pp. 105–115)

The development of mobility resulted inevitably a number of arrangements regarding the conduct within it which led to the gradual drawing up of road and water traffic rules. Their implementation was largely educational in nature, and they were / being related to the transfer of knowledge about the rules of movement by people experienced in this regard to those who were only taking their first steps in this area.

Transport and movement – religious and philosophical motives

The elements of the use of the symbolic elements of movement and transport in religions were widespread in the ancient times. Interest in the topic of the speed and agility of the movement of animals and birds could be seen at the early stages of religion, e.g. in totemism and shamanism.

There are also references to movement in the more developed forms of religion. The gods directing the movement of celestial bodies like Horus in Egypt, depicted with the head of a falcon, were the guarantors of the world order. In pre-Columbian America, there also were many references to animals associated with movement such as Quetzalcoatl, a snake with bird feathers.

Ancient religions often used associations with animals that could be used for traveling, especially horses as well as "hybrids" like Pegasus. It seems that through ancient (e.g. Greek) and medieval (e.g. heraldry) symbols, the images of birds related to "flights" and "fast-running animals" have survived till the present day, serving as the emblems of modern organizations, including state; birds of prey, mainly eagles, and predatory animals like lions, tigers or bears, are particularly popular.

Noteworthy are such mythological figures as Phoenix or Icarus. (Hamilton 1942, pp. 134–140) The last one tried to free himself not only from the captivity, but also from the limitations of the gravity. It is worth paying attention to the "mobility" of some peoples such as the Phoenicians or the Greeks. Considering these civilizations in the context of its relation to movement, it should be remembered that it was not only at sea that they traversed large areas, but also on land. In a sense, stories about gods, heroes and their adventures have become a reflection of these peregrinations, of which the *Odyssey* can be an instance. Traveling appears to be a motif of many religious myths, e.g. of Odysseus. Movement is also referred to by the Greek beliefs about the fate of souls after death. According to the ancient Greeks, the ferryman Charon transported the souls of the dead through the river Styx into the underworld, and expected

to be paid for rendering this last service; hence, the custom of putting coins on the eyelids of the persons going to the "land of shadows".

The Old Testament is also full of references to movement and displacement. The Biblical patriarchs travelled much, and, despite the numerous dangers, they were constantly "on the move" as shepherds with their herds. Patriarch Noah may be the archetype of shipbuilders and steersmen. To the traveling prophets belongs, among others, Jonah, and the most spectacular part of his journey was in the belly of a large fish.

The Israelites travelled to Egypt in search of food and shelter. When the Israelites' stay in the kingdom of the pharaohs became unbearable, Moses led them out of the "land of Egypt", and their journey, long and full of religious events, was described in the Book of Exodus. Another symbol related to journey is constituted by 40 years of Israelites' wandering across the desert before they entered the "Promised Land".

Many "Biblical characters" were on their way; in this context, it is possible to mention, inter alia, the person of Syrian commander Naaman who was cured from leprosy thanks to his journey to Israel. 'The allegory of the road, often combined with the commandment to engage in religious activity, expressed in the words: "Go and teach all nations", can be found on many pages of the New Testament, e.g. in the part referring to the birth of Jesus during a census-related journey from Nazareth to Bethlehem, the flight of him from the "slaughter of the innocent" into Egypt and his return to Israel after Herod's death.

In medieval Christian Europe, traveling was often connected with religion, and it assumed the form of a pilgrimage movement. These were dangerous ventures because of the lack of safety on the roads where robbers prowled. During the Crusades, knightly orders such as the Knights Templar and the Teutonic Knights, whose power and influence played a large role, were established to protect Christian pilgrims.

Some journeys were penitential pilgrimages, and the most famous of them is probably the politically motivated "Road to Canossa" (*Gang nach Kanosa*) of Emperor Henry IV (1084–1105) in 1077, where he humbled himself before the Pope Gregory VII (1077–1085). It became a synonym for the humiliation of secular power before the papacy. In the Middle Ages, traveling was dangerous. Because of this, the Christian people sought help of saints; very popular was in this regard was Saint Christopher, the patron saint of travellers, who, according to legend, carried Jesus himself across the river.

The Quran is also associated with Mohammed's journey from Mecca to Medina in 622, which became the first year in the Muslim calendar. Full of expression and movement allegories is also the concept of "war against the infidels" to conquer the world for "one God", namely, Allah. In Islam, a pilgrimage to Mecca is included in the five basic religious practices. (Giddens 1993, pp. 477–479; Gibb 1973, pp. 16–25)

The religions and philosophies of the Far East are rich in references to "journeys". The allegory of the "road" is inseparably connected with Taoism (and manifested there by the famous phrase "the way is the goal"). References to the allegory of travel can also be found in Confucianism. (Singer 2016, pp. 79–81; Janik 2022, pp. 18–26)

Vedic books are full of the descriptions of the gods' journeys. Wandering was, and is, typical of "holy men" in India. The Buddha also traveled and died during a journey. (Fischer-Schreiber, Erhard, Diener, Friedrichs 1999, pp. 46–48; Zieliński 2021, p. 70) He is often depicted with an elephant, and so are Hindu deities. (Hope, van Loon 2006, pp. 37–46; Rajadhon 1986, pp. 45–73) A kind of missionary worship cult developed in China around the person of Bodhidharma, and he started to be regarded as the founder of a system of martial arts used by monks to defend themselves against robbers. These arts were practiced in the Shaolin monastery and gave rise to today's *kungfu*.

It is in these religions that an important form of *travelling* in a religious sense are pilgrimages to "holy places". They took place already in ancient times, e.g. in religions that drew upon the teachings of Brahmanism. Currently, they occur in almost all religious systems of the modern world, and attract particularly large groups of believers in Christianity, Islam, Shinto, Hinduism, Jainism or Buddhism, and intensively practiced by religions like Judaism (especially, in the form of Hasidism).

Migrations of the first human communities

Considering the history of human mobility, one can conclude that movement seems to be a hallmark of the human species. (Janik 2017, p. 9; Livi-Bacci 2012, pp. 1–11) The reasons for human migrations were different, and they basically have not changed today. These include hunger, a fear of disease, seeking better conditions of life, curiosity, and acts of aggressions. Regardless of the motives of people during their journeys, they managed to reach and populate virtually all possible habitats on our planet. It proves the human character traits as well as willingness to learn new things, face challenges and the existence of the "spirit of explorers", which made people strive to know "what is beyond the horizon" and seek opportunities to improve their lives.

Interestingly, it is amazing how people with the help of only simple primitive technical equipment like sleigh, or by occasionally using animals to carry their belongings, were able to cover considerable distances and to populate many areas. What this, seemingly obvious, statement means that is man was able to travel long distances virtually without the use of means of transport.

Water journeys seem to be extremely interesting, as a result of which people of that era were able to overcome the limitations resulting from the fact that many lands were not possible to be reached in any other way. The use of seem-

ingly primitive raft, canoes, boats, etc., has rendered it possible to achieve enormous successes when it comes to assessing the number and size of the territories that came to be inhabited by man this way. This allows us to conclude that "moving" is an inherent part of human nature. Over time, some people began to lead a sedentary lifestyle and engage in agriculture. (Wren 1994, pp. 8–11)

Transport and the first civilizations

The analysis shows that the development of transport had a positive impact upon the development of state organizations and, vice versa, that state structures favoured the development of means of transport. As the importance of religious and political structures grew, broader possibilities of economic activity appeared, which rendered further "intellectual inventions" corresponding to social needs and the emergence of a wider group of people with appropriate skills necessary. This largely concerned means of transport; in the area of the first river civilizations (in Mesopotamia), the wheel was invented and vehicles were built as well as gradually improved. As a result of the domestication of animals, it became possible to use their force to move the first, relatively simple vehicles.

Conducting commercial transactions on markets had already led to the development of appropriate intellectual "instrumentation", and resulted in the development of the methods of transporting traded goods. Establishing cities has also become a significant step towards raising the level of civilization development. (Elias 2000, pp. 223–225)

The concentration of a large number of people on a relatively small area was associated, apart from achieving the efficiency necessary to erect permanent buildings, with the need to solve numerous problems related to safety, provisioning, etc. The accumulation of a large number of people on a relatively small area rendered it necessary to organize traffic inside the cities as well as to provide provisions for city residents, which was a great logistical challenge. (Huntington 2002, pp. 43–55)

The movement and transport in the context of the emergence of the armed forces

The development of forms of transport also contributed to the development of relatively numerous armies of ancient states. (Morris 2015, pp. 27–52) For these armies, it was very important how they moved, how they were supplied with food and weapons, and whether they had warriors fighting with the help of animals. It was the latter troops that enjoyed great popularity, constituting the most mobile parts of the ancient armies. (Cooley 1894, pp. 48–53) Initially,

there were mainly horse-drawn combat chariots, later replaced by cavalry. Apart from horses, elephants were also used as "combat" animals. The first mass armies of antiquity: Old Babylonian, Old Assyrian or Egyptian, had well-developed structures and hierarchies and fought according to a strategy developed by their commanders. Maintaining the obedience of a relatively large army would not have been possible if there had not been an efficient organizational network that would bind individual formations into one compact organism. Factors such as the authority of the monarchy, religious beliefs, trust in commanders or the belief in the effectiveness of their own armed forces played a large role. This was evident in the Babylonian, Assyrian, Persian and Macedonian armies. In their case, an important role was played by the ability to quickly respond to threats, which the army owed to means of transport. An instance is the well-stocked army of Alexander the Great, about which it should be said that the foundations of the concept of its functioning were developed during the reign of his father, Philip II. Alexander trained his soldiers for long marches with burdens, mostly food supplies. He banned the use of carts, which was to prevent combatants from becoming excessively dependent on them. In comparison, the Greeks reacted negatively to these solutions; the physical effort of carrying supplies disgusted them and rendered it necessary to use slaves to create supply lines and to use transport vehicles.

In antiquity, one can also find the evidence of the existence of military organizational structures characterized by ability to move very rapidly taking into account the technical possibilities of the time. The military expeditions of Alexander the Great and Hannibal played a significant role in this respect. (Grant 1978, pp. 98–106; Janik 2016, pp. 16–17)

In the structures of these armies, you can find the seeds of almost all types of armed forces that exist today, e.g. intelligence services or engineering troops responsible for sieges, crossing rivers, etc. Also in other parts of the ancient world, means of transport were appreciated, e.g. it was in China that one of the earliest studies on military and managerial topics was written; it was the famous work by Sun Tzu (c. 544–c. 496 BCE) entitled 'The Art of War'. (Sun Tzu, Noron P. (edit.) 2016, pp. 41–198; Witzel 2012, pp. 22–23) In his considerations, the author sees unity as a source of strength; there are also terms such as: 'strategy', 'alliance', 'armed forces'(army), 'art of time management', 'attack', 'threat recognition', 'planning', but also such as associated with movement and strategic goals and broadly understood 'mobility'. In his book, Sun Tzu dealt with, inter alia, such strictly military issues as: the abilities and skills of the commander, training the army, choosing the right strategy, taking into account the terrain when formulating the tasks to be performed, the art of building fortifications, methods of forming the formation of combat units, speed of actions, military mobility and the 'operational value' of intelligence services. The 'Art of War'

presents various tactical solutions, the rational manoeuvring of the armed forces, the use of intelligence services, the ability to verify acquired data and the art of defensive and offensive operations. Also in later times, reaching the battlefield faster gave a strategic advantage; an instance can be the Prussian-Austrian war in 1866, during which Prussian troops reached the front line by rail, and the forces of the Austro-Hungarian monarchy marched or rode on horseback, which meant the loss of some combat value. (Haffner 1980, pp. 116–137; Marshall 2016, pp. 68–75)

There were many famous people who use the teachings of Sun Tzu, among others Mao, Võ Nguyên Giáp, and Douglas MacArthur; all three achieved military successes largely due to the mobility of their troops. It is worth noting that the "legend of chivalry" that enshrouded military formations using horses was found to be transferable to other branches of the army, an instance may be the fact that in the Wilhelminian Period and during World War I, many cavalry officers tried to enter service in combat aviation, which was perceived as the continuations of "knightly duels"; one of them was famous Manfred von Richthofen.

Means of transport and culture

In some historiosophical concepts, the mobility and use of animals to transport play a significant role. This is the case, for instance, with Alfred Weber. In his work entitled 'History of culture as a sociology of culture' (*Kulturgeschichte als Kultursoziologie*), which was published for the first time in 1950, he divided the history of the mankind into four periods, the third of which was found to be particularly important due to the issues of transport mobility.

The periods distinguished by Weber are as follows: 1) "Primitive Man", who lived about 500,000 BC and was able to become aware of the existence of the external world; 2) so-called "Second Man", since about 100,000 BC, who was able to improve their existence by using tools; 3) "Third Man", from about 4,000 BC, who dominated and domesticated animals, especially horses; and 4) "Fourth Man", a modern man whose existence is connected with industrialization and the spread of totalitarian systems as well as to the dominance of bureaucracy. (Weber 1960, pp. 499–500)

It is also worth pointing out that the road traffic regulations were also related to ideology and politics; the rule of driving on the right side of the road was established in France during the Great French Revolution (1789–1799), in response to driving on the left side of the road practised by aristocrats. After that, especially in the time of Napoleon Bonaparte's rule, this principle became commonly applicable in many parts of Europe. In other countries, mainly in Great Britain and its ex-colonies, the rule that the left side of the road is used for driving remains in force. (Wright 1968, pp. 88–99)

The beginning of education for transport

Regardless of many problems, people's transport capabilities have increased over the centuries. The transfer of knowledge regarding this sphere of human life in the period of the first civilizations took place largely in family and neighborhood circles as well as in emerging organizations specializing in various types of transport and logistics activities – in the latter case, the leading role was played by armies, conducting trainings and exercises in order to maintain high mobility of soldiers. It is worth noting that certain forms of transport such as chariots, began to play a significant role in sporting competitions, e.g. in ancient Rome.

The transfer of knowledge about the art of steering ships, vessels or smaller floating units concerned both practical sailing skills as well as the elements of navigation – which required at least elementary knowledge of mathematics and geometry. (Janik 2003, pp. 29–31) For a long time, this was a significant obstacle to the popularization of sea travel – the situation in this respect began to change for the better during the modern development of mass education.

Conclusions

A closer analysis shows that means of transport are not only useful devices at our disposal (which we use), but that they are a product of our aspirations, desires and dreams. Although they are often not paid the proper attention to, they are present in literature, movies and art. Modern man cannot exist without means of transport. (Cavanagh, Mander 2004, pp. 179–184) In order to make a better use of them, the mankind should get to know the cultural determinants of their formation and the shaping power they have. A historiosophical reflexion is also useful here, which allows the contemporary man to understand the mechanisms by which means of transport arose and the opportunities they offer better.

The development of the world's roads and modes of transport would not have been achieved if successive generations had not developed the knowledge of effective ways of participating in road traffic and had not passed it on to the next ones. It is these actions that have enabled progress in the field of human mobility, which resulted in the means of transport being found to be an important factor in the development of civilization. (Johnson, Turner 2016, pp. 197–223)

Thanks to means of transport, it became possible to trade or to discover 'the New World'. Railroads and airplanes connected distant places, and cars changed people's way of life in almost all parts of the world. Means of transport even managed to conquer the space around the Earth with the help of rockets. New,

once unknown, possibilities have opened up for the mankind. The development of modern means of transport changed spatial relations, contributing to the development of the globalization process. It is thanks to them and means of communication that the mankind can feel today as the inhabitants of a "global village", with all the consequences of this. (Löw 2018, pp. 82–86) At the same time, means of transport also showed their dark sides, which include the high accident rate, their use for military purposes, and the destruction of the environment. Regardless of this, it is hard not to notice that proper training in the use of means of transport increases people's mobility as well as contributes to increased safety of travelers. This phenomenon, noticed already in the period of the existence of ancient civilizations, has not lost its relevance in this respect in modern times.

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Transport w początkach cywilizacji
w kontekście symboliki i edukacji

Termin „transport" ma bogatą treść korelującą z funkcjami społecznymi, które określają jego cele i obowiązki. Ma także długą historię związaną zarówno z procesami budowania państwa, jak i przemianami cywilizacyjnymi. W zasadzie bez środków transportu nie sposób wyobrazić sobie gospodarki, życia społecznego czy codziennej egzystencji człowieka. Ich powstanie jest efektem inspiracji, poszukiwania sposobu na urzeczywistnienie pomysłów, zdobywania wiedzy i ciężkiej pracy ludzi. Rozwój transportu na szeroką skalę nie byłby możliwy, gdyby wiedza o tym, jak być mobilnym, nie była przekazywana z pokolenia na pokolenie. Umożliwiło to m.in. stworzenie spójnego „banku pamięci", który ułatwił „edukację transportową".

Słowa kluczowe: transport, motywy religijne, motywy filozoficzne, cywilizacje, środowisko.