

Virtual space in geography

TADEUSZ SIWEK

University of Ostrava,
Department of Social Geography and Regional Development, Czech Rep.

Abstract

Virtual world is not only a topic of fantasy literature. It can be a topic of serious scientific research: see simulations, prognosis and models. A kind of virtual construction is counterfactual one that is dealing with an alternative simulation of reality in the past. The fact even less probably than the others becomes a historic event and it becomes only one that is worthy to be a topic of scientific analysis. Virtual constructions can be used in advertisement, propaganda, teaching and science as well. Some counterfactual attitude was used in teaching in University of Ostrava since 2002. They are: alternative scenarios of development of America during the seminars of regional geography and exercise of alternative perception the problem of Teschen Silesia divided 1920 between Poland and Czechoslovakia. They are more topics for virtual or counterfactual analysis in the field of Czech geography, predominantly historical geography.

Key words: virtual, real, counterfactual, historical geography

Real and virtual space

Space is a basic object of geographical research. Every important geographical study deals with the spatial distribution of phenomena, whether natural or social. Some geographers' claim that space is actually the only subject which geography can study, and that thus – because almost all phenomena on Earth have a spatial dimension – geography can in fact study anything at all.

As long as geography has existed, geographers have understood "space" purely as real space. There also exists, however, unreal space in various forms. People's imagination is capable of creating entire fictitious worlds. We know these worlds from ancient tales, myths and legends, and in the modern area, also from science fiction. Thanks to developments in computer and video technology, these fictitious worlds have been brought so close to us that the boundary between fiction and reality is becoming ever more blurred. Fictitious worlds pictured on computer screens can now enter the consciousness of individuals who are not blessed with particularly fertile imaginations. Today, people must – whether they like it or not – take much more account of unreal, artificially constructed spaces, which impinge on people's lives to a greater extent than ever before and in some cases may even influence their behaviour more than real spaces do. If virtual space can influence the behaviour and decisions of real beings, it cannot

be ignored. The term “cyberspace” – a space created by computer technology – has existed in literature since 1984, when it was created by William Gibson in his novel *Neuromancer* (The Dictionary of Human Geography, 2000).

The imagined space invented by people primarily for entertainment is a very long way from serious scientific analysis. Even so, the question arises whether it may not be possible to use some kind of fictitious space for serious purposes. In this case, it could be an area of interest for geographers. What, after all, are geographical models and even maps? They are intellectual constructs, which aim to represent a too complex reality in a simplified way. They are copies of reality, which become more virtual the more they deviate from reality. Deviations from reality may be caused by insufficient knowledge, but what if they are deliberate? Can geographical models or maps of geographical spaces be scientific tools if they depict a deliberately virtual – in other words non-existent – space? Undoubtedly the answer is yes: especially in the case of simulations of phenomena and processes, which have not actually happened – yet. These simulations can be useful forecasting tools. The scale leading from reality to virtuality can take us from virtual reality to real virtuality, which is not a copy of reality but an alternative to it (Crang, M. – Crang, P. – May, J., 1999, p. 7).

This idea is not entirely new. Over 30 years ago, Hugh Prince (1971) proposed a division of the world into real, imagined and abstract for the purposes of historical geography. In his conception, the real world is a reconstruction of the real world in the past, the imagined world is the perception of the world of the past – as seen either by contemporaries or by observers today – and the abstract world includes models of the world of the past created by scientists for the purposes of scientific research. Prince’s inspirational categorization of geographical space can be simplified into two types: the real world and the unreal (virtual) world.

The counterfactual variant of a virtual construct

The dictionary definition of virtual space is one, which is “invented, unreal”. It is a space artificially constructed by people and which is deliberately different from real space. It is the extent of this difference between artificial, virtual space and real space that is important. Some virtual constructs only differ from reality very slightly, while others are very different indeed. The first type is only partially virtual, whereas the second are entirely virtual.

Virtual constructs may differ from reality both in their various elements and in the relations between these elements. The most virtual are those which differ on both of these levels. Unreal elements and unreal relations between them are typical features of fairy stories, myths and legends. Not only have these constructs never existed, but also they could never have existed either. Despite this – or maybe because of it – this type of fantasizing is still very widely used in the arts, and the attraction it holds can be seen in the enduring popularity of fantasy films and literature. On the other hand, virtual constructs may also consist of real elements, which are linked together by unreal relations. Many examples of this can be found in literature: a classic example would be Orwell’s novel 1984. Another form of virtual construct is made up of unreal, fantasy elements, linked together in real relations. This form of construct is likewise a frequent

feature of literature: a good example is Swift's *Gulliver's Travels*, a novel in which fantasy beings are linked together in entirely real relations which Swift had observed in the English society of the time. All three of these types of virtual constructs are the domain of literature and entertainment.

An equally important issue when determining the virtuality or reality of an intellectual construct is the probability of its existence. It is not difficult to imagine a construct of elements and relations that could very probably exist in reality but never actually has existed. This type of virtual construct may be an object of scientific research, and thus this type of virtual space may be an object of geographical research. Such research would centre on case studies of alternatives to reality. These studies would be models, which could be described as counterfactual, a term coined by Niall Ferguson in his book *Virtual History* (1997).

What does this term mean? In Ferguson's case, it refers to what is known as virtual history, which attempts to evaluate scenarios of historical events which never happened but which at the time were probable alternatives to what actually did happen. Accounts of what would have happened if historical events had unfolded differently are quite common in literature, but their overly free interpretation – often slipping into speculation – incurs the displeasure of “serious” scientists. It is above all historians who distance themselves from virtual history. Many of them are captives of their own discipline, studying only what actually happened, and this often leads to certain determinism and the belief that what happened simply had to happen. This determinism is also prevalent outside science, especially in propaganda and efforts to glorify a group's own particular history.

Let us now attempt to evaluate the possible future development of nations and states. Nobody would go so far as to claim that there is only one possible course for future developments. It is clear that there is more than one alternative course of development, and the likelihood of these various scenarios actually happening also varies. Some are almost certain, for example that the Czech Republic will join the European Union in 2004, while others – for instance that a third world war will break out in the next decade – are highly improbable. Future developments are the domain of prognostics experts and the once-popular futurologists, and their activities are of considerable interest both to the general public and to the scientific community. They study a number of variants and estimate their probability. And one does not have to be a scientist to realize that probability does not mean certainty. It is not only the most probable alternatives that will happen; if that were the case, prognosis would be a fairly simple matter. Often alternatives that seem relatively improbable are the ones that actually happen. When such an alternative does actually come true, however, it becomes history, and those who later interpret it approach it from a determinist position as if it were the only alternative that could have happened at the given moment. The other variants – despite the fact that they were more probable – are pushed into the domain of the virtual world and become a subject for entertainment.

Counterfactual constructs can also have far more serious applications than merely in entertainment: they may be used in advertising, propaganda, teaching and science. Since the publication of Hugh Price's study – if not before – it has become clear that these constructs also have a place in historical geography.

Advertising: In advertising it is possible to make use of elements of a fictitious world, and we witness this so often that we often do not even realize it. All of the best, most brilliant and amazing products for amazing prices are typical virtual constructs. In reality, of course, they do not work nearly as well and are not nearly as brilliant and amazing as advertisements for them claim. Advertising is by necessity based on virtual relations, which are an alternative to reality, and this alternative must appear to be better than reality in order to attract customers.

Propaganda: Propaganda is essentially based on the same principle as advertising. What is advertised is not, however, goods, but ideas and political attitudes. Unlike advertising, which is regulated by a code of ethics, propaganda may be negative as well as positive. It shows one's own as being positive, and the foreign as being negative. A classic example of positive presentation is More's *Utopia*, which consists of a description of a counterfactual, impossibly ideal world as a goal at which humanity should be aiming. On the other hand, George Orwell in his works 1984 and *Animal Farm* constructs a repulsive counterfactual variant of the world, which could arise in the case of a victory by global totalitarian systems. Even today we are witnesses to the propagandistic construction of counterfactual scenarios, particularly in the case of the Czech Republic's relationship to the European Union. Advocates of EU entry paint an optimistic picture of the positive effects of the country's accession to the Union, while opponents of joining point out the negative effects of such a step. Both of these fictitious constructions – which are, however, very probable in the future – help people to decide whether or not to vote to join the EU.

Teaching: Virtual spaces, non-existent in reality, can be used to good effect as models enabling students to practise using certain skills and knowledge. At some universities this approach is widespread.

Since 2002 students at the University of Ostrava have also been working with virtual space. In seminars on the regional geography of North America, for example, students were given the task of examining the effects on a selected geographical region of North America if it had developed in a different way to the way in which it actually did. Students chose a certain moment in history which could have given rise to a different course of events and to explore what effects this variant would have had on the given region. Some students chose to examine how North America would have developed if it had not been discovered by Europeans and had remained the domain of indigenous Native American cultures. Others chose the variant in which the founding fathers did not sail across from England and America was colonized from the south by the Spanish and Portuguese. A further variant proposed that the United States were not established at all, and that instead North America became a patchwork of smaller states with various populations.

All of these counterfactual constructs required students to use a creative approach, demonstrating not just knowledge of the geographical environment but also knowledge of politology (i.e. which factors lead to the establishment of states) and economics

(i.e. which factors influence the economies of individual states if these states are located in a particular place and are of a particular size). In changing the course of history, as it was, students also had to demonstrate a solid knowledge of historical developments up to the chosen moment of change. Some ideas were rather improbable, but others hardly differed from reality. One student, for example, chose the case of Greenland if it had become independent. That is an entirely realistic variant, and in his description of Greenland the student did not even need to deviate from reality. Other students, however, showed considerable imagination. Their constructs differed from reality in fundamental ways, and the most valuable of these constructs were those which made the reader realize that the history of the North American continent could actually have developed in that way. One of the studies, for example, contained the hypothesis that Alaska was not sold to the Americans and that after the Russian Revolution in 1917 the Tsar and his supporters rescued there. Tsarist Russia thus moved to Alaska, while in Eurasian Russia the Communists won and the Soviet Union was established. Other studies proposed that the Japanese or Chinese landed on the west coast of North America before the Europeans, and began to colonize the continent. This alternative would have led to the establishment of entirely different states on the west coast of today's USA.

Another example of a virtual model is one, which focuses on a smaller territory, but one, which is much more familiar to students. A seminar for students of Polish at the University of Ostrava deals with the virtual development of the Těšín (Cieszyn/Teschen) region. Students work with the counterfactual scenario of how the regions would have developed if in 1920 it had not been divided between Czechoslovakia and Poland, but instead had been incorporated into Poland in its entirety. In that case a minority Czech community would have existed which would have been of roughly the same size, and would evidently have found itself in a roughly similar position, as the Polish community which lives in the Czech part of this region today. The aim of this seminar is to act against deep-rooted national stereotypes, and one of the teaching aids used is a book of fictitious newspaper cuttings, which swap over the historical roles of Poles and Czechs within this sensitive territory (Siwek 2002).

Science: Virtual constructs can be of considerable use as models for comparison with the real world in science. Disciplines which examine the development of countries, such as history, historical geography and politology, are thus able to compare the positive and negative effects not only of what actually happened but also of alternative scenarios. Morris R. Cohen, in his study on the methodology of science dating back over 70 years (1931), stated that it is only possible to understand the true meaning of historical events by comparing them with alternatives which did not happen.

Examples from recent literature prove that interest in such comparisons is growing all the time. Niall Ferguson's team of British and American historians carry out serious analyses of situations which in reality never happened, for example what would have happened if King Charles I of England had avoided a civil war and Cromwell's revolution had never taken place. Or what would have happened if North American had remained part of the British Empire, or if Ireland had remained part of the United Kingdom. Other hypotheses include a German invasion and occupation of Britain

in 1940, or how Europe would look now if Nazi Germany had defeated the Soviet Union in the Second World War. Another interesting virtual construct is the situation that would have come about if Europe had avoided the Cold War. Other topics include that of how America would have developed if Kennedy had not been assassinated, or how the world would look now if Gorbachev had not come to power in the USSR and Communism had not collapsed. This book persuasively demonstrates that it is possible to describe events that did not happen as serious history – within a certain time frame, naturally. If the time scale is too distant from the real world, hypotheses can slip into unscientific speculation.

Ferguson's study *Virtual History* is not the only example of its kind from recent years. Other works dealing with counterfactual virtual constructs are a book on political geography by Aaron Belkin and Philip E. Tetlock (1996) and two collections of studies on military and general history edited by Robert Cowley (1999 and 2001). No such work has yet been written in the Czech Republic till the year 2002 (Siwek 2002).

I am convinced that this is a possible issue of interest to Czech geographers. Geography too allows for counterfactual analysis of many phenomena, because if states or parts of states had developed in an alternative way, then the societies, economies and political systems of these territories would also be different. And it is for this reason that the comparison of virtual space with real space can bring a valuable contribution to Czech geography, especially historical geography.

References

- BELKIN, A. – TETLOCK, P. (1996): Counterfactual thought experiment in world's politics: logical, methodological, and psychological perspective. Princeton University Press, Princeton, 344 s.
- COHEN, M. R. (1931): Reason and nature. An essay on the meaning of scientific method. New York, Harcourt, Brace and Co., 470 s.
- COWLEY, R. ed. (1999): What if? The world's foremost military historians imagine what might have been. Putnam, New York, 336 s.
- COWLEY, R. ed. (2001): What if? 2: Eminent historians imagine what might have been. Putnam, New York, 448 s.
- CRANG, M. – CRANG, P. – MAY, J. eds. (1999): Virtual Geographies: Bodies, Space and Relations. Routledge, London and New York, 322 s.
- FERGUSON, N. ed. (1997): Virtual history. Alternatives and counterfactual. Picador, London, 548 s.
- JOHNSTON, R. J. – GREGORY, D. – PRATT, G. – WATTS, M. eds. (2000): The Dictionary of Human Geography. Blackwell, Oxford, Malden, Mass. (USA), 958 s.
- PRINCE, H. C. (1971): Real, imagined and abstract worlds of the past. Progress in Geography Vol. 3, s. 1–86.
- SIWEK, T. (2002): Český Těšín polský – Czeski Cieszyń polski? Olza, Český Těšín, 144 s.