The proposal aims to investigate space transformations through the use of satellite views. Nowadays “virtual globe” software systems, such as Google Earth, or web mapping service, as Bing or Google Maps, provide a huge archive of images that “exactly” show how territories has been progressively transformed. This kind of documents, in the form of satellite images, expect to be objective (showing the world as it really is), not selective (showing everything), holistic (any place is linked to another one), comprehensive and exhaustive (what else can be shown?). However we have to ask ourselves what kind of narratives these documents are telling us.

The hypothesis of this paper is that this images are unable to explain any narrative if they are not interpreted, and the most appropriate way to do operate an interpretation is their re-elaboration into synthetic representations (maps and drawings). In fact the single satellite views are not able to explain how the evolution of landscape infrastructures, such as mobility or ecological systems (roads, water, nature), have substantially changed the territorial composition. Starting from this consideration, this paper aims to perform a land investigation operating a deconstruction and re-elaboration of a selection of satellite documents referring to a specific place.

The territory that has been chosen for this operation is a portion of the Henan Province between the cities of Zhengzhou and Kaifeng, in China. The inner plan of the Henan has been shaped through centuries in order to be a huge agricultural reserve. An incredible porous tissue composed by small infrastructures such as roads, canals, ponds and terraces for agriculture, has formed an extremely complex and rich ecosystem. Starting from the Eighties, Henan, and in particular its capital Zhengzhou, has been characterized by a strong process of urbanization due to the intention of creating one of the biggest mobility hub in China. According to Liu Ying, Zhao Rong-qi and Xu Ming-po, since 2001, this process is getting into an “acceleration phase” generated by the urban entrepreneurialism (Wu, 79). In Zhengzhou three main projects took place.

Firstly, in 2001, the municipal government promoted the creation of Zhengdong New District, planning a new CBD for the whole city. In the same year, a design competition was launched in order to develop an area of 150 square kilometers, bigger than the existing city (Wu, 93). Six local and international design offices and institutes of urban design has been involved. In November 2011 the project of Kisho Kurokawa Architects and Associates has been selected. At the beginning of 2002, the municipal government started the construction of Zhengdong New District. Nowadays, the first nucleus of the CBD (40 square kilometers) has been completed while, after Kurokawa passed away, other two districts are under construction: Long Hu, developed by Isozaki, Aoki and Associates, Longzihu, designed by the Zhengzhou Urban Planning Design & Survey research Institute.

During these same years the Municipality decided also to build a new infrastructural network in order to support the city expansion. The Fourth Ring Road and the Statal Road 107, that connects Beijing to the Pearl River Delta crossing Zhengzhou, have been completed. At the same time the railway lines have been strengthen in order to support the Southwest Ring Expressway and the Beijing-Zhuhai high-speed trains (Ying et al.).
Finally, in 2006, the City of Zhengzhou, supported by the provincial government and the Zhongyuan city group, proposed a new ambitious plan, Zhengbian New District: a “composite city” of 400 square kilometers developed in a vast area of more than 2,100 square kilometers between Zhengzhou and the city of Kaifeng in the East (Wu, 96). In 2009 Zhengzhou municipal government organized an international competition for the Zhengbian masterplan that has been won by the London-headquartered office Arup thanks to a proposal based on a “low carbon urban system” (Wu, 97).

These three process of urbanization has provided a huge infrastructural network in order to set the urban expansion. This network could be investigate starting from the analysis of satellite views. The proposal works on six images of the “virtual globe” software systems Google Earth. These satellite views are divided in two groups according to different scales of representation: a macro area of 100x100 kilometers and a micro area of 2x2 kilometers. Three temporal steps have been selected in order to show the territorial evolution: 1986, 2001, 2016 for the macro scale and 2001, 2009, 2016 for the micro scale. Starting from these images it is possible operate a layers deconstruction of the main territorial elements into a series of maps aims to reconstruct a narrative of this territorial transformation.

References