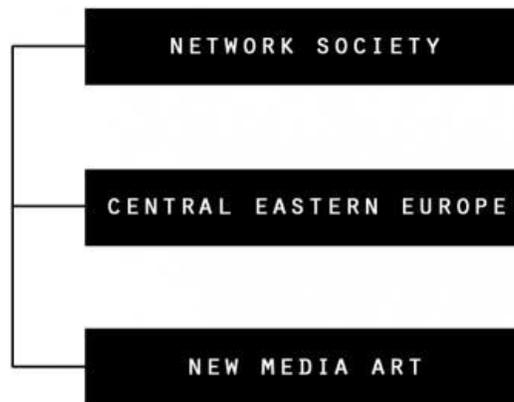


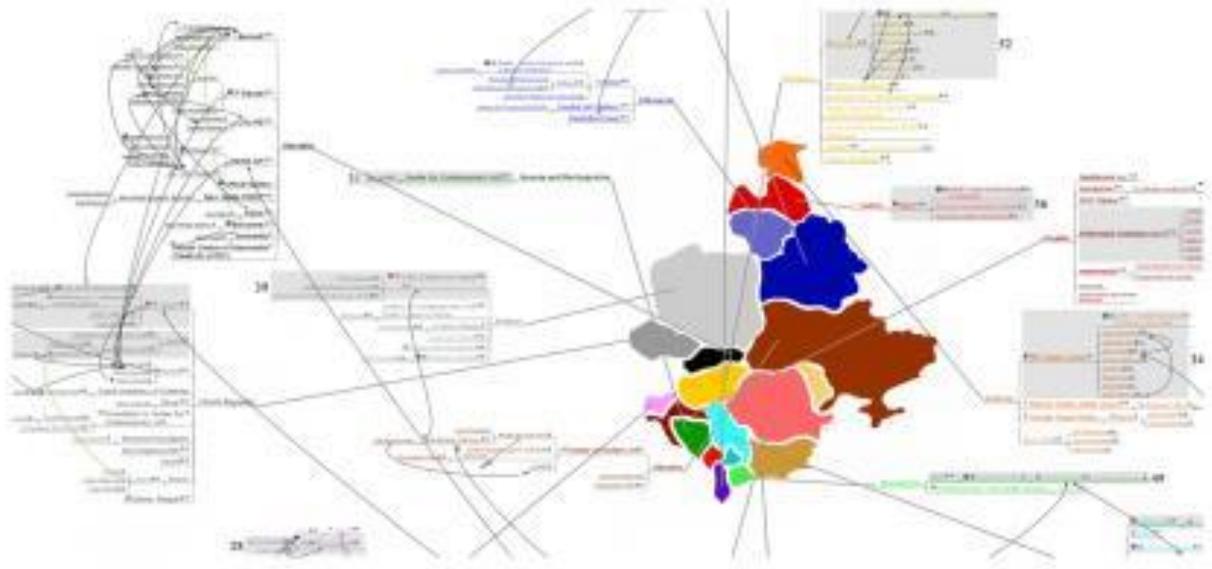
# VISUALIZING NEW MEDIA ART IN CENTRAL EASTERN EUROPE

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Numerous amounts of facts connected with new media art in the territory of Central Eastern Europe go unused because of the inability to see relationships between different kinds of information. To face this issue the idea of CEEMAC2000+ has emerged. This paper briefly discusses the basic terms needed to understand the new media art situation in the region as well as presenting the possibilities for CEEMAC2000+ development.



*Fig. 1. Possible connections between three main terms described in section 2. Image by Agnieszka Pokrywka.*



*Fig. 2. Sketch of CEEMAC2000+. Image by Agnieszka Pokrywka.*

## 1. Introduction

Central Eastern Europe (CEE) has for a long time been hidden behind the Iron Curtain in many aspects and is still an undiscovered hybrid built out of the past and present. Similarly, local new media art (NMA) is a tangle of historical and political dependencies mixed with current global influences (e.g. networked society, high technologies). In addition, the very dynamic specificity of this region blurs a wider view of CEE and NMA activities. As a result, considerable amounts of data and facts connected with this topic are unused simply because people cannot see any relation between them or visualize their quantities. The concept of CEEMAC2000+: Central East European Media Art Chart (2000-now) is intended to be a collaborative interactive map which could be able to present most of the networks, dependencies, connections between art centers, projects, and people which focus on local NMA development. CEEMAC2000+ aims to collect, share, and present large amounts of data in a non-linear, clear and visually attractive way, simply to create new artistic cartography.

The paper is structured in the following way. Section 2 briefly presents emerging terms such as CEE, network society, and NMA. Section 3 gives examples of how these terms can be merged. Section 4 focuses on data visualization and its use in the context of CEEMAC2000+.

## 2. New Europe, new society, new media

The first step of the CEEMAC2000+ project development is to explore stereotypical terms like CEE and NMA with a special focus on the history of CEE (Soviet times) and its current situation (network society, technological development).

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### 2.1. CENTRAL EASTERN EUROPE

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Norman Davies [4] states that borders between Western and Eastern Europe were changing a lot. However, the territory on which these bounds were moving did not belong to any of the aforementioned parts. Because of this, terms such as CEE have appeared. According to Piotr Piotrowski [10] Central Eastern Europe is a territory which from the late '40s up until 1989 was dominated by the Union of Soviet Socialist Republics (USSR). Nowadays, countries of this region (Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Montenegro, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Serbia, Slovakia, Slovenia, and Ukraine) are located between the so-called Western countries (Germany, Austria, Italy) and Russia.

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### 2.2. NETWORK SOCIETY

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According to Manuel Castells, [3] a network is a decentralized matrix of nodes through which communication can occur with a multidirectional freedom and which is not restricted by time or space. A common feature of all networks is the synchronization of each part and the simultaneous independence of every single node. These nodes have different levels of development and infrastructure which depends on the political and economic situation of the region in which they are located. The level of nodes development determines the whole network. Networks establish the new social order of current societies. This is caused by passing from the industrial age into the information age, and from energy to information. Castells sees the information technology revolution as one of the processes which leads to the production of new social morphology within a society.

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### 2.3. NEW MEDIA ART

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Marshall McLuhan [7] understands the medium as the message itself, which can create a new environment simply through its presence. To describe this idea he uses the metaphor of a light bulb which does not have any content but which certainly has a social effect and enables people to extend their daytime activities into the nighttime. Art creativity, which is based on media, can be explained as an art form which makes use of facilities such as electronic equipment, computing, and new communication technologies. As Louise Poissant [10] states, technology and its various processes are often used in experimental ways to produce different works of art. Additionally, Lev Manovich [8] explains that today's new media interpretation can be understood as the mix between older and newer cultural conventions for data representation, access, and manipulation. Here, the old data means a representation of visual reality and human experience, and often an understanding of culture. The new data is understood as numerical data.

### 3. New Europe + New Society + New Media

There is strong dependence and fusion between three terms mentioned in section 2. The most prominent of these terms are discussed below.

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#### 3.1. NETWORK SOCIETY IN CEE

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Development of network society, where the key social structures and activities are organized around electronically processed information networks, is deeply connected with technological advancement which is lower in CEE (according to Digital Opportunity Index in Europe, 2006). Moreover, Manuel Castells [3] claims that it is not just technology which defines modern societies, but also cultural, economic, and political factors which make up the network society. Therefore, it is necessary to reflect on the network society in the context of its nodes' location which are in mutual relation.

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#### 3.2. NMA IN CEE

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Net art, as one of the branches of NMA, has been strongly influenced by a context of cultural crisis in CEE at the beginning of the '90s. After experiencing separation and underground movements for some time, CEE net artists were able to notice that the Internet "a space where you can buy is a space where you can steal, but also where you can distribute." [5] Another example of dependency of new media artists on their location is the fact that tools which are needed for NMA creativity are mostly results of technological development, which is on a much higher level in so-called Western countries. It can mean that the specificity (or even existence) of NMA differs according to location, although recently these differences have seemed to become smaller.

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#### 3.3. NMA AND NETWORK SOCIETY

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Uppgrowth of network society is influenced by technological advancement. This means that underdeveloped regions with limited access to new technologies are simultaneously on margins of networked society. As Manuel Castells states: "If you are not in this space of electronic communication, you do not

exist, in our society” [1]. Moreover, reduced access to technology both limits creative possibilities of new media artists and makes it more difficult to promote their works on a larger scale.

## 4. Data Visualization

The second step of CEEMAC2000+ project development is to thoroughly research data visualization. This can help to improve classification and understanding of large quantities of different data connected with NMA on the specific territory.

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### 4.1. CEEMAC2000+ CONCEPT

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CEEMAC2000+, networked graphs visualization, aims to record the relations between artists, curators, projects, events, and organizations which shape NMA in CEE. Time based dynamic topology of creative collaborations as well as patterns of contributors are planned to be freely-accessible and regularly updatable by the community of users. An interactive interface for navigating and exploring the network of artistic collaborations is embedded in the CEEMAC2000+ dataset and can bring benefits for both NMA creators (possibility of more aware collaboration) and its researchers (access to knowledge about particular nodes and their position within the larger network). CEEMAC2000+ wants to deliver new interfaces for flexible interaction with collected datasets and productive collaboration across borders.

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### 4.2. CEEMAC2000+ REALIZATION

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The main purpose of data visualization is to communicate information clearly and effectively by graphical means. Ideas can be communicated effectively thanks to a balance between aesthetics and intuitive functionality. Moreover, understanding leads to interacting which can help with the development of new media based art on this territory. According to Ben Fry [6] there are seven stages of data visualizing which can be found useful during CEEMAC2000+ implementation.

- Acquiring: obtaining the data.
- Parsing: providing some structure for the meaning of the data, and arranging the data into categories. Basic categories and subcategories are planned to be structured in the following way: people (artists, curators), events (projects, single events, cyclical events), organizations (media labs, centers, museums, galleries).
- Filtering: removing all but the data of interest. Network graphs can become confusing if there is a substantial growth in the amount of data. Because of this, CEEMAC2000+ omits events which took place before year 2000. Obviously only territory of CEE is in the scope of CEEMAC2000+ interest.
- Mining: applying methods from statistics or data mining as a way to discern patterns or placing the data in a mathematical context.
- Representing: choosing proper visual modes.
- Refining: improving the basic representation to make it clearer and more visually engaging.
- Interacting: adding methods to manipulate the data or to control what features are visible.

## 5. Summary

NMA in CEE is dynamic and changeable. This is why CEEMAC2000+ can be helpful in understanding the specificity and tendencies in the field. NMA creators, thanks to CEEMAC2000+, gain unique opportunities to have an overview of the movement of which they are a part. In the case of NMA researchers CEEMAC2000+ delivers new ways of documenting artistic activities, story-telling, and knowledge formation.

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