

## **Is Genealogy of Forms Possible? (Yes and No)**

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The advances in data science and the growing volumes of digitized cultural heritage begin to make practical the earlier art history project to map the themes, motives and forms of art across time and space. (The relevant 20th century art history concepts include genealogy of forms, iconography, and museum without walls.) But while technically this becomes more possible, we also need to ask if this is what we want to do. Drawing on my forthcoming book 'Cultural Analytics,' (the MIT Press, 2020), in will I argue that this project is very important today, and also point out what I see as its problems.

Computational analysis of culture can be defined as the quantitative study of cultural patterns on different scales. But we need to keep in mind that any pattern we may detect and describe only captures similarities between a number of artifacts on only some dimensions, ignoring their other differences. When we start considering these differences, what looked like a single group of similar artifacts reveals presence of multiple and distinct smaller groups. A single pattern breaks down into many patterns. Thus, any analytical results are always relative to what dimensions we chose to compare, and which ones we chose for the time being to ignore. Unless it is a 100% copy of another cultural artifact or produced mechanically or algorithmically to be identical with others, every expression and interaction is unique. In some cases, this uniqueness is not important in analysis, and in other cases it is.

In the nineteenth and twentieth century the lack of appropriate technologies to store, organize, and compare large cultural datasets was contributing to the popularity of reductive cultural theories. Today I can use any computer to map and visualize thousands of differences between billions of objects. We do not have an excuse any more to only focus what cultural artifacts or behaviors share, which is what we do when we categorize them, or perceive them as instances of general types. So, while we may have to start with extracting patterns first just to draw our initial maps of contemporary cultural production and dynamics given its scale, eventually they may recede in the background of even completely dissolve, as we focus only on the differences between individual objects.