## **Beyond Locations:** Deep Mapping Artists' Workshops in Golden Age Amsterdam

Weixuan Li Huygens ING/University of Amsterdam

Amsterdam, during its golden age, was known for the size and scale of its creative industries, especially for paintings. At its peak, there were more than 300 painters working in the city, who accounted for the unprecedented painting production in various genres and styles. Other creative individuals, like engravers, publishers, gold- and silversmiths, together with painters, fostered a prosperous 'cultural industry' in the 17th-century Amsterdam. Although the phenomenon of the spatial concentration of artists and artistic activities (so-called 'spatial clustering') has attracted attention of cultural and economic historians, existing studies of such a phenomena in early modern period are scarce, and often stopped at identifying clusters at the city level without explaining what happened within the spatial cluster.

Applying the digital methodologies to the historical big data, this research aims to visualize where painters lived and to understand their choices of location within their physical and social milieu. This research will center around painter communities and the painting industry in Golden Age Amsterdam (1585-1660) while taking the other creative industries as a reference to understand painters' location choices.

Methodologically, this research proposes a mechanism of translating the descriptions of locationrelated information in historical sources into concrete-georeferenced locations while accounting for the uncertainty and ambiguity in the historical materials. Although there are several studies concerning the representation of uncertainties in GIS, there is no existing implementation of visualizing uncertainties. The physical, geo-coded locations, as vectorized in the first cadastral map of Amsterdam by the HisGIS project, serves as a basis in this geo-translation process and as an anchor for the alignment of pre-cadastral maps, archival materials, and modern databases like *ECARTICO* and *RKDimages* (Fig. 1).

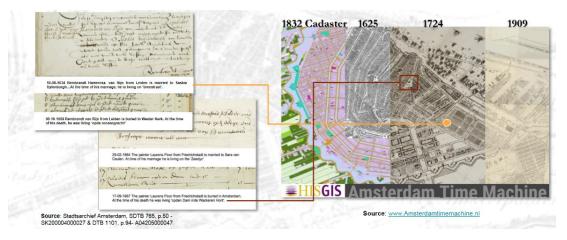


Fig. 1 - Locating archival documents in the historical maps across time

On the basis of the multi-layered map linking various historical sources, this research tries to bring the features of the urban space where artists lived, worked, and socialized back to life through 'deep mapping.' Deep mapping creative industries in Amsterdam will embrace these uncertainties to see, experience, and understand space in all its complexity, and enable the visualization and analysis of migration pattern of the creative individuals within the city. Deep mapping approach will not only help identify artistic clusters through geographic visualizations, but also integrate various layers of information resulting in observations that would not be possible to discern through traditional methods. Figure 2 shows an example of mapping the artists' residences and workshops together with their social relations. Distinguishing artists in Amsterdam by their origin, Figure 2 illustrates how the immigrants from the Southern Netherlands settled in Amsterdam in the beginning of the seventeenth century and formed their own clusters near Dam square and Kalverstraat. More importantly, it shows that it was the immigrants who first moved into the Jodenbreestraat where later developed into an artistic center and attracted great masters like Rembrandt.

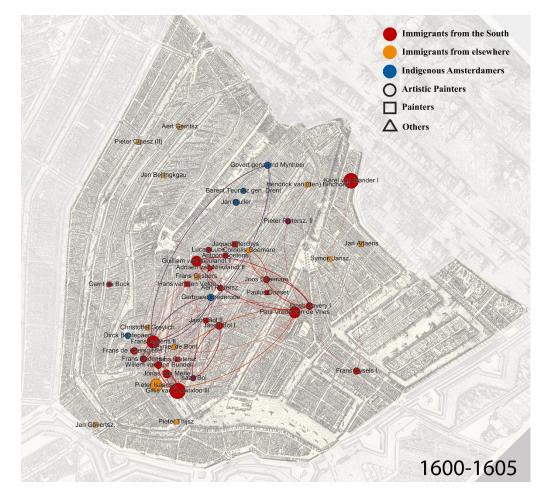


Fig. 1 - Combining social and spatial network of artists