

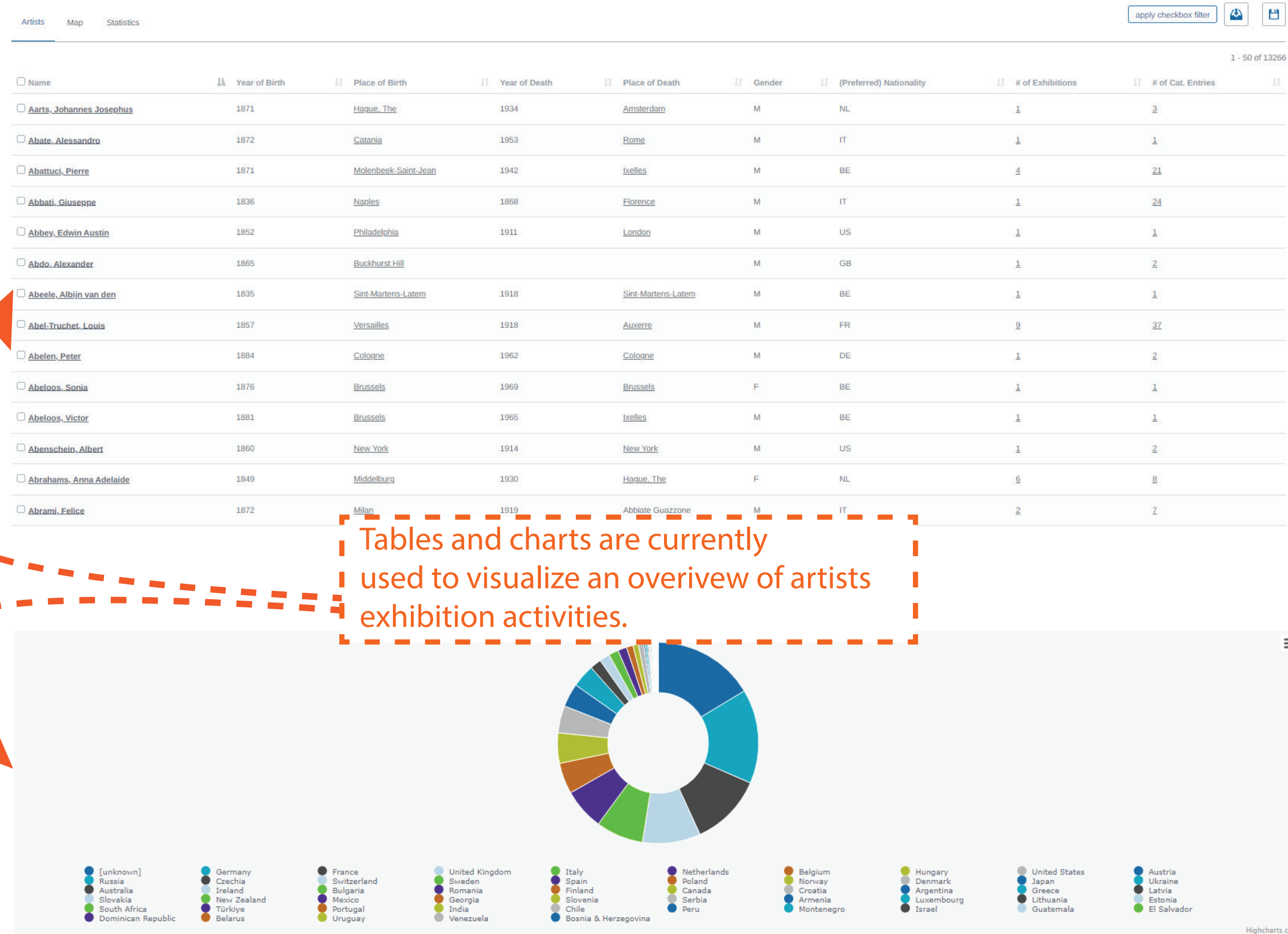
# TimeScapes: Towards a Visual Characterization of Modern Artists' Exhibition Activity

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## Problem

The richness and potential of the Database of Modern Exhibitions (DoME) lies in its innovative capacity, encompassing a comprehensive collection of more than 1350 Modern Art exhibitions in Europe from 1905 to 1915, documented and collected through printed exhibition catalogues. Due to its large scope, DoME serves as an ideal database for visual analysis, extracting insights, and communicating advances in Art History research. However, creating visually appealing, effective, and intuitive representations of such data is challenging due to its large scale. Providing such overview/summary visualizations and balancing simplicity with meaningful insights that can be extracted is crucial for clearly communicating this information.



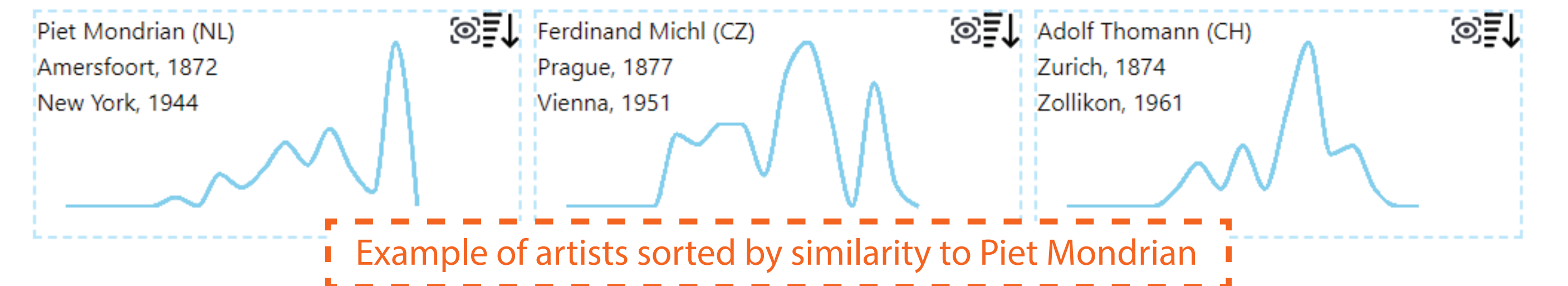
## Our Approach

We propose an approach that leverages the strengths of sparklines combined with interactive features, such as, dynamically re-ordering artists' exhibition activities based on similar behavior (Similarity Ordering), or Co-Exhibition Activity. This facilitates the tasks of researchers that are investigating patterns and trends, for instance, in Art History. These techniques enable the exploration and understanding of the dynamic trajectories of individual artists' careers while addressing the challenges associated with summarizing such large scale data. The concept of summarizing and visualizing such large datasets, as exemplified through our proposed approach, can be generalized to various domains.

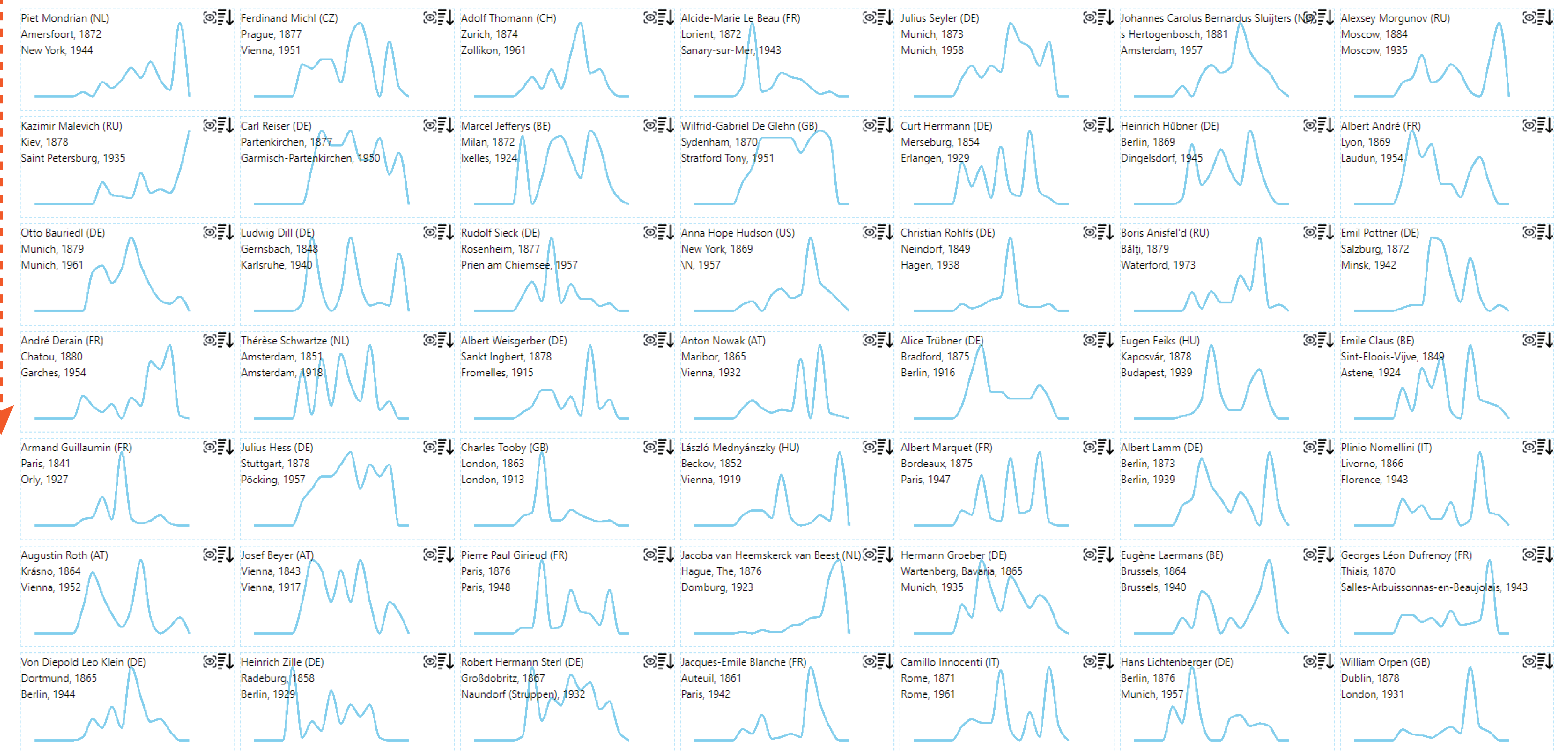
Piet Mondrian (NL)  
Amersfoort, 1872  
New York, 1944

The number of artworks exhibited by the artist over time

Eye icon - navigates to detail view  
List icon - resorts all artists by similarity to selected one



Sorted by similarity (wrapping around)



## Future Work

Future opportunities for research are centered around exploring the multi-dimensional aspects of the data, such as, incorporating additional data dimensions, i.e., artistic styles, geographic locations, age, gender, and nationality to provide a more nuanced understanding of the similarities between artists' exhibition activities.

Additionally, investigating different similarity ranking algorithms to better highlight and order the artists to make their exhibition activities comparable.

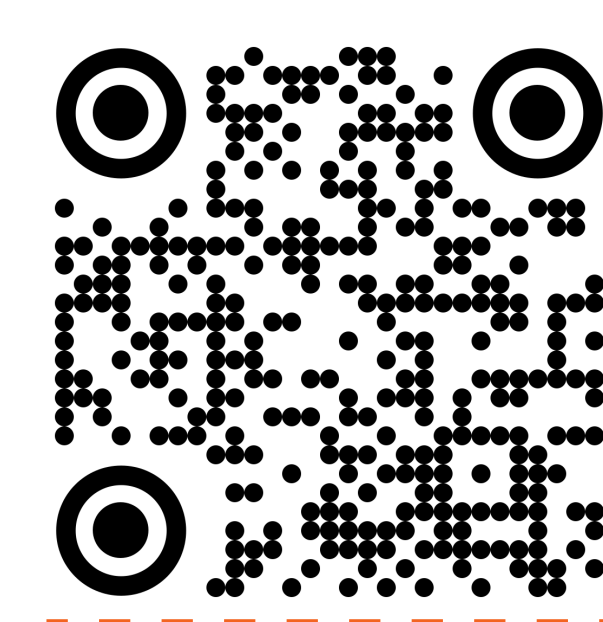
Furthermore, we aim to encode further attributes in the sparklines to provide more contextual information about the artists' careers and that mark these pivotal moments, contributing to a better understanding of their behavior.



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<https://exhibitions.univie.ac.at/>

TimeScapes Prototype

<https://artvis.cvast.tuwien.ac.at/artists>

Database of Modern Exhibitions

