

Research Summary of Dr. Sabine Lang

Research Focus

My research consists of two strands, namely art history and digital art history. The latter refers to the use of computational methods for the automatic analysis of art data. Therefore my research focus is on Surrealism – especially on Surrealist artists in France, Great Britain and Germany –, modern British art, and issues in digital art history.

Dissertation

I received my PhD in art history from the University of Tuebingen in May 2016 after earning my Master's degree from the University of Bristol on the topic of Surrealism and the metropolis (essential concepts were the uncanny, flânerie and anonymity). My dissertation studied British Surrealist Roland Penrose (1900-1984), his artistic works and home – Farley Farm House in the South of Sussex – and aimed to provide a comprehensive study of his life and works as well as establish him as a valid research topic within (German) art history. The first part includes Penrose's biography and a sketch of the British art scene in the twentieth century; it defines the terms national identity and *Englishness*, both of which influence his life and works, and presents Surrealist movements in England and France. *Englishness* is understood as relating to specific English characteristics, mainly rationality, tradition, freedom, romanticism and a high relevance of the English countryside. The main part however is dedicated to Penrose, the artist. It gives a chronological analysis of his artistic works which include references to historical events or artists' friends such as Picasso, Paul Éluard, Max Ernst, Henry Moore and his second wife Elizabeth 'Lee' Miller. The dissertation utilizes an interdisciplinary approach, considering visual and cultural studies, history and psychology, and was further based on a comparative and iconographic method. The following conclusions were drawn: (1) Penrose's life and works are characterized by a progressiveness and nostalgic tendencies which relate to an English landscape tradition; (2) Penrose and his homes in London and Sussex were pivotal points for European artists. He was embedded within (and also mainly contributed to) a tight and large network consisting of artists, gallerists, curators, art students, writers and scholars from other disciplines. (3) Penrose's contribution to British art was great; he not only promoted artists through exhibitions in his galleries but also discussed issues of modernity in his works and introduced the postcard-collage as a new technique. Through my studies I have acquired a detailed understanding of the European art scene in the twentieth century, principal dynamics and insights into styles, techniques, and iconography.

Research Projects

I worked as a postdoctoral researcher in the Computer Vision Group at Heidelberg University. The group led by Prof. Dr. Björn Ommer develops and uses machine learning approaches to analyse images and videos including art data. During my time in the group, I led two research projects: the first created

interfaces and applied underlying algorithms to study large image collections. These interfaces enabled the search for identical and similar objects or the grouping of datasets according to user-defined similarities. For art history this means that thousands of digital images are evaluated quantitatively and qualitatively to identify overarching (visual) patterns. Computational methods allow to engage with reception history and reconstruct the wandering of motifs or form properties over time and space.

The second project studied style through the machine gaze and employed computer-based methods to transfer artistic styles to real photos, thereby pointing to defining style features and studying the evolution of style. My engagement with style through style transfer has offered new perspectives on style, mainly in relation to how the machine perceives style. My research in the Computer Vision Group and the application of computational approaches to study art has also led to a critical reflection of traditional methods in the context of computer technologies and digital images and current computer-based models regarding their validity to study art. Essentially the use of the machine expands the field of art history; it assists, triggers new discussions and offers new perspectives. Interdisciplinarity characterizes my research and it is essential to view art history not as an isolated but highly interlinked discipline. I took an interdisciplinary approach to study Surrealist art for my Bachelor's and Master's theses as well as for my PhD thesis. All theses tied art history to other disciplines including visual and media studies, cultural science, literature or psychology. My current research at the intersection of art history and computer science exemplifies an even greater interdisciplinarity, in that it combines two seemingly antithetical disciplines.

Future Research Projects

In future projects I want to engage with political iconography, especially with recurring poses in images of war, and with a group of Scottish artists, who were later referred to as the Scottish Colourists (main activity: 1900-1930). These are Francis Campbell Cadell (1883-1937), John Duncan Fergusson (1874-1961), Leslie Hunter (1877-1931) and Samuel Peploe (1871-1935).