FENESTRA

800 Years of fenestration history. Flat glass and windows in Federal Scientific Institutes

DURATION	BUDGET
15/01/2017 - 15/04/2021	588 970 €

PROJECT DESCRIPTION

Context



Flat glass is one of the greatest and most versatile art forms. Across numerous disciplines stained glass windows in monumental settings have been thoroughly studied over the last two centuries. However, an even greater quantity of material remained unappreciated and unstudied in Belgian storerooms. The Royal Museums of Art and History (RMAH) have unparalleled resources for the study of flat glass in their depots providing a unique collection of material dated from the 13th to 20th century. This collection is the subject of this project. The collection can be divided in several sub-collections based on parameters like for example the flat glass type (individual fragment, roundel, unipartite panel, lead light, stained glass panel or complete windows), production period, production workshop, material and stylistic properties and specifications regarding acquisition. The collection contains information of lost fenestration where nothing has survived in situ.

Objectives

The main objectives are research and dissemination, preservation and access of one of the most important Belgian flat glass collections. The objectives can be further classified per discipline leading to specific research questions:

- (1) History: To write the history of the formation of these collections by collecting provenience and contextual data that over time have become separated from the collections.
- (2) Art history and archaeology: To make a detailed inventory of all material and create an open access database available for a broad public. A combined historical, art historical and archaeological research will be carried out on well-selected sub-collections, including detailed technological examinations and stylistic details. This research will be the foundation for the applied scientific research.
- (3) Applied sciences: To perform an extended diachronic study of the sub-collections. The goal is to improve the methodology of dating flat glass based on chemical and optical fingerprints (fingerprinting of potash-, HLLA- and industrial material, investigation of the relation between composition, fabrication technology and optical transparency and research on flashed and silver stained glasses and specific paint layers by optical means).
- (4) Conservation: To evaluate concrete conservation issues and to act for preventive conservation and long-term storage of the full collection.





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Methodology

The collection will be examined in various ways incorporating humanities, social sciences, applied sciences and conservation. The transdisciplinary research consists of a combined historical, art historical, archaeological, anthropological and applied scientific methodology. The different subcollections in themselves have become an object with history. We will set out the initial history of the sub-collections, their current usage and their possible future trajectories. This will enable a better understanding of their chronological and spatial context. Furthermore, a detailed research of well selected sub-collections, based on their historical and artistic relevance, will establish a methodology incorporating technology and morphology; stylistic details and evolutions. These sub-collections will be photographed, recorded, catalogued and described to provide most efficient access and long term archiving. Subsequently, optical spectroscopy will be used as a first-line non-destructive analysis technique to get a better understanding of the material properties and will allow for a well-thought-out sampling strategy for chemical research. For this material research, the partners will make use of the broad gamut of available analysis equipment within the network.

Impact

This transdisciplinary approach will give important insights into the life history of the collection and the use of flat glass in the Low Countries. It will provide crucial information in technological and stylistic artistic evolutions as well as identifying the transition point from potash to High Lime Low Alkali (HLLA) material and HLLA towards industrial production. These new insights will be applied to the use and distribution of raw materials as well as the knowledge flow to produce flat glass and manufacturing of lead lights and stained glass windows; including waves of migration by masters and workers and distribution networks. The research will give new insights into the fenestration history, in the understanding of the technological evolution of window glass in the Low Countries and the relation to sociocultural encounters and confrontations. In addition, the examination will include information about weathering phenomena of both glass and paint layers as well as important insights and advices for long-term preservation and storage. Thus, this unexplored collection will become an important reference collection. Furthermore, the whole collection of the RMAH will be reborn and its famous but unfortunately forgotten masterpieces will be highlighted in an accurate inventory, publications and an exhibition allowing the public to rediscover a major part of cultural heritage.



Outreach

The research results will be published in a wide range of peer reviewed journals; as well as a Corpus Vitrearum (CVMA) publication. To bridge the gap between interesting academic knowledge and the broad public, an exhibition is organised at the end of the project. In addition, findings will be communicated via different websites and social media such as the Twitter and LinkedIn account of B-PHOT and partners. Furthermore a selection of journalists from print, audio-visual and online media will be informed through press releases.

CONTACT INFORMATION

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LINKS

http://www.b-phot.org/www/Research-Photonics/Projects/BELSPO-projects/Fenestra2

