



NETWORK PROJECT

ARTGARDEN

**Art Technical Research and Preservation of Historical
Mixed-Media Ensembles: 'Enclosed Gardens'**

Contract - BR/154/A6/ARTGARDEN

SUMMARY

PROMOTORS: **Marjolijn Debulpaep**, Royal Institute for Cultural Heritage
Lieve Watteuw, KU Leuven
Karolien De Wael, University of Antwerp

AUTHOR: **Marjolijn Debulpaep**, Royal Institute for Cultural Heritage KIK-IRPA, Preventive Conservation



KU LEUVEN



CONTEXT

Central to the ARTGARDEN project is the unique collection of seven 16th century Enclosed Gardens from the Mechelen City Museum. These *Horti Conclusi* are wooden retable cabinets with virtually countless little elements (about 400 per cabinet) composed of a multitude of materials in complex configurations: brass and silk flowers, glass and brass berries, polychrome wooden statuettes, paper banderoles, relics, wax etc. The restoration of these extraordinary Belgian heritage artifacts was the starting point for this network project. The ARTGARDEN team comprises art historians, conservator-restorers, preventive conservation specialists, imaging specialists and conservation scientists, who delve into the multifaceted process of researching and safeguarding each Garden, as well as other types of historical mixed-media objects. One part of the project focuses on conservation treatments, supported by advanced imaging techniques, laboratory analyses and art historical research. Another part tackles preventive conservation issues. For complex objects like the Gardens, the choice of preventive conservation measures is not straightforward. The material interaction issues of mixed-media objects from all over the world are countless and are not fully researched yet. Concerns related to the complexity of mixed material interactions is a universal problem and a headache for every collection manager and object restorer.

Examining other mixed media artefacts in addition to the Enclosed Gardens will raise the profile of this type of underappreciated collections. Hopefully it increases attention and care for the many historical mixed media objects worldwide (folk art, ethnographic art, religious artefacts, costumes, manuscripts...).

OBJECTIVES

Investigate the (art) historical & anthropological pedigree of the Enclosed Gardens and their material-technical pedigree, conservation history and the degradation phenomena.

Investigate the overall risks for the preservation of the Gardens, and how the objects need to be conserved, treated or restored in order to delay further decay.

Develop a free and user-friendly online tool that will alert collection managers to the risks associated with the preservation of their historical mixed-media objects, fed by mixed-media knowledge coming from literature research and the new insights gathered from research on the ARTGARDEN corpus, as well as built-up own expertise on risk analysis for cultural heritage.

METHODOLOGY

The methodology of ARTGARDEN had 3 main phases or project work packages:

1. *Research on the 7 Enclosed Gardens of Mechelen* : art historical, art technical & anthropological research; material-technical research, degradation phenomena & material interactions; scientific documentation/imaging (X-Ray, IR, UV, vis. light, Microdome); preventive conservation research (risk analysis & advise for long term exhibition, storage & transport)
2. *Research on a corpus of 6 historical mixed media objects from Belgian collections*: idem above & in-depth case study for ARTGARDEN and AGATO : the Casket for the crown reliquary of Holy Thorns, Musée diocésain de Namur
3. Methodology development resulting in an *online decision support tool* for the preservation of mixed media objects : AGATO

RESULTS & RECOMMENDATIONS

All results of the art historical, art technical & anthropological research, as well as the material-technical research, and research on degradation phenomena & material interactions on the overall research corpus have been used to better understand the investigated issues on the corpus and helped to finetune the overall concept of the functioning of AGATO.

The overall concept for AGATO consists of 3 main parts: user's input, knowledge base query and output. In the first part, users will provide input to characterise their mixed-media objects and the environment in which they are kept. This input will then be used to search the knowledge base for the relevant information on material-environment and material-material interactions that can possibly damage the object. 'Risk warnings' concerning these potentially harmful interactions for the object at hand, together with recommendations to mitigate each risk that has been identified, are provided as outputs to the user.

AGATO also provides single material Risk Assessments (RA) and acts as an overall reference database for ARTGARDEN and Risk Assessment and preventive conservation in general.

The online AGATO website is the flagship of the ARTGARDEN project. For its development, the consortium worked in close collaboration with <https://www.multimedium.be/>. Besides presenting the project, the partners and the follow-up committee involved in its realization, the website features the study of the ARTGARDEN research corpus and acts as the main dissemination and valorization channel of the project. But most importantly, it is a tool offering free online decision support for heritage caretakers worldwide.

The website can be consulted here <https://agato.kikirpa.be/home>, and users are able to navigate through the different tabs. For each ARTGARDEN case study, the images and description of the object are linked to its art historical background, material technical research

results and bibliography. Users have access to downloadable PDF research reports that result from the investigations executed within ARTGARDEN.

AGATO is a free online decision support tool. The use of the actual prototype is intentionally kept free, to give anyone managing a collection of objects the chance to introduce their particular objects and get an assessment of the risks their object runs according to their specific environmental situation, based on the 10 agents of deterioration.

Users will find all necessary background on AGATO and all the references used to feed AGATO's knowledge database, as well as FAQ, in the tab 'About AGATO'.

Demo of AGATO : <https://youtu.be/hYR7Q2Ni6e0>

KEYWORDS

Enclosed Gardens of Mechelen - Mixed material interactions - Preventive conservation - Online decision support tool AGATO - Physico-chemical analyzes