

## Scientific Service Project Z01

### Methods of Analyzing Manuscripts for Recovering Lost Writing

Prof. Dr. Christian Brockmann

Boryana Pouvkova, M.A.

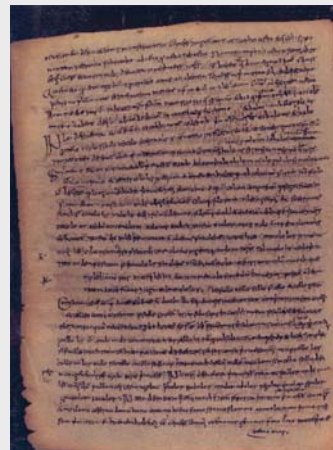
Claire Rachel MacDonald, B.A.

#### Description of the Project

The scientific service project aims to make available and to further develop current digital recording, evaluation, and visualization procedures with whose aid script that is no longer readable can be made visible again. Manuscript research has repeatedly been limited by writing surfaces that are no longer decipherable because of wear, organic deterioration, or external influences like water or fire damage or whose original writing has been obscured for the naked eye through conscious interventions (for example, palimpsesting, correcting). Thanks to the technological development of special optical procedures, however, lost writing can often be made visible again without damage to the manuscripts.

#### Method and Goals

The project focuses on providing current digital recording procedures to recover writing that is no longer readable in manuscripts and on developing optical procedures adapted to the various material givens of the manuscript cultures in question. In close cooperation with the involved sub-projects, suitable procedures will be chosen, tested, and refined. The emphasis is on multispectral digitalization, whereby luminescence (especially UV fluorescence in the case of palimpsests) and the use of grazing light, etc., are considered. At the same time, the IT-supported evaluation and visualization of the raw data within the service project itself will be further developed.



Making the lower level of a palimpsest's script readable  
Cod. Neapol. ex Vind. lat. 2 (olim Vind. 16), f. 65V (Aufnahmen © 2003 Fotoscientifica)

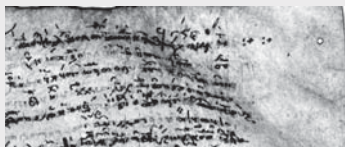
This pursues the following goals in exemplary investigations:

1. Selected, research-relevant manuscripts whose writing, script layers, or signs are completely or partially no longer readable will be made readable again by means of nondestructive optical technologies and methods; the participating manuscript researchers will then decipher and interpret them with the aid of the digital images thereby produced.
2. At the same time, the project will critically appraise and, where necessary, correct the technology and methods of recording, image processing, and visualization in their practical application. The goal is to further develop or optimize these procedures; a precondition for this is the intensive involvement of the manuscript researchers.
3. All individual projects contribute to developing transdisciplinary approaches in manuscript research. Taking practice as the starting point, in close cooperation with Z02 and Z03, a general methodology will be worked out, systematically expanded, and presented in a kind of handbook or guideline, among other things. The scientifically supporting sub-project, combined with Z02 and Z03, thus aims at long-term utility. The technologies and methods to be exemplarily developed in the three support projects are to set long-term standards for manuscript research.

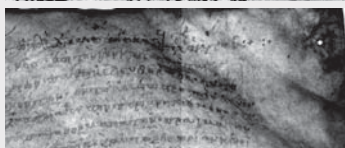


#### Structure of a palimpsest page

Upper text with decorative border  
(Cod. Lips. Rep. I 62, f. 17)



Upper text on front and back  
Menologion, 12<sup>th</sup> century



Lower text (front)  
Maximus Confessor  
(Scribe of the 11<sup>th</sup> century?)

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