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# ORIENTAL MANUSCRIPTS AND NEW INFORMATION TECHNOLOGIES

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## VISUAL ARTS AND COMPUTING. WORKS OF ART AS A SOURCE FOR THE HISTORY OF WARFARE: A DATABASE PROJECT\*

This article is dedicated to a database project, which has been started in connection with the study of *Early Persian miniatures as a source for the history of Mongol warfare*. The main goal was to elaborate a computer processable means of describing the military equipment represented in works of medieval art. Then the information from these works could be entered into a database, making it possible to link this data to the scanned images of the warriors and arms depicted. It is hoped that it will be a first step towards establishing a large-scale database of comparable

data from medieval Middle Eastern works of art in general. At present the main task is to produce a *conception* of such a database.

As this approach to the study of military history is relatively new, and such databases seem to have never been attempted before, some introductory remarks are required, — both on the “compatibility” of works of art with database specifics and the possibility of applying a computer approach to visual materials, as well as on ways of using “the visual” in historical reconstruction.

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The past decade has witnessed a boom in the development of computing in the humanities, one of the main forms of its application being the *database*. Emerging first of all as a linguistic tool, such databases gradually spread to other fields. In the early 90s the solving of most of the problems, caused by the technical difficulties of writing systems inherent to Oriental languages, has allowed, e. g., the creation of a number of complicated Arabic and Arabic-English databases. The diversity of such databases, however, cannot hide their common feature: all of them are dealing with *text par excellence* — literature, treatises, periodicals, even colloquial speech recorded and transcribed. It is, of course, not surprising, as the text can be *directly* converted in to the computer form and entered in a database, then easily processed and used for a subsequent research.

The same situation can be seen not only in computing, where it is quite natural, but also in the field of general history, which is concerned, almost exclusively, with the *text*. The text itself, however, is not the only source of information; the *visual* is quite significant as well. Despite the obvious importance of the *visual* in history, the approach to visual materials characteristic of works on general history tends to be basically inappropriate. In most of these works

the *visual* enjoys a minor role as “illustration” to the “main” theme. Half a dozen miniatures or drawings are tacitly supposed to help a reader to “understand better” the subject in question, but one can hardly find any trace of the author himself using this kind of material. It is even odd how little attention is paid by “pure” historians to the miniatures in manuscripts in comparison to their texts. Moreover, critical editions of medieval sources are usually not provided with *any* visual material, and most of the miniatures from the manuscripts are not published at all — or published *separately* in books on art history. For the original readers, however, *both* were important, being two sides of one coin. Thus it is not a good idea to separate them now, especially when we are dealing with the medieval period, for which sources are not so abundant.

Though such questions, related to the basic features of artistic materials, are obvious and familiar for an art historian, it is not the case when general historians are involved. How many specialists, while using the medieval chronicles, bothered to look at their miniatures, published in books of another “domain” of historical knowledge? Even taking into account a characteristic ignorance of the right hand about deeds of the left one, it is still rather difficult to understand

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