

Martin Kuna et al.

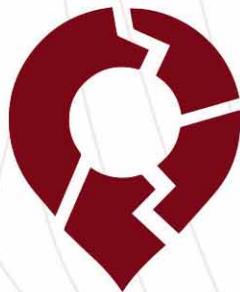
Structuring archaeological evidence



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The Archaeological Map of the Czech Republic
and related information systems

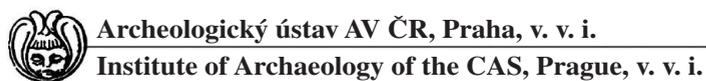
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Prague 2015



This publication summarizes results of the grant project *Archaeological Map of the Czech Republic. A system for data acquisition, management and presentation*. The AMCR project was conducted in 2012-2015 within the NAKI (Applied Research in National and Cultural Identity) Programme supported by the Ministry of Culture of the Czech Republic (Reg. No. DF12P01OVV003).



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Institute of Archaeology of the Czech Academy of Sciences, Prague, v. v. i.
PRAGUE 2015

Reviewed by:
PhDr. Jan John, Ph.D.
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KATALOGIZACE V KNIZE - NÁRODNÍ KNIHOVNA ČR

Kuna, Martin

Structuring archaeological evidence : the archaeological map of the Czech Republic and related information systems / Martin Kuna, Jan Hasil, David Novák, Ivana Boháčová, Lucie Čulíková, Peter Demján, Dagmar Dreslerová, Martin Gojda, Iva Herichová, Dana Křivánková, Olga Lečbychová, Jan Mařík, Jana Maříková-Kubková, Michal Panáček, Jaroslav Podliska, Adéla Pokorná, Jaroslav Řihošek, Eva Stuchlíková, Marek Suchý, Jan Válek, Natalie Venclová, Libuše Haišmanová. -- First edition. -- Prague : Institute of Archaeology of the Czech Academy of Sciences, Prague, v. v. i., 2015
ISBN 978-80-87365-88-5 (vázáno)

902.2 * 903.2 * 902:904 * 007+004 * 004.65 * (437.3)

- excavations (archaeology) -- Czechia
- antiquities -- Czechia
- information systems -- Czechia
- database management systems -- Czechia
- collective monographs
- archeologické výzkumy -- Česko
- archeologické nálezy -- Česko
- informační systémy -- Česko
- databázové systémy -- Česko
- kolektivní monografie

930.2-930.5 - Archaeology (historical periods, material remains) [8]

902 - Archeologie [8]

Česká verze textu je k dispozici na <http://www.archeologickamapa.cz>.

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ISBN 978-80-87365-88-5



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compiled by Libuše Haišmanová



Foreword

This publication provides the first comprehensive information on “national” database systems in the archaeology of the Czech Republic (CR), especially for foreign experts. It represents a description and evaluation of a certain phase of development of these systems that began after the political and social changes in 1989. It is therefore based on twenty-five years of work characterized mainly, as far as technical development is concerned, by the particularly rapid expansion of digital technologies. The book, however, covers not only their technical descriptions, but rather aims at their application and potential impacts on the archaeological community.

The heart of the publication is a report on the *Archaeological Map of the Czech Republic* (AMCR) project and its principal output – a complex database system that aspires to become the backbone of the information flow regarding archaeological fieldwork in Czech archaeology. The “virtual research infrastructure” of the AMCR has been created as a part of the project of the same name¹ conducted in 2012-2015 at the Institute of Archaeology of the Czech Academy of Sciences (CAS), Prague (hereinafter IAP). Specialists from the National Heritage Institute (NHI) in Prague and Brno participated as co-workers to perform individual tasks. Within the framework of the Strategy AV21 programme,² the Institute of Archaeology CAS, Brno (IAB) took part in final adjustments of the information system and its application in Moravia and Silesia.

The AMCR system is closely involved with the statutory roles of both Institutes of Archaeology CAS in archaeological heritage management and, thus, with coordination of archaeological fieldwork in the CR and the collection of information on its results. The project aimed at creating an interactive management system on the archaeological heritage in the form of a desktop client for online data collection from individual licensed organisations and other users. In addition to these tasks, the AMCR is conceived as a tool for the re-examination and editing of earlier data, i.e. for capturing and storing the vanishing information on the archaeological heritage of the country. Ultimately, the collected data should be available not only for professionals but also for the general public, and the whole system should facilitate generally more open and easier access to information

¹ The whole title of the project is *Archaeological Map of the CR. A System for Data Acquisition, Management and Presentation*. It was conducted in 2012-2015 within the NAKI (“Applied Research in National and Cultural Identity”) Programme supported by the Ministry of Culture of the CR (Reg. No. DF12P010VV003).

² Programme of the Czech Academy of Sciences *Strategy AV21: Top research in the public interest*.

regarding the “national” archaeological heritage – in full accordance with the orientation of the programme from which the project has been financially supported.³

Information on archaeological fieldwork and finds, metadata for the field documentation as well as the documentation itself forms part of the cultural heritage as a whole. Information on archaeological fieldwork and finds represents an irreplaceable source, since no archaeological context can be explored repeatedly. This information has to be continuously cared for, similarly to the field relics and museum finds themselves. Unlike other segments of the archaeological heritage, the situation is even more difficult for the field documentation, as it is not yet explicitly protected by law. At the same time, the documentation of archaeological fieldwork can very easily be lost, just as the memory and records of all past events fade.

The project’s authors hope that in the long-term perspective the AMCR can turn into an important integrating element in Czech archaeology. Crowdsourcing principles proposed, to a certain extent, for the collection and editing of the data can encourage a sense of responsibility in the professional community for its data or, in other words, for “creating the content” that is essential for its further development.

With the creation of the AMCR information system, Czech archaeology can close the gap with advanced European countries, a shortcoming that has become readily apparent over the last decade. Any delay in addressing this challenge would not only widen the gap but also lead to a further loss of valuable information.

The creation of the AMCR information system represented a complex task because it was necessary not only to prepare a software tool for data management but also to deal with the revision of data as such. Thus, issues related to programming and considering the data model were in practice intertwined with research in the archives, the conversion of heterogeneous data into a unified form and the revision of their content.

The contents of this publication can be divided into several sections. The first part (Chapters 1, 2) focuses on a description of the AMCR solution and the context of its appearance. Database applications and archives that preceded the AMCR and are currently more or less included in it, form part of the second block of contributions (Chapters 3-5). The third section (Chapters 7-9) introduces systems that are independent of the AMCR but which in the future can share source data, identifiers, etc. System IIS ASP (Chapter 6) should have originally represented an independent software product created within a parallel research project. When the project started, it became clear that shaping it into a part of a broader AMCR platform would be much more convenient.

The fifth section includes two contributions (Chapters 10, 11) suggesting ways that AMCR data could be used in proper archaeological research. Even such a small example may be of interest because of variable interpretative possibilities as well as

³ See footnote 1. The general public may benefit from some of the features of the AMCR system but mainly from other outputs of this project such as the publication/website *Archaeological Atlas of Bohemia* (cf. Chapter 12; Kuna et al. 2014, 2015).

hints at many yet unanswered questions in archaeological theory and method. Examples of research application of the AMCR data are followed by Chapter 12, which describes an attempt to present archaeological sites to the general public through the *Archaeological Atlas of Bohemia*. The Atlas and its website may be particularly interesting for foreign readers because they bring the first archaeological guide of this type in English. The last contribution (Chapter 13) represents an endeavour to articulate a vision for the future of information technologies in Czech archaeology. This part may be recommended particularly because it has been (for the most part) written by representatives of the generation that will also be responsible for fulfilling this vision.

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*Translation by Petra Maříková Vlčková
Revision by David J. Gaul, Trada, s. r. o.*

*Published by the Institute of Archaeology of the Czech Academy of Sciences, Prague, v. v. i.,
Letenská 4, 118 01 Praha 1, Czech Republic*

*Managing editor: Filip Laval
Cover design: Zdeněk Mazač
AMCR logo: Petr Kincl
Graphic design and layout: Kateřina Vlčková
Printing: Helvetica & Tempora, s. r. o., Pod Kaštany 246/8, 160 00 Praha 6, Czech Republic*

First edition, 2015

ISBN 978-80-87365-88-5

Orders – Objednávky – Bestellungen:
Institute of Archaeology of the Czech Academy of Sciences, Prague, v. v. i., Letenská 4,
118 01 Praha 1, Czech Republic
Fax: +420 257532288, knihovna@arup.cas.cz

The book is available for purchase in the library of the Institute of Archaeology CAS in Prague.

Česká verze textu je k dispozici na <http://www.archeologickamapa.cz>.