

Martin Kuna et al.

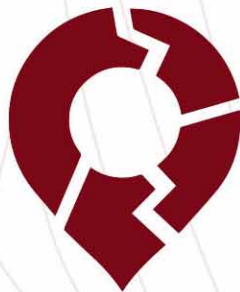
Structuring archaeological evidence



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The Archaeological Map of the Czech Republic
and related information systems

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Glossary

[Czech equivalent]

Activity area – “an area within a *community area* serving a purpose over a limited period of time. A concept relating to living culture,” (Neustupný 1998, 134). An activity area corresponds to a *component* within the archaeological context (dead culture).

Archaeological archive (cf. archaeological fund) – “comprises all records and objects recovered during an archaeological project and identified for long-term preservation, including *artefacts*, *ecofacts* and other environmental remains, waste products, scientific samples and also written and visual documentation in paper, film and digital form” (Perrin et al. 2014, 20). In Czech terminology, an “archaeological archive” consists of all research documentation and records, but not finds; therefore, “archaeological fund” is used instead.

Archaeological documentation point – a designation of the documentation unit and the basic recording entity in the MADP [MADB] and the appropriate AMCR module. See Chapter 6.

Archaeological Atlas of Bohemia – see Chapter 12.

Archaeological Database of Bohemia – the first database of archaeological fieldwork and finds (“sites and monuments record”) in the territory of Bohemia, created in early 1990s in the IAP; predecessor of the Archaeological Map of the CR. See Chapter 1.

Archaeological fund (cf. archaeological archive) – synonymous with “archaeological archive” in its broader meaning; the term is more suitable for Czech terminology.

Archaeological Map of the Czech Republic – see Chapter 2.

Artefact – “any object whose formal properties and/or position in space have been intentionally created to support a specific purpose (i.e. having a practical function, social meaning, and/or symbolic significance),” (Neustupný 1998, 134).

Authority list (authority file) – a set of unique entities designed as universal nodes for cross-referencing and data retrieval.

Base Maps of the CR – basic topographic representation of the CR, scaled at 1:10,000, 1:25,000, 1:50,000, 1:100,000 and 1:200,000; available both as printed sheets and their seamless raster equivalent. Since 2001, the Base Maps are produced digitally from the vector data set of the *Fundamental Base of Geographic Data of the Czech Republic* (ZABAGED®) and the database of geographic names (Geonames). Creation and update of the Base Maps is facilitated by the Land Survey Office (cf. <http://geopor-tal.cuzk.cz/>).

Cadastral (cadastral area) – a historical as well as contemporary administrative unit of settlement structure. Despite exceptions, cadastral areas correspond to individual

villages, towns or their parts. Cadastre specification is one of the basic parameters of the archaeological data and serves as a sorting criterion in the IAP physical repositories.

Community area (cf. settlement area) – “a concept relating to live culture. A structured union of *activity areas* exploited by one community over a period of time,” (Neustupný 1998, 135).

Complex (cf. feature) – “a structured set of artefacts serving a purpose or a set of interconnected purposes (a grave, a house, etc.). Often termed ‘assembled find’ in traditional archaeology,” (Neustupný 1998, 135).

Component – “a set of complexes and/or artefacts serving one purpose over a limited period of time,” a concept related to dead culture (archaeological context; Neustupný 1998, 135). In the ADB and AMCR the term refers to a set of chronologically and functionally coherent complexes related to a single fieldwork event/site or, more precisely, to a documentation unit. See Chapter 2.1.3.

Crowdsourcing – a process of (voluntary) collaborative effort by a wide community to achieve a common goal.

Data class – data category characterized by a set of fields, attributes and relationships to other classes. It serves to the description of a set of related features of the real world.

Data model – structure of an information system, description of database classes, including all their properties, fields, type of entries and relationships among them.

Digital Archive of the IAP – a set of digital files derived from field documentation kept in the IAP Archive as well as their metadata description (database). See Chapter 4.

Digital humanities – a field of research combining (enhancing) humanity disciplines with digital tools and computing.

Document unit – a part of document metadata related to a logical segment of the data described by the document. See Chapter 2.3.1.

Documentation unit – a spatial unit defined within a fieldwork event or site. It includes *components*. See Chapter 2.1.3.

Ecofact – “a natural object or an *artefact* possessing ecofactual properties. Such properties originate through unintentional human action, quite often without human awareness. Examples: the bodies of domesticated animals, thermoluminescence in ancient pottery, trace elements in metals,” (Neustupný 1998, 136).

Excavation report (final fieldwork report) [nálezoová zpráva] – final report on an completed fieldwork, including a standardized description of the fieldwork, its results and methodology, a list of finds, contexts, plans, cross-sections, analyses, etc.

Feature [objekt] – unmoveable object or structure, synonymous to “*complex*” by E. Neustupný (1998, 135).

Fieldwork [terénní výzkum] – any type of field activity aimed at collecting archaeological data as a means of learning about the past.

Fieldwork event [archeologická akce] – any logical (i.e. spatially and time-limited) and comprehensive part of archaeological fieldwork conducted by a specific person/

organisation that can serve as a convenient evidence unit. An archaeological event is also generally characterized by a single “archive” of the field documentation and finds such as a series of numbers identifying stratigraphic units, documentation, etc. Fieldwork events serve as the basic type of entries in the *Archaeological Database of Bohemia* and the *Archaeological Map of the CR*. The AMCR makes a difference between “project fieldwork events” and “stand-alone fieldwork events,” See Chapter 2.1.3.

Glossary – a controlled list of terms used for the description of records in a database.

Infrastructure – fundamental facilities providing elementary services for a community or the public. E-infrastructure is a network of hardware, software, data, administrators and users.

Institute of Archaeology CAS, Brno, v. v. i. (IAB) – one of the research institutes of the Czech Academy of Sciences. It is involved in scientific research in archaeology, infrastructure management and specific tasks of the archaeological heritage management. It operates in Moravia and Czech Silesia (eastern part of the CR).

Institute of Archaeology CAS, Prague, v. v. i. (IAP) – one of the research institutes of the Czech Academy of Sciences. It is involved in scientific research in archaeology, infrastructure management and specific tasks of archaeological heritage management. It operates in Bohemia (western part of the CR).

Intervention (field) – any field activity (i.e. construction and development) leading to a (potential or real) strike into archaeological contexts or finds.

Landscape – a space with a given purpose (meaning). It consists of natural and artificial features, objects and their relationships commonly perceived as part of the human world.

Landscape entity – a logical unit of past settlement defined in the process of the synthesis of archaeological, historical or other data; a unit approximating past reality. Synonymous with “landscape components”, “settlement units,” etc.). See Chapter 2.1.3.

Licensed archaeological organisation – an institution officially permitted to conduct archaeological excavations under the terms of the *Monument Act*. See Chapters 1 and 3.

Metadata – data describing other data (i.e. description of documents, description of fieldwork events, etc.).

Monument Act – Act No. 20/1987 Coll. on state landmark conservation. The most important official directive concerning archaeology in the CR. A new version of this law is currently waiting for the adoption by the Parliament of the CR.

National Heritage Institute [Národní památkový ústav] – an institution primarily responsible for monument curation and heritage management in the CR. It serves as a professional extension of the Ministry of Culture of the CR, with an advisory, not executive role.

Negative evidence (negative observation) – a *fieldwork event* that did not identify any archaeological finds or contexts, although controlled and reliable field methodology was used.

Object [předmět] – a moveable find (item).

- Persistent identifier** – a long-term identification mark (i.e. set of numbers or characters) of any digital object allowing unique referencing.
- Prague Heritage Reservation** – a listed UNESCO heritage site including most of the Prague city centre (i.e. the cadastres of Hradčany - Prague Castle; Lesser Town; Old Town; Jewish Quarter - Josefov; New Town and Vyšehrad), one of the largest of its type in the world (8.63 square km). See Chapter 6.
- Process states** – stages through which records of the relevant *data class* phase, corresponding to a certain range of data that can (or should) be inserted, and to certain rights and obligations of the users. See Chapter 2.3.2
- Project** – a logical part of archaeological field activities already registered in the preparatory phase. It is usually determined by the particular incentive for fieldwork and its agent and is carried out as one or more *fieldwork events*. See Chapter 2.1.3
- QR code** – Quick Response Code. It is designed as a machine-readable optical label able to include significantly more information than a simple barcode (e.g. URLs, images, business cards, etc.).
- Register of interventions** [evidence zásahů] – national information system included in the currently prepared Monument Act, listing all registered field interventions. In the AMCR, it corresponds to the *Projects* workflow (cf. intervention; see Chapter 2.2.4).
- Report on Archaeological Event** [Zpráva o archeologické akci] – a form containing a brief structured description of the *fieldwork event* and its results, used as a supplement to the *excavation report*, possibly as its substitution. It served as the basic source for entries in the *Archaeological Database of Bohemia*; the AMCR *Fieldwork Event* data class essentially copies its structure.
- Settlement area** – “a structured union of *components* left behind by one *community area*,” (Neustupný 1998, 140); the key concept within the “settlement area theory” by E. Neustupný.
- Settlement pattern** – a shape of distribution of *settlement units* (*settlement areas*) and networks.
- Settlement unit** – a logical part of the settlement regarding its function and meaning for past society (e.g. village, castle, hillfort, cemetery, etc.); a more general equivalent to *settlement area*.
- Settlement zone** – a (more-or-less) continuously settled area in a given period of the past.
- Shape** – a spot (“shape”) recognized in an aerial photograph and identified as a potential archaeological feature (i.e. circular ditch, macula, etc.).
- Site** [lokalita] – a “phenotypic” category of archaeological context; a unit determined by how it appears on the surface or even from a distance (e.g. earthworks, a group of barrows, cropmarks). Its shape and content are substantially influenced by *transformation processes*. See Chapter 2.1.3.
- Thesaurus** – a vocabulary of synonyms (often multi-language).

Transformation process – “any change that transforms a living past culture (and its remains) into dead culture represented by archaeological records,” (Neustupný 1998, 141) including pre-depositional, depositional and post-depositional processes. Roughly synonymous to taphonomic processes, formation processes, etc.

User role – sets of working rights in the AMCR, always tied to a specific user account; organisations may be represented in the system by users on different authority (role) levels. See Chapter 2.2.1

Virtual research environment – a set of digital *infrastructures*, tools and utilities allowing i.e. advanced data discovery, exploration, harvesting, processing, analysing, visualisation, sharing, commenting, reviewing and publication.



Abbreviations

[Czech equivalent]

AAP – Archive of Aerial Photographs (see Chapter 5)

ADB [ADČ] – Archaeological Database of Bohemia (see Chapter 1)

ADP [ADB] – archaeological documentation point (see glossary)

ALS [LLS] – aerial laser scanning

AMCR [AMČR] – Archaeological Map of the Czech Republic (see Chapter 2)

API – application programming interface

ARCHES – Archaeological Resources in Cultural Heritage, a European Standard
(see <http://archaeologydataservice.ac.uk/arches/>) – international research project

ARIADNE – Advanced Research Infrastructure for Archaeological Dataset Networking
in Europe (see <http://www.ariadne-infrastructure.eu/>) – international research project

ARS – archaeological remote sensing

ASL – above sea level

CAS – Czech Academy of Sciences (see <http://www.cas.cz/>)

CDB – Codex Diplomaticus et Epistolaris Regni Bohemiae

CEC [CES] – Central Evidence of Collections – evidence of museum collections, Czech
Republic (see <http://ces.mkcr.cz/>)

CIDOC-CRM – International Committee for Documentation – Conceptual Reference
Model (see <http://www.cidoc-crm.org/>)

CIM – Codex Iuris Municipalis

CR – Czech Republic

CsAS – Czechoslovak Academy of Sciences

CSR – Czechoslovak Republic

CSV – Comma-Separated Values file type (*.csv)

CZAD – Czech Archaeobotanical Database (see Chapter 8)

DAEAE [DAEAV] – Digital Archive and Evidence of Archaeological Excavations
(see <http://arub.avcr.cz/archiv/>; Chapter 1)

DGN – design file type (*.dgn)

DIR [OIZ] – Department of Information Resources of the IAP

DOC – document file type (*.doc)

- DOI** – digital object identifier (see <https://www.doi.org/>)
- EAC** – Europae Archaeologiae Consilium, European Archaeological Council
(see <http://european-archaeological-council.org/>)
- EDE** – evidence density estimation (see Chapter 10)
- GeoTIFF** – geospatial TIFF (*.tif)
- GIS** – geographic information system
- GML** – Geography Markup Language file type (*.gml)
- GPX** – GPS Exchange Format file type (*.gpx)
- GSM** – Global System for Mobile Communications
- GUI** – graphical user interface
- IAB [ARÚB]** – Institute of Archaeology CAS, Brno, v. v. i. (see <http://arub.avocr.cz/>)
- IAP [ARÚ, ARÚP]** – Institute of Archaeology CAS, Prague, v. v. i. (see <http://www.arup.cas.cz/>)
- ICT** – information and communication technologies
- ID** – identifier
- IDAF [IDAV]** – Internet Database of Archaeological Finds (see <http://idav.cz/>)
- IIS ASP [IIS APP]** – Integrated Information System of Archaeological Sources of Prague
(see Chapter 6)
- INSPIRE** – Infrastructure for Spatial Information in Europe (see <http://inspire.ec.europa.eu/>)
- ISAD** – Information System of Archaeological Data (see <http://isad.npu.cz/>)
- JPEG** – Joint Photographic Experts Group file type (*.jpg)
- LA-ICP** – laser ablation inductively coupled plasma mass spectrometry
- LAO [OAO]** – licensed archaeological organisation (see glossary)
- MADP [MADB]** – Map of the Archaeological Documentation Points (see Chapter 6)
- MC CR [MK ČR]** – Ministry of Culture of the CR (see <http://www.mkcr.cz/>)
- MultiTIFF** – multi-page TIFF (*.tif)
- NAA** – neutron activation analysis
- NAKI** – Program of Applied Research and Development of National and Cultural Identity of the MK CR (see <http://www.mkcr.cz/veda-a-vyzkum/verejna-soutez/>)
- NHI [NPÚ]** – National Heritage Institute (see <http://www.npu.cz/>)
- NPD** – normal probability distribution (see Chapter 10)
- PAC [PAK]** – Prague Archaeological Committee (see <http://www.archeopraha.cz/prazska-regionalni-archeologicka-komise-pak>)

PDF – Portable Document Format file type (*.pdf)

PDF/A – Portable Document Format / Archive file type (*.pdf)

PHR [PPR] – Prague Heritage Reservation

(see http://www.praha.eu/jnp/cz/co_delat_v_praze/pamatky/prazska_pamatkova_rezervace/index.html)

PIAN [PIAN] – Spatial Identification of Archaeological Finds [Prostorová identifikace archeologických nálezů] (see Chapter 2.1.3)

PID – persistent identifier (see glossary)

RAW – raw image file type (*.raw)

RBM – Regesta Bohemiae et Moraviae

RTF – Rich Text Format file type (*.rtf)

RXT – Retrospect file type (*.rtx)

SAL [SAS] – State Archaeological List of the CR (see <http://www.npu.cz/pro-odborniky/pamatky-a-pamatkova-pecel/zakladni-odborne-specializace/archeologie/sas/>)

SEM-EDS – scanning electron microscopy – energy dispersive spectroscopy

SQL – Structured Query Language

TDF – temporal frequency distribution (see Chapter 10)


TIFF – Tagged Image File Format file type (*.tif)

UPD – uniform probability distribution (see Chapter 10)

VRE – virtual research environment (see glossary below)

WMS – Web Map Service

XRF – X ray fluorescence



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and related information systems

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