## **SUMMARY**

This work pursues an ambitious venture: the formulation of a historical method of the archaeology, paying special attention to the interests of medieval and post-medieval archaeology. Since its emergence as a scientific discipline during the 19<sup>th</sup> century, prehistoric archaeology in German-speaking countries has also pursued historical goals; since the dying out of positivistic concepts in the first third of the 20<sup>th</sup> century archaeology understands itself as an integral part of the historical disciplines – as expressed in the term "prehistory". However the consensus of opinion on the historical goal of archaeology is opposed to the almost complete absence of ideas on how this goal could be reached: in traditional archaeology, "method" only demarcates the field of ancillary research tools. The question as to interpretation of the material sources, not covered any longer by this term, is only most rarely the subject of specialist discussion.

Indeed the historically orientated traditional archaeology, as can be shown on the basis of a detailed research history, has always tended to mask the question of interpretation. This statement also applies, in modified form, to Anglophone theoretical archaeology: it is true that both processual and postprocessual archaeologies developed ideas on how historical meaning might be assigned to the material sources, but no interpretive methods, which would have been suitable to deal with the historical uniqueness of the material sources. The fundamental problem of historical archaeology – the question as to adequate interpretation of the material source – remains an open question in theoretical archaeology as well. In the course of this work I concentrate on this basic question, setting it at the centre of the theoretical considerations. If the question "how to interpret an individual material source?" is answered adequately, it should not be difficult to establish a consistent methodology of archaeology as a historical discipline.

First of all however, a seemingly long since answered question must be asked again: the question as to the nature of archaeological sources. Since the beginning of the 20<sup>th</sup> century, a dualistic source model has been put forward in archaeology, although actually problematic at first sight. The archaeological sources, it is said, consist of finds and features. Now finds and features represent categories, which take form during, *and not before*, the process of archaeological excavation and documentation: only these specific finds are collected, which have been judged to be relevant on the basis of preliminary source interpretation; the feature demarcation and the preliminary source interpretation develop hand in hand anyway. The dualistic source, consisting of features and finds, emerges only as a result of the excavation and is in fact identical to the documentation.

From such considerations and supported on the statistically supported observation that historical interpretations clearly win quality already in present-day archaeology if finds and features are conjointly considered, I come to the conviction that the archaeology must choose the yet unexcavated material source as its methodological starting point: the three-dimensional material space within the borders of its later development, herein after referred to as *archaeological context*. An archaeological context can be understood materially as completely built up of finds or described structurally as an arrangement of features. While not every grain of sand will be gathered as a find and not every structure in each scale can be documented as a feature, the number of possible find/feature-documentations is immeasurably large. Obviously, already the task of source documentation confronts archaeology with an unsolvable problem – unless one subscribes to a powerful tool which is able to lead the archaeologist through documentation and, beyond, also through the problems of evaluation and interpretation: the human ability to *understand*.

Now a look at the epistemological discussion of hermeneutics, the 'art of understanding', shows that, seemingly, an understanding of material conditions is possible only in so far as they are already conceived conceptually. Reflection, the continuous balancing of the particular and the whole, seems to be limited to the conceptualized world. However, some commonplace observations as well as simple considerations of evolutionary history suffice to grasp the intellectualistic constriction of this concept of understanding. No doubt, there is a human ability to understand material situations, going clearly beyond the objectively existing.

This understanding is not by any means accurate, but nevertheless adequate in matters of everyday life and capable to be sharpened up purposefully in the light of a problem to be tackled.

Since contemporary everyday life can represent however neither our goal (that is history) nor our ambition (that is science), still far reaching modifications have to be carried out before this 'material understanding' can become the basis of a historical method of archaeology. The pivotal issue on this score is linked with the idea of correspondence, which must mark the relationship of each scientific interpretation to the material reality bequeathed in the sources. In this work I suggest the adaptation of the deductivist falsification criterion, yet in a totally hermeneutic way. In such a system, which I call material hermeneutics, a successful falsification only leads to the final rejection of the associated (meaningless) formal hypothesis. Further-reaching effects of falsification, which are relevant for interpretation, form part of hermeneutic reflection and hence are always reversible. Despite the hereby connected abandonment of the alleged security of deductivist establishing of meaning, material hermeneutics nevertheless permits - totally hermeneutic - stabilizations of the interpretation by each performed trial of falsification.

If the concept of material hermeneutics appears still somewhat theoretical here, this impression is not completely unwarranted – after all it applies to the archaeological context that, as we have seen above, cannot even be adequately documented. But material hermeneutics succeeds to integrate this context in a process of understanding, wherein also the formation history of the material source can be considered. For the purpose of source criticism, special attention is to be paid to the neither completely avoidable nor completely controllable changes during excavation and evaluation. In conjunction with a consciously carried out change of perspective, the interpretation which is, in reality, elaborated particularly on the basis of the *archaeological documentation* can now adequately refer to the original material source.

However, material hermeneutics reaches its full strength only by creating a further source representation, the quantified *archaeological database*. The preparation of a database permits the testing of quantitative formal hypotheses and their processing by means of computer applications, so enormous data sets can be processed in shortest time. In addition, inferential statistics allows the rapid examination of very complex formal hypotheses, at the same time dimension reduction techniques admit to establish already automatically confirmed formal hypotheses in an inductive way. This principle was already used by Czech archaeologist Evžen Neustupný as a central element of his deductivist methodology. Like him I advance the view that the potential of inference statistics and the – strictly speaking non-statistical – procedures of dimension reduction cannot be overrated, as archaeology traditionally deals with large and complex data sets. From Neustupný I finally adopt the term *archaeological structures* for formal hypotheses valid in terms of the archaeological database, irrespective of the deductive or inductive mode of establishing.

On this methodological basis I draw up the heuristic framework of material hermeneutics along the thread of an extensive analysis of medieval and post-medieval archaeological 'scholarly editions'. Supported by mathematical procedures like factor analysis, typical aspects of the *historical potential* of the archaeological sources are extracted out of a range of source-, interpretation- and heuristic- orientated criteria. Brought together in a recapitulatory interpretation, these aspects help to supplement the heuristic framework of material hermeneutics in a plausible way. In the end, a differentiated heuristic system of interpretive access to the archaeological context and its representations is placed at the archaeologists' disposal.

As a result of the large adaptation of deductivist motives, source examination in the proposed heuristic system is dominated by theoretically objectifiable processes – with the important exception of stratigraphical determination. By contrast, source interpretation is characterized by subjective processes of contextualizing the material source in various ways – heuristic processes that help to counteract the rash pocketing of the source by the interpreter. Even if these 'inner' and 'outer' heuristics surely differ in their relevance for the correspondence between source and interpretation, the hermeneutic interpretation nevertheless profits from both domains in an essential way.

Yet it would hardly satisfy to embed the here briefly introduced interpretation method as a foreign matter in an otherwise unchanged process of excavation and post-excavation analysis. Therefore, after the concluding formulation of the material hermeneutic heuristic system, I discuss practical aspects of excavation, analysis and edition, which must be reconsidered from a hermeneutic perspective. In doing this, particularly excavation practice, so far objectivistly documenting and mostly conceived as a craft, proves to be in need of radical reform. In addition, the problem of co-operation with the neighbouring disciplines as well as the question as to guidelines of a hermeneutic 'scholarly edition' (in which source description and interpretation now refer to each other under guidance of the last named) deserve more intensive attention.

Finally and in condensed form, the task of the methodological foundation of historical archaeology is expanded to the question as to problem-orientated comprehensive objectives. It can be shown that the principle of data-orientated hermeneutic interpretation also applies for these wider spanning contexts. However, it must be pointed out that now the possibilities of recourse to the material source become constricted: in most problem-orientated works the archaeologist can only draw upon source material already evaluated upon other terms. Hence a genuine scientific reference to the material source is no longer given. Problem-orientated 'macro-historical' archaeological work becomes epistemologically dependent on the calibration by 'micro-historical' source editions.

After completing the methodological basic research the work finally addresses further requirements which a historical turn of archaeology would imply, and the options which it would offer. Here, questions as to the scientific organization take centre stage, which is still strongly affected by traditional, non-historical structures or which, as in the case of archaeological monument conservation has not really arrived at the archaeological problem yet.

The main aim of this work is initiating an intensive discussion about the further way of a 'traditional' archaeology that commits itself to a historical goal and at the same time feels uncomfortable about the Anglo-American way of prescriptive application of theories — which is, in my opinion, completely right. The work 'Historical Archaeology' for this purpose puts up for discussion a consistent methodological framework, which permits archaeology to self-confidently cut its own path to the historical goal at last. The work does not at all strive for dogmatic acceptance — if it happens to starts a productive, open discourse as to the epistemological bases of archaeology as history, the venture would meet with success.