

REVIEW

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Contextual numismatics: a post-processual approach illustrated by application to Roman coins

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Abstract

In this paper, 'contextual numismatics' is presented as the most recent and innovative research direction in the field of numismatics. In addition, its further potential for research and the limit of gaining knowledge are outlined. A historical overview of the gradual development of an archaeological-oriented approach to numismatic material serves as an introduction to the discussion. This is followed by a presentation of the distinguishing features compared to other research methods to study Roman coin finds, as well as a discussion of possible paths and goals in the further development of this approach to study these culturally significant objects.

Keywords Numismatics, Coin finds, Object biography, Post-processual, Agency

Introduction

In developmental psychology, self-discovery is understood as a process in which young people develop an identity by defining their individual features and goals and distinguishing themselves from the characteristics and goals of others [1]. The identity question 'Who am I?' leads to the formation of a new wholeness in which elements of the old are integrated with expectations of the future while expectations are simultaneously and critically questioned and reviewed [2]. According to this view, identity is fundamental to one's understanding, self-knowledge and sense of what one is or wants to be [3]. The same definition can be applied outside of analytical use within the human domain to abstract structures such as science and scholarship. Academic disciplines, in particular, as producers of new knowledge and outlets for

diverse research agendas, lend themselves to critical self-reflection from the aforementioned points of view (for prehistory, see [4]; for medieval and modern numismatics, see [5, 6]). In this contribution, so-called contextual numismatics, as the most recent research direction from material culture studies, will be the focus of the upcoming review.

The historical development

The foundations for the gradual development of ancient numismatics are found in the humanistic tendencies of the Renaissance. Classical antiquity as an ideal and counter-design to one's reality, as well as the dissemination of knowledge through the editing of writings by Greek and Roman authors within educational realms triggered, for the first time, a broad, interest-oriented turn to all kinds of legacies of the ancient world. The desire to experience the past not only through the written tradition, but also through its material culture, led to the search for ancient coins, resulting in compilations within private and aristocratic collections [7]. Critical examination of ancient coins in a scholarly sense was initially limited to their pictorial repertoire, such as illustrating 'famous men from history' in the works of ancient authors. The basic

Parts of the article have been translated and published previously in German language.

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concept of systematic ordering and classifying of the material world occurred in the wake of the intellectual revolution of the eighteenth century, resulting in a turning point in the history of numismatic research, which, from a modern perspective, is subsumed under the antiquarian tradition. Parallel manifestations in the natural sciences, such as the establishment of taxonomic orders in botany and zoology after Carl von Linné (1707–1778), illustrate the general change in the methodological structure of science, reflecting the general spirit of the times. The understanding of a cosmology subject to the principle of objectively classifiable, time-independent regularity served as the basis for systematizing the material world [8].

In numismatics at the same time, Joseph Hilarius Eckhel (1737–1798) established the basic order of ancient coins according to taxonomic patterns. Eckhel established that they could be hierarchically arranged to precisely describe and represent the numismatic material as a whole. The various objectives of the classification of numismatic material since the late eighteenth century all focus research on the individual object alone (for an overview with special reference to the development of the coin series in numismatic research, see [9]). From Eckhel's principle of order in the 'Doctrina numorum veterum', via much more recent projects, such as the chronologically structured 'Corpus Nummorum' under the direction of the Berlin Academy, to the collection catalogue of Greek coins, the 'Catalogue of Greek Coins in the British Museum', all focus on the individual coin itself. The special appreciation of coins as objects of value as well as miniature works of art has likewise contributed significantly to this perspective concentrated on the singular object. Due to the numerous literary sources from antiquity dealing with money, as well as the fact that coins themselves contributed to the philological material corpus as carriers of inscription, numismatics was also understood as part of the historical-philological canon of classical studies [10]. In addition, these small, round, mass-produced metal objects experienced a modern concept of value through the international coin trade [11], manifesting itself in the simple equation 'ancient coin = modern monetary value'. As such, ancient coins were usually accorded a special value among all excavation finds. In this vein, numismatic research during the 19th and early twentieth centuries was detached from the archaeological context, and instead studied with a focus on the typology, series, iconography, and purely economic function of ancient money [12].

It was only with the increasing importance of coin finds as a dating tool in the development of the study of the chronology of Roman sites through excavation in European nation-states in the nineteenth century that the

call for a systematic recording of archaeological finds resulted, thus giving new impetus to the methodical examination of the objects. Significantly, the catalyst for this change did not come from the numismatists dealing with the coins, but rather from the ranks of field studies in Roman archaeology. Scholars recognised that coins from excavations, beyond their usefulness as dating aids, are a prime source for answering questions about the economic and historical situation of investigated sites (cf. the coin finds of the Roman military camp at Hofheim, which were studied and processed by the excavator himself: [13]). To gain objective information from the numismatic material of a site, however, the respective coin finds had to first be compared with those of other sites. For this reason, it became necessary to gather information about the coin finds from other sites. Leading until then, however, gazetteers of coin finds were inconsistent regarding the quality of their information and were often published in widely scattered media. Even in the journals of specialist antiquarian societies, often only rare or curious coins were documented—usually with only large-scale topographical information of the find-spot. As a result of the low interest of 19th-century contemporaries in archaeological information of coin finds, Julius Friedländer (1813–1884), director of the Coin Cabinet of the Royal Museums in Berlin from 1868 to 1884, in his fundamental compilation of numismatic research literature remarked on the brief listing of geographically arranged finds: "Finds of Roman Coins—only what I have noticed by chance, I have not collected such notes" [14]. Theodor Mommsen was among the first scholars to point out the importance of archaeologically documented coin finds for numismatic research in his seminal study on the location of the Battle of the Teutoburg Forest [15].

During the interwar period, Harold Mattingly (1884–1964), in his study 'Hoards of Roman Coins Found in Britain and a Coin Survey of the Roman Province', contributed to the continued methodological sharpening in find classification by using labels such as 'isolated finds', 'site-finds' and 'hoards' [16]. Significantly, the methodological ideas expanded further through a chapter on the evaluation of coin finds in the volume 'Archaeology of Roman Britain' [17] edited by the philosopher and archaeologist Robin George Collingwood (1889–1943). It was not until the project 'Fundmünzen der Antike (Coins Finds of Antiquity)', founded in 1953 that a continuous and systematic national recording of coin finds was created [18]. During its existence from 1953 to 2010, the project documented and published all ancient coins found within the territory of the Federal Republic of Germany. By making the material available, these reliable and convenient bases created, for the first time, a numismatic, archaeological, historical and economic-historical

evaluation, resulting in the establishment of the series ‘Studien zu Fundmünzen der Antike (Studies on Coins Finds of Antiquity)’. The scientific success of the project had an international effect and soon after led to the adoption of these objectives and systematics in neighbouring European countries.

As such, from the middle of the twentieth century onwards, two different numismatic research agendas became the norm: one that decontextualized coins from their ancient historical tradition, focusing on their primary meaning as an economic medium and another that considered the coins’ archaeological documentation. The latter approach, commonly referred to as “the study of coin finds”, established standards to uniformly document information about coin finds and developed methods and concepts to research the significance of coin finds for the ancient world. Interestingly, the two strands of development are both taught within modern university curricula, where numismatics is taught within ancient history or archaeology departments. However, even the latter approach did not study the objects in their archaeological context, but predominantly examined the coin finds from a macro-historical perspective focusing on the chronological development of the circulation of money in the historical interaction with the respective political-economic environment. It was not until the last third of the twentieth century that Iron Age numismatics, with its institutional proximity to archaeological fieldwork and methodological influences from Anglo-Saxon prehistory, turned intensively to the archaeological context in the methodological reflection of its source material [19]. In Iron Age archaeology, the impetus to apply an archaeological approach to study money was ostensibly due to the lack of any written sources in European Iron Age cultures that could help answer questions about the function and meaning of Iron Age coins [20]. Not least due to the development of a contextual approach in Roman archaeology [21], Roman numismatics has cautiously opened up to this new approach in the last 15 years.

This trend, however, is limited to Roman numismatics. In ancient Greek numismatics, research on coins and money from an archaeological perspective is less common. Here, research continues to focus increasingly on economic-historical and typological issues for several reasons (see the overview in [22]). The first is that at universities, museums and other academic research institutions, Roman numismatics is more common than Greek numismatics. More scholars and research projects deal with money of the Roman world, resulting in a higher density of publications compared to Greek numismatics. Moreover, research on ancient Roman culture in neighbouring disciplines of classical studies contributes as a multiplier (Table 1).

Table 1 Papers in the disciplines of Roman Archaeology, Greek Archaeology, Roman History and Ancient Greek History on Academia.edu (< <http://www.academia.edu/> >) (6 March 2023)

Discipline (Roman)	Contributions	Discipline (Greek)	Contributions
Roman Archaeology	313.335 (60%)	Greek Archaeology	213.212 (40%)
Roman history	1.175.545 (67%)	Ancient Greek History	575.955 (33%)

Furthermore, the geographical embedding of Roman culture in the western Mediterranean and north-western Europe provides methodological advantages for studying Roman coinage. In these countries, Roman archaeology has traditionally been cultivated in university research and national archaeological heritage management. In Europe, many efforts have been made since the second half of the twentieth century through long-term national projects to systematically document coin finds in find corpora and make it possible to compare finds across regions such as in Germany, Italy, Switzerland, Croatia, Luxembourg, the Netherlands, Austria, Hungary and Poland. In recent years, national find inventories and their data have been transferred to electronic format. The most comprehensive source for numismatic finds today is the database of the Portable Antiquities Scheme, which currently documents over 299,000 Roman coins from England and Wales. A similar approach has been undertaken by its Dutch counterpart, the Portable Antiquities of the Netherlands. Few national find inventories have been established in the eastern and southern Mediterranean region. In addition, a central recording and documentation of individual finds has not been developed to the same extent as in Western Europe—the numismatic database of the Israel Antiquities Authority is a notable exception. As such, hoards continue to be the most important basis for a large-scale or diachronic analysis of coin finds there [23]. This circumstance inevitably influences the application of theories and methodologies in the study of ancient coins.

Despite the gradual approximation of the study of coin finds to archaeological field research in recent years (see the summary of the status quo in [24] [5]), the focus of numismatic research continues to be embedded in a macro-historical approach. Methodologically, this focus comes from a tradition that acknowledges only the economic function of ancient coinage and presents a site’s coin finds in the form of a coin series without taking into account the individual genesis of the material on site (see the discussion on coin series

in [25]). Despite the undisputed gain in knowledge of this conceptual approach, we must be aware that coin series can never reflect the diversity and individuality of the former use of coins, but instead merely project a distorted perspective of past conditions. The idea of producing objective ‘facts’ with scientific-mathematical methods is strongly reminiscent of ‘New Archaeology’. This method has rightly been countered by the fact that the basis for statistically reliable statements on numismatic finds is rarely given. Thus, any compilation of a coin series from the coin finds of a site always represents a selective and artificial construct—a construct that is incapable of depicting the individual dynamics of ancient everyday reality. Instead, a coin series implies a theoretical ideal state consisting of (a) a constant money supply, (b) a constant influx of newly minted money and (c) an even and representative loss of coins. The coin series model negates the different qualities of ancient actions and levels all actions to the same level of meaning. In everyday reality, however, each loss of a coin represents an individual action of an ancient actor of varying significance. The methods of a contextual approach, on the other hand, attempt to precisely answer these questions on the use and function of the objects in certain situations through a holistic, micro-historical view of the archaeological evidence. It is only through the study of coin finds in their former functional contexts or through the study of the archaeological record in which coins are embedded that we can glean how people interacted with objects and the meaning they attached to the coins in certain situations.

Numismatics in its current form is based on two epistemological concepts (Table 2); the first is the understanding embedded in the framework of ancient historical research. Here, coins are analysed by the literary tradition and their economic function. This research looks at the object primarily in its genesis and classification within time and space. The second approach taken by the discipline is linked to archaeology. Here, the object

is examined based on its entire material tradition: the archaeological situation. The depth of archaeological contextualization varies according to the research agenda applied and the authors involved. Most analyses work on a macro-level without detailed consideration of the archaeological context of the individual coin. However, several recent studies have demonstrated that an examination of the individual fate of a coin within the archaeological record brings out a multitude of complex interrelationships with which the object was once interwoven. Exemplary studies for this contextual approach are those on the Roman settlements of Augst [26], Reims [27], Magdalensberg [28], and Rouen [29], the Roman legionary camp of Nijmegen [30], Lattara [31] and the recent edited volumes on coins in an archaeological context [24, 32, 33].

It is no coincidence that the key word ‘context’ has been brought to the fore within numismatics concerning coin finds in recent years, reflecting this recent methodological reorientation—cf. the term ‘context’ in the title of numismatic publications [24, 33]. The context, or archaeological-oriented approach, is to be understood here as the world surrounding the object, with which it stands in a reciprocal relationship (see also the discussion in [34]). Contextual approaches, which strive for a holistic observation of their sources (mostly of a material character), have also been popular within neighbouring disciplines of classical antiquity [21]. This change of perspective tends to lead to a critical re-examination of the hitherto customary questions addressed to the material under study.

People instead of things

In the current research debate, it is necessary to specify the goal to be pursued with contextual numismatics. Do we want to learn more about the objects themselves or more about the interrelationship between objects and people in their former world? Presumably, from the point of view of contextual research, the interest is concentrated around the latter, with a focus on why coins were consciously or unconsciously placed in this or that place, why certain types of coins were selected (and not others), and why coins and, not other objects, were used for the corresponding action. In all these arbitrarily chosen and deliberately theoretically formulated examples from numismatic research, one element clearly emerges as a common interest: human action (in the definition according to Max Weber as a meaningful doing [35]). Accordingly, material culture can be interpreted as the result of active human behaviour towards the environment, similarly to how modern behavioural biology describes human behaviour, namely in relation to its consequences [36]. Should we therefore define the study of

Table 2 Schematic and simplified representation of the different concepts in the study of ancient (Roman) coins (without taking into account the iconographic and philological approach)

	Ancient history	Archaeology	
Source	collection coins	coin finds	coin finds
Focus	written source	archaeological feature	archaeological feature
Method	macro-historical	macro-historical	micro-historical
Approach	monetary history	coin finds	contextual numismatics

‘the human use of coins in individual situations’ as the main goal of context-oriented numismatics? Shifting the perspective from the object as the individual thing to the human users in order to better understand the objects in their mutual relation to the human actors could give important impulses to numismatic research (for recent trends of symmetrical and post-humanist archaeology which look beyond the human/thing dichotomy and beyond humans as subjects to a more expansive view of beings in the world, see [37, 38]).

In Anglo-Saxon archaeology, under the influence of sociological and anthropological models, there has been an increased research focus on humans and their conscious and unconscious choices of action combined with their visibility within the archaeological record. The heterogeneous approaches in explaining the overall phenomenon as well as the different methods of research are summarised under the umbrella term ‘agency’ [39–41]. The various approaches all aim to determine how individual human agency is embedded within the overall structure and how structure and agency hinder or influence each other, or even whether they each actively shape the other. This methodological approach also assumes that the objects under examination should not be understood merely as passive elements only charged with meaning through the use of humans, but rather emphasises the active role that objects can take on humans, depending on the context [42]. The emphasis on humans as social beings in their social relationships and roles forms the basis for the relationship between agency and structure [39, 43].

For practical application in archaeology, in addition to the study of social relations, it has also proven advantageous to place the individual moment of action at the centre of the investigation. This gives a micro-perspective view of the acting individual’s special significance because only based on such a perspective can individual choices of action, and possibly situation-related human perceptions, be detected. For contextual numismatics, this theoretical discussion and its practical application is of great use, given that it shows which path leads closer to the former users; their individual usage of the objects; and the dynamics of the reciprocal relationship between thing and person (for a comparable approach in anthropological ceramics studies, see the case studies in [44]). A critical engagement with numismatics along the lines of agency also helps raise awareness of the imbalance of the methodological approach to the material. The construction of antiquity in numismatic research, whether in the ancient historical tradition or with the current archaeological reference, is guided by an unconscious structuralist understanding of the system. The model of ancient monetary circulation is a prime example of such

a scientific understanding of a structuralist character. By elaborating abstract mechanisms that may condition a circulation in selected time and space, a structure is placed relatively uncritically above people and their actions as individuals and co-producers of structures (cf. a conceptual similar critique already in [45]). In this scenario, the human as an individual actor no longer actively appears in the studies themselves. To stay with the example of monetary circulation, one explanation for this can be found in the practice of processing coin finds. As already mentioned at the beginning, the current perspective of numismatics in dealing with coin finds lies predominantly in the macroscopic level, which does not illuminate the individual situation of human action. As such, even small-scale studies of individual sites with good archaeological documentation result in the identification of structures rather than the elaboration of the results of individual actions.

The perception of ancient coins exclusively as money—in the sense of modern Western economic-monetary function—also contributes to this predicament, given that in general contemporary thinking, the (inherent) dynamics of monetary transactions are considered to depend on the structural factors of the market and less on the individual. This view is further reinforced by the appropriation of an understanding of historical processes as events over long time frames (the long duration of archaeological quasi-events could be described, with Paul Ricoeur, as a cinematographic time-lapse effect, see [46]). In such a view, the many individual moments of the circulation of coins are amalgamated into one event, even though in reality they could have extended over several decades. This understanding of a long duration of historical moments as one event is predestined to promote a structural understanding. Under these conditions, the study of the material takes place in a cycle that has a significant influence on the cognitive possibilities of the discipline. The heuristic method of ‘comparing hoards’ is a suitable example to show further implications of a structural understanding of the system. In this approach, hypotheses regarding the overall concept of the circulation of money in the past are based on individual parts (basically individual ‘hoards’) of the former wholeness, while being aware that only a fraction of the former wholeness is available for interpretation. All interpretations, however, are based exclusively on a representative sample, which, in turn, is constituted anew in every situation: with every new addition of material, every new excavation, and every new find. The common belief that the whole system can nevertheless be understood and explained only if the individual components are well-known and sufficiently available reflects a distinctly reductionist understanding. Apart from that, structurally

entrenched ideas, such as the supposedly exact knowledge of ancient monetary circulation or its construction, are mostly indebted to a modern Western, economically influenced way of thinking, leading to a field of investigation that does not reflect the significance of the past reality and its people. Monetary circulation, minting sequences, dating, etc. are areas of research ascribed to the material culture. For the ancient users and their cultural, social and mental context, questions about the minting sequence or the dating of coins are probably not of particular interest—if the average ancient users of coins ever thought about these questions at all. For us, on the other hand, these questions, even though their content is embedded in the modern intellectual culture of our present, provide access to examine the past.

A focus on the interaction between people and objects would be particularly appropriate due to several factors. Hardly any other archaeological evidence has such a polysemous character as coins due to their intertwined textual, pictorial and material nature. The multi-layered facets of materiality similarly provide many possibilities for variation in the human use and handling of these objects. Ways in which human actions and thoughts can be studied in relation to their material environment have already been demonstrated in neighbouring disciplines. Historical anthropology, for example, offers many starting points for an intensive examination from the perspective of contextual numismatics, despite its emergence primarily from research into the early modern period, resulting in a completely different development and quality of its source material, namely predominantly written sources.

In historical anthropology, humans as actors with their own actions and thoughts are the centre of historical investigation, not a subjectless process or structural analysis (for an overview, see [47, 48]). Analogous to the context-oriented archaeology of agency due to the different informative value of the sources on humans as social beings, the micro-level comes to the fore rather than the macroscopic perspective. Events on a small scale and individual situations with a view ‘from below’ (on this especially [49]), rather than structural historical overall developments, are the focus to correct the blindness of historical science for the subjective actor of history. However, historical anthropology has also recognised that it would lose its cognitive capacity if the gaze were to remain focused exclusively on individual sections of the whole without consideration of the system as a whole and the constructional character of its own work was not constantly critically reflected upon [50]. The ways of forming a synthesis between micro- and macro-perspectives without explaining the other—yet understanding and using them accordingly as a juxtaposition of

heterogeneous sources (on this the observations for landscape archaeology, see [51])—should be of use to contextual numismatics in the further development of its own methods (for the linking of the methodological approach of historical anthropology with archaeological fieldwork, see [52]).

Practical application

If one wants to follow contextual numismatics with the objective defined here, one must remember within which framework one wants to gain knowledge in the first place. Contextual numismatics, especially, as a part of archaeology, should be aware of its possibilities and limitations. It is tempting to construct a meaning sense of the sources in the past life-world through supposedly objective and empirically interpretable finds. Yet, how do we know whether contexts functioned and made sense during their creation in the same way we recognise them in the present? Historical scholarship has recognised the danger that, throughout historically-oriented disciplines, sources (in our case the material culture) are viewed in their context as if they make sense in this constellation in the contemporary now [53]. Why is it that we are tempted to subsequently project meaningful behaviour onto a context potentially devoid of meaning, caused by arbitrary, or downright senseless human action? Of course, we can only recognise the consequences of meaningful (i.e. as the result of a mental process caused) and regular human action within the archaeological record. Because of this, we are forced to interweave two reference systems to interpret past dynamics based on the static finds: past dynamic human action and existing static archaeological evidence. In addition, human thinking tends to involuntarily recognise patterns and regularities in the surrounding world, even when they are merely the result of coincidence [54]. Thus, the potential for misinterpreting regularities of the evidence, and consequently of human action, is obvious. The outcome depends directly on the methods used to determine whether the occurrence of coins in certain contexts may be interpreted as a regular phenomenon or not.

The question raised by Matthias Pfisterer, based on a concrete example, aims in the same direction; namely, whether coins in hoards that deviate typologically from the overall structure of a hoard due to their nominal composition and chronology are to be understood as a special phenomenon [55]. Pfisterer interprets the pattern of Roman-period ‘irrationally composed hoards’ produced by human behaviour analogous to the contemporaneous rite of giving coins to the dead. By placing humans (as actors) and their mental processes at the centre of the study, Pfisterer hints at the potential of cultural anthropological approaches for numismatics. The

frame of reference of his interdisciplinary study, however, does not reflect the level of the contextual archaeological approach but rather starts from a macroscopic-comparative point of view, similar to numismatic hoard studies. This robs the collected evidence of further significance. It becomes apparent that the choice of perspective, whether micro or macro, decisively influences the possibilities of gaining knowledge.

With the emphasis on material culture as a result of (and part of) human activity, the numismatic canon of methods could prosperously expand to include the paradigms of contemporary archaeology. So far, however, even in contextual approaches, assignments, premises and assumptions are applied without their relevance to the epistemological framework of contextual numismatics critically questioned. To do justice to the primary objective and gain knowledge of the meaning and use of coins in human activity, numismatics needs a methodologically adequate definition and systematics of its sources. It is doubtful that the common concepts of 'treasure', 'hoard' or 'purse' including their definitions and patterns of meaning meet the requirements of contextual numismatics. In numismatic research, these categories are commonly understood with reference directly to the supposed 'precisely definable' former functional context. A find of coins defined as a 'purse', for example, conveys the former function of the coins as purse content. The same applies to treasures and hoards, resulting in the neglect of the individual character of the archaeological record as the core. The conventional naming of coin finds directly according to their former function is based on a predefined interpretation of the context. The individual conditions of a find are set aside in favour of a narrowly defined functional pattern according to which the find is conceptualised. This also includes groups of finds for which, for example, the designation 'banking resource' or 'hoard, which was lost rather than deliberately concealed' is used to create new categories directly related to the supposed functional context (cf. [56]; likewise [57]; against this the objections of [58]; most recently new categories in [59]; with criticism against a construction of an artificial system that never does justice to the former realities, already in [60]).

It is questioned whether it is useful in the interpretation of coin finds to systematise multi-layered past life-world phenomena with the help of recent, uniformly defined schemata, in which the complexity of the former reality is not brought to bear. Many factors are no longer ascertainable today—the former users of the coins who may have chosen them according to their individual needs and possibilities, the micro- and macro-economic background [61], the social conditions and the respective historical and intellectual-cultural constraints in the use

of the objects, etc.—which warn against an overly simple and template-like interpretation of ancient circumstances by modern observers [62]. The conventional terms also evoke an exact knowledge of the former intention in dealing with the coins. A 'treasure' or 'hoard' is usually considered to have been intentionally deposited—whether with ritual or economic function and irrespective of a reversible or irreversible intention—while purses, on the other hand, are mostly considered to be unintentional losses. Through this simplistic representation, the complexity of the real world is reduced to a canonical system [63]. By applying these conventional concepts, the state of the archaeological record as it 'is' per se is modified before interpretation, reducing multi-layered phenomena into unambiguous categories. Implicitly, this method endows the archaeological record, which is roughly interpreted, with the illusion of a true reality 'as it was.' This, however, is a contradiction (in the same direction of thrust is the demand for a contextual-oriented approach in the study of hoards, as argued in [64–66]). The genesis of the models 'treasure', 'hoard' or 'purse' is rooted in a numismatic tradition without direct archaeological reference to the objects. Within this framework, they have insofar proved to be useful tools. For contextual numismatics, which aims to be 'objective' research on the 'use of coins by ancient humans in certain situations', these concepts will not suffice.

Referring to the archaeological record exclusively in its contemporary preserved state offers a way to avoid using the concepts of 'treasure', 'hoard' and the like while still discussing the former function and use of numismatic objects. Similar demands for a consistently context-oriented archaeology have been formulated in Classical Archaeology [67, 68], which mostly adheres to a canon of methods similar to numismatics. Due to the character of coins and their manifold uses and functions for humans, a method must be applied that is as neutral as possible. For example, numismatic finds could be described neutrally according to the nature of the present find situation rather than their supposed former functionality (with a theoretical extension to the interpretation of finds as a dynamic process [69]) to overcome the methodological limitations of the narrowly predefined categorization described above (for a wider entire discussion on deductive reasoning and categorization, see [70–73]). The description and definition should thus be exclusively based on the condition of the archaeological record created in the past as the 'most objective' criterion of all distinguishing features. In this way, those numismatic finds for which the archaeological evidence cannot provide information about the source character are distinguished from those for which the archaeological evidence can—a similar line of argumentation for the definition of finds

via the elaboration of an archaeological pattern has been presented in prehistoric archaeology [74]. The aim is to determine whether or not the find situation can reveal former actions and the way people dealt with the objects. The criterion for assigning a definition thus shifts from the functional interpretation of the find to the general possibility of knowledge about a find. The archaeological interpretation of the respective find circumstances and the find conditions of the corresponding coins and their numismatic interpretation in their monetary history and context form the decisive indications for the classification. In this approach, the find spot, specific to each object, and the potential relationship between place and thing will characterise the interpretation, providing information about the source character (for further studies of context and associated finds, see [75–77]).

The inability to differentiate between objects that were lost by chance in the past and those that have no clues to their former functional context (this phenomenon was introduced into the numismatic discussion by [78]) based on the archaeological record legitimises the methodological approach presented here. For this purpose, the inability to distinguish between losses and coins whose finding situation simply cannot be defined in more detail must be made clear. In numismatic research, the latter group is generally subsumed as accidental losses ('single finds') in opposition to once intentionally deposited coins [79]. Such a tendential interpretation, however, neglects the possibility of considering coins with sparse or missing archaeological information as potential secondary deposits from originally different source categories (the idea discussed for the first time in [80]). Even if the heterogeneous character of these finds remains an insurmountable obstacle for methodological reasons, the internal differentiation of the sources can be reduced to two qualitatively different aspects with the archaeological record as the only criterion. Using the presented method, contextual numismatic research, all the information observed in the archaeological record would be decisive, since it reveals in which way and milieu the object(s) in question originally arrived at the site of their recent discovery (for a critique of the often unreflective interpretation of actions and the negation of individual patterns of explanation, see already [81]).

Since the record is raised to the standard for the attribution of the coins, the perspective shifts to a micro level, both temporally and spatially. The individuality of the archaeological record, as opposed to the narrow meaning of concepts such as 'treasure', 'hoard' and 'purse', will inevitably result in a more critical interpretation of the find, inching closer to the former users and their individual use of money, coinage and its function. Such an objective must inevitably lead to a contextual approach

to the material. Even if in some cases it is not possible to clarify the circumstances of loss or deposition, one fact is clear: the coins found at a site must not be categorized simply as exclusively the result of an unintentional loss. A cautionary example is the recent, pioneering detailed study of Iron Age sites in Britain and southern Germany by Colin Haselgrove and Leo Webley. After reviewing the archaeological contexts, the two authors reconstructed structured deposition in the broadest sense [82, 83] with a potentially high proportion of depositions with ritual meaning [84]. In unclear or insufficiently informative find situations, the archaeological record may not reflect the final context of use or intention of ancient users, but rather a subsequent situation due to the archaeological process [85, 86].

Summary

Turning numismatic research towards people and their actions in connection with coins, instead of focusing on the individual object itself, is the goal of context-oriented numismatics. In this way, insights into the individual handling and use of coins are gained beyond a structural understanding of the system. Through this model, the diversity of human ideas and actions are revealed without perpetuating the use of models such as 'treasure', 'hoard', etc., which do not actually correspond to the dynamics of life (with reference to the model of object biography, the discussion of the individual dynamics of life ('drama') using the example of the Portesham mirror in [87]). Ethnographic observations of modern Western-European coinage concepts in opposition to the Western understanding of these objects, even in recent non-Western cultures [88], show the danger of reducing ancient coins one-sidedly to the materialisation of an economic value and neglecting the polysemic, non-economic character in the interpretation.

In the process, the micro-level inevitably becomes the numismatist's workbench. In the application of contextual numismatics, research will become more aware of the fragmentation of the possibilities of interpretation due to the increasingly methodological selection of sources. The selection of sources inevitably leads to uneven qualities of the same, which, in turn, cannot be used for comparison on a common level. The more the field of observation is narrowed, the less the micro-evidence is comparable with each other. We will have to find ways to resolve this fundamental disagreement regarding the possibility of knowledge. In the future, studies based on contextual numismatics will show the best form such singular evidence can be reproduced. The narrative-descriptive style, in the sense of a 'thick description', has recently found favour again in archaeology to accentuate humans, their feelings and their actions related to

their surrounding world and material culture (cf. on this approach in classical archaeology [89, 90]).

The archaeology-oriented, contextual approach has already revealed many positive perspectives. As we move forward, only intensive studies of the archaeological record will take us further to learn more about coin finds and the function of the objects (for the discussion, see [85, 91]). The present thoughts aim to contribute to this development and serve as an impulse for the self-discovery of the contextual approach in numismatics.

Acknowledgements

I would like to thank Klaus Kortüm (Esslingen), Franziska Lang (Darmstadt) and Birgit Öhlinger (Innsbruck) for comments and remarks on earlier versions of this paper. Finally, my thanks go to Elena Robakiewicz for improving my English.

Author contributions

S.K. is the sole author of this paper. S.K. wrote the main manuscript text and reviewed the manuscript.

Funding

Open Access funding enabled and organized by Projekt DEAL. This work was funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation)—SFB 1391—Project-ID 4056627366. We also acknowledge support from the Open Access Publication Fund of the University of Tübingen.

Availability of data and materials

Not applicable.

Declarations

Competing interests

The author has no competing interests to declare that are relevant to the content of this article.

Received: 28 July 2023 Accepted: 4 November 2023

Published online: 05 December 2023

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