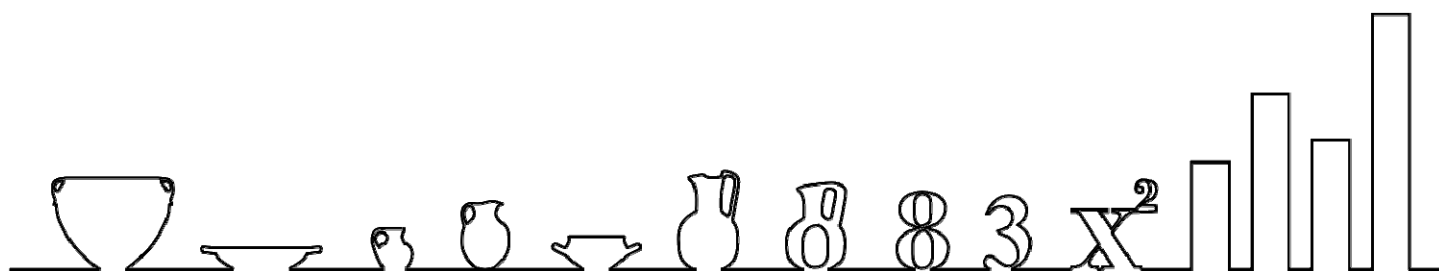# Early Iron Age Pottery:
A Quantitative Approach

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POTTERY QUANTIFICATION: SOME GUIDELINES

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FOREWORD

The following pages provide a number of elementary principles and additional recommendations concerning pottery quantification.[1] The main objective of the Athens Round Table was to elaborate a set of common practices in this field. It emerged from many discussions we had that there is no single quantification method for the time being that all researchers can adhere to. There was, however, unanimous approval for coming up with guidelines that would serve as a working basis. Bearing this in mind, we therefore recommend 1) a minimal quantification method to be implemented systematically and 2) two more elaborate methods to choose from: EVE (estimated vessel equivalent) and MNI (minimal number of individuals). Both methods are explained with a discussion on how and when they should be applied and close comparison of their respective advantages and drawbacks. This document is intended to be simple and concise in its form. It provides useful information and basic working tools.

Quantifying pottery is a multi-stage process which will be discussed in the following order:
1. Selection of assemblages
2. Classification
3. Basic quantification (sherds count)
4. Elaborate quantification methods: EVE and MNI
5. Presentation of quantified data.

1. SELECTION OF ASSEMBLAGES

In principle, quantification can be used for any assemblage of ceramics. As part of the process of recording excavation data, no specific restrictions are necessary. However, experience shows that counting (or measuring) ceramics is a long and painstaking task which cannot always be carried out systematically. Furthermore, quantification just for the sake of quantifying does not make any sense. The whole process is justified when it can provide answers to clearly defined questions. Hence the purpose of conducting a quantitative analysis should be questioned according to the archaeological context and abandoned, perhaps, if the initial conditions (materials and context) are not conducive.

A selection of the ceramic assemblages to be examined has to be made according to the means available and the general orientation of the research. The reliability of the observations and interpretations depends largely on the **quantity of pottery** taken into account. It is, however, difficult to fix an absolute limit below which ceramic quantification should not be carried out, as it varies in scale according to the archaeological context (a monument, a site, a region).[2] Nevertheless, the analysis ought to be based on the largest possible samples. Besides, when possible, it is considered good practice to compare similar-sized assemblages.

A ceramic assemblage is also assessed from a qualitative point of view. First, it depends on the **archaeological context:** an assemblage from a closed deposit, such as a rubbish pit, will probably provide more information than another from a fill layer. Moreover, the **homogeneity** of the materials is equally important: a chronologically homogenous assemblage is likely to yield more significant results than another with numerous residual pieces or later intrusions. Finally, **excavation methods** must also be taken into consideration: were archaeological layers carefully or arbitrary excavated? Were sherds recovered *in situ* or by sifting? These are questions that certainly ought to be addressed. Particular caution is recommended when dealing with assemblages from past excavations, when a significant number of potsherds discovered was often discarded.

The principles listed above refer to an ideal scenario where large assemblages are recovered from well-defined contexts. However, more often than not, researchers have to deal with less. In any case, it is essential to assess the quality of the sample and of its context of discovery and to describe it clearly when it comes to present the quantified data (see below).

2. CLASSIFICATION

Sorting pottery is a prerequisite in any quantification study. This stage shall be taken up to a more or less advanced degree depending on several factors, such as the state of preservation of the material, the existence of a well-defined typology, the available time or the level of expertise.[3] Equally decisive are the quantification method

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[1] These guidelines are based on the outcome of the Round Table which took place in Athens in 2008. An initial version was submitted to the participants; this edition includes their corrections. This document owes a lot to the protocol published in the proceedings of the Round Table organized by the 'Centre archéologique européen du Mont Beuvray' in 1998 (Arcelin and Tuffreau-Libre 1998, 141–157).

[2] Statistically, however, data collected below a certain threshold of relevance will not yield significant results.

[3] The workforce carrying out the sorting and counting is crucial. The reliability of the data relies on them. It would be utopian to work out data-recording systems which could be used by anyone. Ceramic work requires minimal training, involving practical experience of handling material. Nevertheless the clearer and well-structured a data-recording system is, the better the staff will be trained to collect the data.

to be used and the issues to be tackled. The classification will then have an influence on the way quantified data are presented in publications.

Usually, the levels of classification, which correspond to successive sorting stages, are defined as follows:
1. Categories of pottery (fine painted ware, coarse hand-made ware, etc.)
2. Large families of vases (small open, large closed, etc.)
3. Shapes (plates, cups, kraters, etc.)
4. Types
5. Decoration.

During the first stage (categories), it is probably better to avoid designations referring to specific functions, such as drinking or serving vessels. Vases can be sorted through according to their use at a later stage on the basis of their categories and shapes.

The use of a standardized terminology is needed as often as possible. It is not our primary concern to provide here an exhaustive multilingual lexicon of Greek pottery. However, for purposes of clarity and ease of reference, a basic glossary covering categories and shapes is included in appendix.[4]

3. BASIC QUANTIFICATION

First of all, we recommend the systematic application of an elementary quantification method, i.e. the counting of all sherds (hence a **Number of Remains**, 'NR').[5]

It is important to stress that sherd counting must be made **before mending**. For the sake of efficiency, every fragment must be counted, including those resulting from recent breakage, although the tiniest bits may be discarded.[6] A basic sherd count gives an immediate idea about the state of preservation and the composition of the finds.

At this stage, the preliminary sorting of sherds can be more or less detailed. If the aim is to obtain a rapid overall picture of the assemblages, fragments can be simply sorted through according to categories and families of vases.[7] If a more elaborate quantification analysis (EVE, MNI) is planned, the classification can be extended to shapes, types and decoration. For the sake of time, basic NR counting and more elaborate MNI or EVE counting (or measuring) can be carried out simultaneously (see below).

Some researchers also recommend weighing the pottery which gives a better idea of the quantity of pottery when combined with sherd count. However, this operation can be time-consuming and in the end it provides limited information. We therefore suggest that the pottery be weighed only if necessary and only after it has been sorted into categories.[8]

Moreover, a useful practice to document the assemblages consist in taking overall pictures of the potsherds. It gives a broader idea of the quantity and state of preservation of the pottery and provides a useful supplement to the counting stage. Although these photographs may not necessarily be part of the publication, they offer reliable evidence that remain accessible in the documentation.

4. ELABORATE QUANTIFICATION METHODS: EVE AND MNI

Two methods are commonly suggested for ceramic quantification, EVE (estimated vessel equivalent) and MNI (minimal number of individuals). Since there is no common agreement among the researchers about which of these methods should be preferred, both of them are succinctly presented here. Their respective advantages, drawbacks and specific field of application are also discussed. Several criteria determine the choice of one of these methods, such as the material itself, its state of preservation, its uniformity or conversely its diversity (e.g. repetitive or varied decoration), the resources available (e.g. time, workforce), as well as the degree of details expected from the results, in order to answer the initial question.

EVE

There are several ways of obtaining the EVE, but the most commonly used involves measuring the arcs of selected parts of vases. Rims are usually measured ('**rimEVE**') but depending on the kind of pottery bases can also be measured ('baseEVE'), or even both together ('rim/baseEVE'). This method is relatively straightforward. It is explained in easily accessible publications and therefore only requires a brief presentation here.[9]

Arcs are measured in degrees on a rim-chart (Fig. 1–2). Bearing in mind that a complete rim measures 360°, we obtain the rimEVE by dividing measurements by 360.[10] Results should be presented in fractions rather than degrees or percentages, although the information is basically identical (Fig. 3).

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[4] Several projects on EIA ceramics, which aim at creating multilingual thesauri, are currently in progress.
[5] NR quantification gives a very distorted picture of the original ceramic 'population'. The flaws of this method have been reported elsewhere (Orton *et al.* 1993, 169). In practice, however, NR method is still widely used.
[6] Arcelin and Tuffreau-Libre 1998, VII. If breakage rate is a central issue in order to understand deposition factors, fresh breaks should not be taken into account, although experience shows that it has little effect on the results. Whatever is decided, the solution adopted must be applied uniformly and explained in the description of the quantification method.
[7] The identification of a vase, however, tends to remain conjectural until all its fragmented pieces are put together.

[8] We have noticed that not only the weighing but also the recording of results is time-consuming. These operations can be limited to a strict minimum if sherds are only weighed once sorted into categories.
[9] Orton 1975; Orton *et al.* 1993, 172–173.
[10] Or by 720° when rim and base measurements are combined (rim/baseEVE).

Category	Shape	Type	Rim Decoration	Body Decoration	Rim	Body	Base	Handle	Rim arcs	NR
Fine Painted	Plate	-	-	leaves		1			0	1
	Lekanis	1	vert. lines	vert. lines	3			1	130	4
		3	vert. lines	vert. lines	3				56	3
		4	vert. lines	vert. lines	3	5	2		214	10
		4	horiz. lines	?	1			1	48	2
		-	-	-				1	0	2
	Cup	1	monochrome	monochrome	42	13		5	2044	60
		1	vert. lines	vert. lines	2	2	2		326	6
		2	monochrome	monochrome	8	8	1	2	436	19
		2	vert. lines	vert. lines	10	5		3	284	18
		-	-	-				16	0	16
	Skyphos	2	horiz. lines	bird	6	5	1	3	312	15
		2	horiz. lines	chevrons	2	3	1	1	165	7
		2	horiz. lines	?	10	2		1	434	13
		2	monochrome	horiz. lines	1				28	1
		2	monochrome	?	3	2			104	5
		3	monochrome	monochrome	14				441	14
		3	monochrome	vert. lines	3	4	1	3	82	11
		3	monochrome	?	2				86	2
		4	monochrome	pendent semicircles	2		1		292	3
		8	horiz. lines	?	8	7		1	228	16
		8	dots	meander	2	5			190	7
		8	dots	?	7				158	7
		8	concentr. circles	?	2	1			86	3
		-	-	-				17	0	17
	Kantharos	2	horiz. lines	wheel	2	3		1	52	6
		2	horiz. lines	?	2				64	2
		4	horiz. lines	vert. lines	2	1			30	3
		4	dots	?	3				30	3
		-	-	-				3	0	3
	Skyphos/Kantharos	-	-	bird		1			0	1
		-	-	bird		1			0	1
		-	-	meander		3			0	3
		-	-	wheel		4		1	0	5
	small open	-	-	-		316	78		0	454
	Krater	3	monochrome	?		2			36	2
		3	horiz. lines	?		1			22	1
		3	dots	?		1			22	1
		-	-	meander		6			0	6
		-	-	concentr. circles		1			0	1
		-	-	-		42	1		0	43
	Jug	5	horiz. lines	?	1	1			270	2
	Cut-away neck Jug	1	horiz. lines	-		1	10	1	30	12
		2	monochrome	-		1			0	1
	Trefoil Jug	2	monochrome	-	3				160	3
	Hydria	4	-	-	1				30	1
	Amphora	5a	monochrome	?	5	6			310	11
	small closed	-	-	-		186	2	4	0	192
	large closed	-	-	-		21	9	5	0	35
Semi fine	Amphora	-	-	horiz. lines		25		4	0	29
Coarse	Pot	1	-	-	40				1608	40
		2	-	-	1				50	1
		3	-	-	1				70	1
	Basin	1	-	-	3				122	3
		2	-	-	6				68	6
	?	-	-	-		546	15	5	0	566

Fig. 1: Example of a pottery inventory sheet of an archaeological unit (rimEVE method)
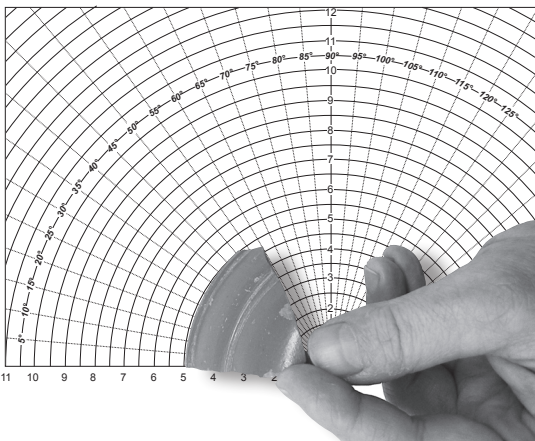
Fig. 2: measuring rimEVE with a chart in degree

Shape (Fine painted)	NR	NR%	rimEVE	rimEVE%
Plate	1	0.1%	0	0%
Lekanis	21	2%	1.24	6.2%
Cup	119	11.3%	8.58	42.9%
Skyphos	121	11.5%	7.24	36.2%
Kantharos	17	1.6%	0.49	2.4%
Skyphos/Kantharos	10	0.9%	0	0%
small open	454	43.1%	0	0%
Krater	54	5.1%	0.22	1.1%
Jug	2	0.2%	0.75	3.8%
Cut-away neck Jug	13	1.2%	0.08	0.4%
Trefoil Jug	3	0.3%	0.44	2.2%
Hydria	1	0.1%	0.08	0.4%
Amphora	11	1%	0.86	4.3%
small closed	192	18.2%	0	0%
large closed	35	3.3%	0	0%
total	1054	100%	20	100%

Fig. 3: Summary table of rimEVE by shapes

MNI

The MNI method requires a more detailed explanation. Variations in the calculation of the MNI obviously impede data coherence and we therefore advocate standardizing practices on the basis of the 1998 Bibracte Protocol.[11] Here is an opportunity to reach a wider audience by publishing an English summary of the key points of this document initially written in French. The principles to apply when using the MNI system are the following:

Counting
– Counting should be carried out after mending together (or grouping) a maximum of fragments, in order to avoid counting the same vase twice.[12]
– At this stage, not only rims and complete profiles, but also bases, handles, and even bodies should be mended before counting. Decorated bodies must be counted after mending, since the counting is used to establish the number of occurrences of patterns (see below). In practice, however, since it is often impossible to mend body fragments without decoration, they are counted without mending. This has no influence on the MNI calculation or on the NR results since the latter is counted during a separate operation.
– The total number of potsherds (to obtain the NR) and the number of different items after mending (to obtain the MNI) can be counted at the same time in order to speed the process (Fig. 4).

Calculation of the MNI
As opposed to the NR, which is the result of a basic count, the method to calculate the MNI follows a number of specific rules:
– In theory, the MNI is worked out from the number of different rims and bases. The higher of the two totals is added to the number of complete profiles (which have both rim and base).[13]
– In practice, however, only rims are usually taken into account (and added to the complete profiles),[14] based on the fact that only these elements allow the most comprehensive identification.[15] In large assemblages, this restriction has little impact on the result as the number of rims and bases tends to even itself out.
– It is necessary to apply a '**compensation by 1**' to credit a category or shape which is only represented by body fragments with an existence.[16] A category or shape represented by one or several body fragments thus counts as 1. Several body fragments count as 1, even if their type or decoration indicate that they do not belong to the same vase (Fig. 5). Type and decoration are taken into consideration later in the quantification process (see below 'typological number of individuals' or TNI and 'number of occurrences' or NO).

Data aggregation
– Counts from several excavation units are often added up (for instance when studying the material from a whole phase or from a large area). If mending has not been carried out between the excavation units, what is added up is not the number of different rims but the sum of MNI. To avoid confusion, it is indicated with an asterisk (MNI*).[17]
– In this case, compensations are not added up: compensation is re-calculated after data aggregation.[18]

Extensions of the MNI system
– If typological or decorative criteria are to be taken into consideration, a more elaborate quantification method must be employed. All potsherds which can be singled out thanks to specific criteria will count as individuals. The result is an 'enhanced' number of individuals referred to as the '**typological number of individuals**' (TNI, Fig. 6).[19]
– For a detailed account of decoration patterns, the '**number of occurrences**' (NO) can eventually be recorded. Each occurence of a pattern counts as '1', regardless of which part of the vase is concerned (Fig. 7).

The MNI method allows the archaeologist for a degree of freedom in its application. Nevertheless, it has to be used uniformly and rigorously to allow comparison between assemblages from different sites.

EVE or MNI?

The EVE and the MNI methods are two relatively different quantification approaches. The former refers to measuring ('how much pottery?'), the latter to counting ('how many vases?').[20] Their advantages and drawbacks can be assessed from several criteria:

Differentiation: EVE is especially suitable for dealing with undifferentiated pottery. In this case, the MNI is problematic since the grouping of fragments belonging to clearly identifiable 'individuals' is difficult to achieve. There is therefore a high probability of counting the same individual several times, a drawback which can be avoided with EVE since each fragment is measured only once. On the other hand, the MNI is useful when dealing with clearly dissimilar pottery, whose types and decoration can be easily discriminated.

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[11] Arcelin and Tuffreau-Libre 1998, 141–157, numbered I–XVII.
[12] *Id.*, VII. The mended sherds as well as all the fragments that can be attributed with certainty to the same artefact based on the fabric (clay, glaze), the morphology (thickness, profile, diameter) and the decoration are counted as a single 'individual'. This is an obvious weak point of the MNI method, because the grouping of fragments is not only dependent on the subjectivity and expertise of the archaeologist but also on the characteristics of the material, since it is often easier to group or mend fragments belonging to a decorated vase than to a plain one.
[13] *Ibid.*
[14] *Id.*, VIII.
[15] For instance, small open vases such as cups, skyphos, kantharos and kotyles of the Geometric period have similar bases whereas the shape of their lips are quite often different.
[16] Arcelin and Tuffreau-Libre 1998, XI.
[17] *Id.*, IX.
[18] *Id.*, XI. Experience has shown that it is difficult to implement the compensation factor in a computer application to be calculated automatically from a database. It is best added at the last stage when handling data.
[19] *Id.*, XIII-XIV.
[20] See Orton and Tyers 1990, 82–85.

State of preservation: it is sometimes assumed that fragmentary material which cannot be mended easily is therefore not suitable for MNI counting. However, measuring arcs to obtain EVE is also sensitive to the fragmentation of material. The arc is often difficult to calculate for very small fragments and therefore the diameter will not be easy to ascertain. So, on this point, neither method is preferable.

Data aggregation: during analysis, the counts (or measurements) of several excavation units are frequently added together. As we saw before, the sum of several MNI is no longer a MNI in the strict sense.[21] Therefore, the MNI method is sensitive to data aggregation, unlike the EVE.

Body fragments: the EVE method does not include body fragments in the quantification.[22] This is a major concern in relation to rare artefacts, such as imported vessels or uncommon shapes, which may disappear from the quantification if they are only represented by body fragments (i.e. neither rims nor bases). On the contrary, the MNI method can take these rare artefacts into account thanks to the 'compensation by 1' principle. The discard of body fragments in the EVE method also raises serious issues when analysing richly decorated ceramics, since significant patterns are found on body fragments. Here again, the use of TNI or NO methods, which are both extensions of the MNI system (see above), help solve the problem.

Implementation: quantification is a time-consuming process, whatever method is used. Nevertheless, measurements required by EVE, albeit its simplicity, take distinctly longer than MNI counts.

In a nutshell, the EVE method is the most rigorous from a statistical point of view but it is much more tedious to implement than the MNI method. It is advisable to use it for indiscriminate pottery, provided that sufficient resources such as time and trained staff are available. The MNI method, on the other hand, should be used for pottery with rich morphological and decorative variations. It enables a more flexible analysis of these elements than EVE.

5. PRESENTATION AND PUBLICATION OF QUANTIFIED DATA

The way quantification results are presented in publications is crucial. They must be complete, accurate and comprehensive in order to offer the most straightforward access to the data.

One should be careful in providing a few concise information before presenting the figures such as:
– The context of discovery and quality of excavation, the criteria used to select the pottery assemblages and the

relevance of these assemblages to answer the issue at hand.
– The general aspect of the pottery assemblages (relative quantity, level of fragmentation, state of preservation).[23]
– The classification and quantification methods chosen.

These introductory commentaries (or metadata) will give the readers an idea about the quality of the data published.

As mentioned above, we recommend that the basic NR counts be supplied systematically. The most efficient way is to list these figures in front of the results of more elaborate quantification (EVE or MNI, Fig. 3 and 5). When several quantification methods were used simultaneously, it is advisable to publish all the results even though only some of them are used in the analysis.

The various counts are presented in synthetic tables of the data collected. Graphs can be avoided at this stage; they will be more useful later on during the analysis and interpretation of the dataset. Moreover, it is highly recommended that the general presentation of the data and the interpretation based on them constitute two separate parts of the publication.

Two basic principles should be underlined for the tables to be clear and easy to understand:
– Several comprehensible data tables are better than a single cluttered one: by spreading information over a number of well-organized tables, any confusion between different levels of classification (categories, shapes) can be avoided (see tables on Fig. 5).
– If it seems sensible to include percentages within the tables to ease comparison, these should not ultimately replace the actual figures which remain the essential raw data.[24]

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[21] Vases whose fragments have been dispersed over several assemblages are thus counted several times.

[22] Unless they are given a value of zero. This solution can be applied on inventory sheets but becomes a real problem when the data are processed into mathematical operations.

[23] On this point, some general photographs of the material will be a useful supplement.

[24] As a rule, percentages of a corpus inferior to 30 should be avoided.

Category	Shape	Type	Dec. Rim	Dec. Body	NR	Rim	Body	Base	Handle	Profile
Fine Painted	Plate	-	-	leaves	1		1			
	Lekanis	1	vert. lines	vert. lines	4	2				
		3	vert. lines	vert. lines	3	2				
		4	vert. lines	vert. lines	10	1				1
		4	horiz. lines	?	2	1				
		-	-	-	2		1		1	
	Cup	1	monochrome	monochrome	60	32				
		1	vert. lines	vert. lines	6					2
		2	monochrome	monochrome	19	8				1
		2	vert. lines	vert. lines	18	6				
		-	-	-	16				16	
	Skyphos	2	horiz. lines	bird	15	2				1
		2	horiz. lines	chevrons	7					1
		2	horiz. lines	?	13	10			1	
		2	monochrome	horiz. lines	1	1				
		2	monochrome	?	5	3				
		3	monochrome	monochrome	14	10				
		3	monochrome	vert. lines	11	3		1		
		3	monochrome	?	2	2				
		4	monochrome	pendent semicircles	3	2				1
		8	horiz. lines	?	16	5				
		8	dots	meander	7	2				
		8	dots	?	7	6				
		8	concentr. circles	?	3	2				
		-	-	-	17				17	
	Kantharos	2	horiz. lines	wheel	6	1				
		2	horiz. lines	?	2	2				
		4	horiz. lines	vert. lines	3	1				
		4	dots	?	3	2				
		-	-	-	3				3	
	Skyphos/Kantharos	-	-	bird	1		1			
		-	-	bird	1		1			
		-	-	meander	3		3			
		-	-	wheel	5		1		1	
	small open	-	-	-	454		316	78		
	Krater	3	monochrome	?	2	2				
		3	horiz. lines	?	1	1				
		3	dots	?	1	1				
		-	-	meander	6		3			
		-	-	concentr. circles	1		1			
		-	-	-	43		38	1		
	Jug	5	horiz. lines	?	2	1				
	Cut-away neck Jug	1	horiz. lines	-	12	1	5	1		
		2	monochrome	-	1		1			
	Trefoil Jug	2	monochrome	-	3	3				
	Hydria	4	-	-	1	1				
	Amphora	5a	monochrome	?	11	3	3			
	small closed	-	-	-	192		186	1	4	
	large closed	-	-	-	35		21	8	2	
Semi fine	Amphora	-	-	horiz. lines	29		25		4	
Coarse	Pot	1	-	-	40	21				
		2	-	-	1	1				
		3	-	-	1	1				
	Basin	1	-	-	3	2				
		2	-	-	6	2				
	?	-	-	-	566		546	15	5	

Fig. 4: *Example of a pottery inventory sheet of an archaeological unit (MNI method)*
   – for NR, counting is done without mending
   – for MNI, counting is done after careful mending; all fragments belonging to the same vase count for 1

Category	NR	NR%	MNI	MNI%
Fine painted	1054	62%	127	81.9%
Semi fine	29	1.7%	(1)	0.6%
Coarse	617	36.3%	27	17.4%
total	1700	100%	155	100%

'Compensation by 1' is indicated into brackets (1). Reminder: 'compensation by 1' is only applied for categories and shapes (compensation at the shape level affecting the MNI of the corresponding category)

Fine painted

Shape	NR	NR%	MNI	MNI%
Plate	1	0.1%	(1)	0.8%
Lekanis	21	2%	7	5.5%
Cup	119	11.3%	49	38.6%
Skyphos	121	11.5%	51	40.2%
Kantharos	17	1.6%	6	4.7%
Skyphos/Kantharos	10	0.9%	0	0%
small open	454	43.1%	0	0%
Krater	54	5.1%	4	3.1%
Jug	2	0.2%	1	0.8%
Cut-away neck Jug	13	1.2%	1	0.8%
Trefoil Jug	3	0.3%	3	2.4%
Hydria	1	0.1%	1	0.8%
Amphora	11	1%	3	2.4%
small closed	192	18.2%	0	0%
large closed	35	3.3%	0	0%
total	1054	100%	127	100%

In this table, there is no 'compensation by 1' for skyphoi/kantharoi, small open, small closed, large closed and unidentified bodies, since fragments counted under these entries belong to shapes already represented by individuals. In tables showing only MNI (and not NR), these entries do not appear.

Coarse

Shape	NR	NR%	MNI	MNI%
Pot	42	6.8%	23	85.2%
Basin	9	1.5%	4	14.8%
Indet.	566	91.7%	0	0%
total	617	100%	27	100%

Fig. 5: Summary table of NR and MNI by categories and shapes extracted from Fig. 4

Types of jugs

Shape	Type	TNI	NMI
Jug	5	1	1
Cut-away neck Jug	1	1	1
Cut-away neck Jug	2	1	0
Trefoil Jug	2	3	3

For the calculation of TNI, any diagnostic fragments (or groups of fragments) allowing to specify a type are taken into account, not only the rims. As a consequence, the 'compensation by 1' is not needed.

Fig. 6: Typological number of individuals (TNI), extracted from Fig. 4

Decorated skyphoi and kantharoi

Decoration	NO
Vertical lines	4
Horizonzal lines	1
Meander	5
Chevrons	1
Pendent semicircles	3
Bird	5
Wheel	2

Any pattern is counted, be it on isolated body fragments or body fragments attached to a rim.

A pattern appearing several times on the same vase counts for 1 only.

Fig. 7: Number of occurrences (NO), extracted from Fig. 4