THREE LARGE POTTERY GROUPS FROM SAINT-DENIS, A COMPARATIVE APPROACH

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Excavations have been in progress at Saint-Denis (a town situated 7 km to the North of Paris) since the beginning of the urban redevelopment programme in 1973. Since 1977 a full-time team of four, directed by O. Meyer and backed by a permanent group of volunteers, has been carrying out a series of long-term rescue excavations in the medieval town to the north of the royal Basilica.[1]

Although one of the full-time posts is reserved for a Finds Supervisor, the quantity and variety of material excavated over the last 5 years has permitted neither an exhaustive study of the pottery nor its publication, most of our efforts to date being channeled into an efficient recording, conservation and storage of the finds.

With the exception of work by Ken Barton[2] and Jacques Nicourt,[3] "Parisian"-ware has been rarely discussed in the literature. We hope, therefore, that the large quantity of ceramic material discovered at Saint-Denis will substantially increase our understanding of medieval pottery in the Paris area.

We intend to publish elsewhere a potter's kiln and a more complete study of pottery from well-stratified sequences. However, a preliminary examination of the pottery has already allowed us to organise a permanent exhibition in the town Museum where we have stressed the following aspects:

- Technology
- Shape and function
- Decoration
- Typological evolution.

This present article, a limited study originally published in our annual report for 1978, is a methodological approach to certain problems concerning pottery analysis. The re-publication of the work in this journal has provided us with an opportunity to present the more common types of pottery found at Saint-Denis to a wider audience.

We will deal here only with pottery groups since the analysis of any pot considered singly in a group of archaeological material may be misleading. In addition, the dates based upon typological evidence previously proposed for pottery in the Paris area often contradict the stratigraphic evidence at Saint-Denis. Having quantified our data, we shall argue in terms of relationships and distribution whilst attempting to take into account the dynamics of the process by which the remains of a given sociocultural milieu are preserved archaeologically.

Presentation of the archaeological contexts

The three contexts being considered all come from the fills of archaeological features ultimately used as rubbish pits and which date roughly from the end of the 12th century to the beginning of the 14th century.

Group A: (context 11/227) taken from a large funnel-shaped pit perhaps originally intended for the extraction of clay or gypsum.

Group B: (context 12/121) taken from a square-shaped pit of which an alternative original function could not be determined.

Group C: (context 11/218) taken from an abandoned cellar originally well-built in ashlar.
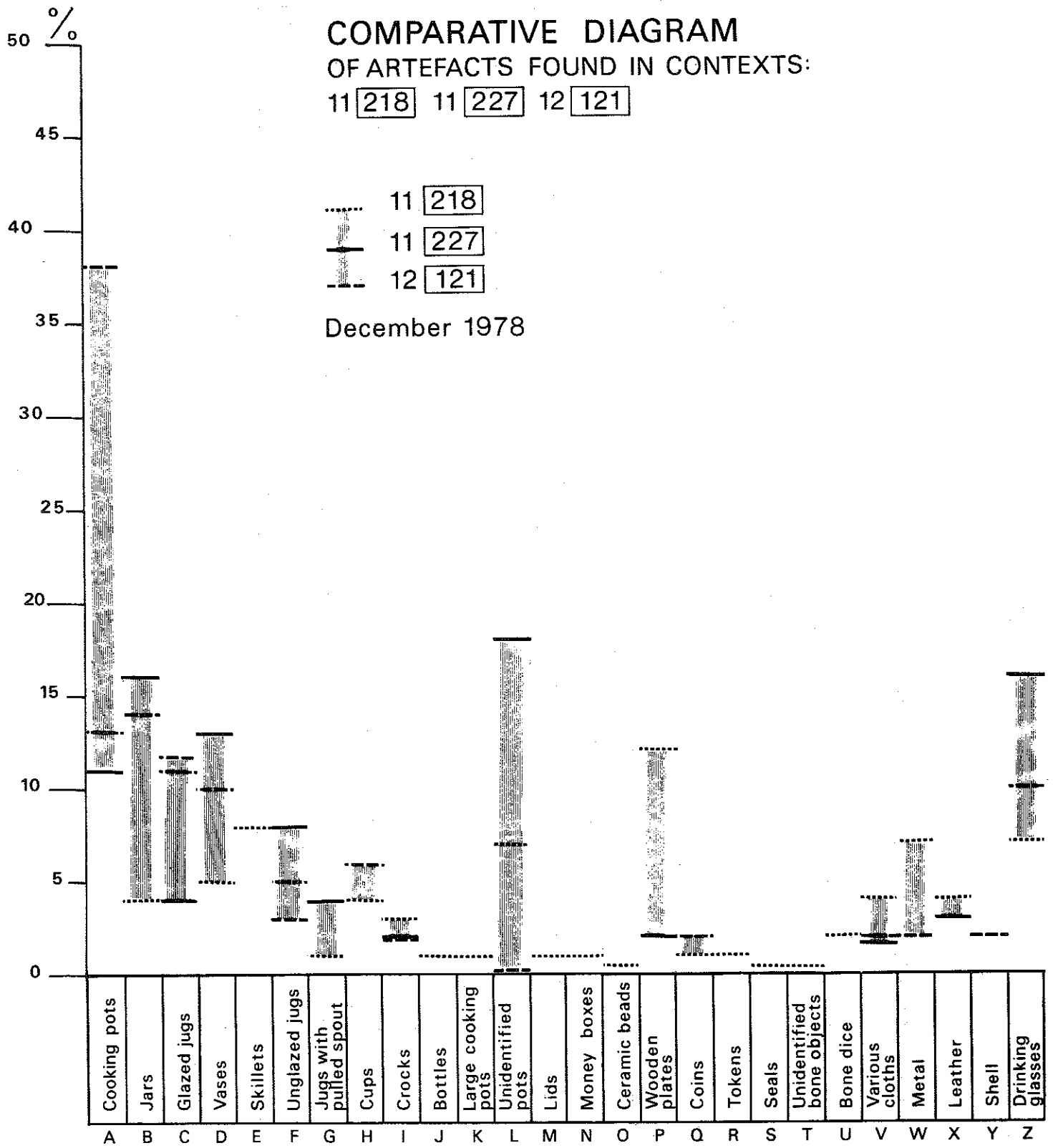
COMPARATIVE DIAGRAM
OF ARTEFACTS FOUND IN CONTEXTS:
11 218 11 227 12 121

11 218
11 227
12 121

December 1978

Fig. 1

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TABLE OF DATA AND CALCULATIONS (Fig. 2)

| Type Reference	Type	GROUP A Number	GROUP A %	GROUP A Relationship to the mean in %	GROUP B Number	GROUP B %	GROUP B Relationship to the mean in %	GROUP-C Number	GROUP-C %	GROUP-C Relationship to the mean in %	A + B + C Number	A + B + C Mean	A + B + C %
	total number of pots	53			51			153			257		
1	Cooking-pots	10	18.86	-8.75	24	47.05	+19.44	37	24.18	-3.43	71	23.66	27.62
2	Glazed jugs	4	7.54	-8.8	7	13.72	-2.62	31	20.26	+3.92	42	14.	16.34
3	Vases	14	26.41	+13.97	6	11.76	-0.68	12	7.84	-4.60	32	10.66	12.44
4	Jars	12	22.64	+10.59	8	15.68	+3.63	11	7.18	;4.87	31	10.33	12.05
5	Skillets	0	0	-8.55	0	0	-8.55	22	14.37	+5.82	22	7.33	8.55
6	Unglazed jugs	6	11.32	+3.55	2	3.92	-3.85	12	7.84	+0.07	20	6.66	7.77
7	Cups	2	3.77	-3.88	3	5.88	-1.77	12	7.84	+0.19	17	5.66	7.65
8	Crocks	1	1.88	-2.39	1	1.96	-2.23	9	5.88	+1.61	11	3.66	4.27
9	Jugs with pulled spout	4	7.54	+5.21	0	0	-2.33	2	1.30	-1.03	6	2.	2.33
10	Bottles	0	0	-1.16	0	0	-1.16	3	1.96	+0.80	3	1.	1.16
11	Large cooking-pot	0	0	-0.77	0	0	-0.77	2	1.30	+0.53	2	0.66	0.77
2+3+7	"Luxury" pottery	20	37.73	+2.33	16	31.37	-4.03	55	35.94	+0.54	91	30.33	35.40
1+4+6+8	"Ordinary" pottery	29	54.71	+2.96	35	68.62	+16.87	69	45.09	-6.66	133	44.33	51.75

Figure 3

No. TYPE	% 11 227 = A	% 12 121 = B	% 11 218 = C
1 Cooking pots (Coquemars) Figs. 4 & 5	Type 1)a: Numerous 18.86% -Hollow pierced handle -Widening neck -Disorganised flame decoration Type 1)b: Rare -Solid handle -Straight neck -Organised flame decoration	Type 1)a: Few examples 47.05% Type 1)b: More than half 24.18% -lower part of the body unglazed	Type 1)a: Absent Type 1)b: The only type present
2 Glazed jugs (Pichets glaçurés) Figs. 6-8 7.54%	-Well pronounced rim -Completely glazed -Very prominent and well-finished applied strips	13.72% -Rim still pronounced -Glaze missing on the base -Same	20.26% -Rim almost running into the neck -Glaze missing on rim, base, handle -Hardly pronounced and badly finished applied strips
3 Vases (Vases) Figs. 9-11 26.41%	"Truncated-cone"-shaped neck -Very globular-bodied -Glaze almost all over	11.76% -Same -Same but less globular-bodied -Same	7.84% -Almost cylindrical neck -Same, even less globular bodied -Lower part of the body unglazed
4 Jars (Oules) Figs. 12-14 22.64%	-Very prominent banded rim -Globular body -disorganised flame decoration	15.68% -Prominent banded rim -Ovoid body -Same	7.18% -Barely pronounced band banded-rim -Ovoid body with a less-curved profile -Absence of decoration

Figure 3 (continued)

| No.	TYPE	% 11 227 = A	% 12 121 = B	% 11 218 = C
5	Skillets (Poêlons) Fig. 15	22.65%	-Absent	14.37% -Numerous
6	Unglazed jugs (Pichets non-glaçurés) Fig. 16	11.32% -Well-pronounced lip	3.92% -Lip still pronounced	7.84% -Lip almost running into the neck
7	Cups (Tasses poly-lobées) Figs. 17-18	3.77% -Irregular-sized lips -Large size	5.88% -More regular-sized lips -Smaller size	7.84% -Same -Same
8	Crocks (Cruches) Fig. 19	1.88% Too small a sample	1.96% Same	5.88% -Two complete examples
9	Jugs with pulled spout (Pichets bec verseur) Figs. 20 1 21	7.54% -Asymmetrical flat handle -"compressed" globular body	0 -Absent	1.3% -Handle with rectangular cross-section -"stretched" ovoid body
10	Bottles (Bouteilles) Fig. 22	0	0 -Absent	1.96% -One example
11	Large cooking pot ("marmite") Fig. 23	0 -Absent	0	1.3% -One example

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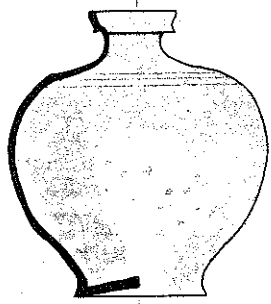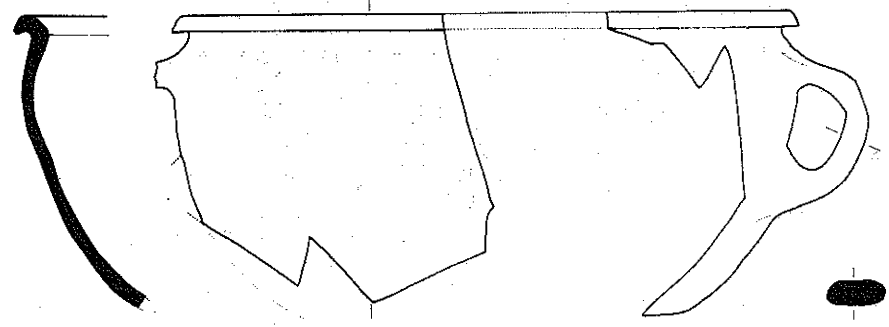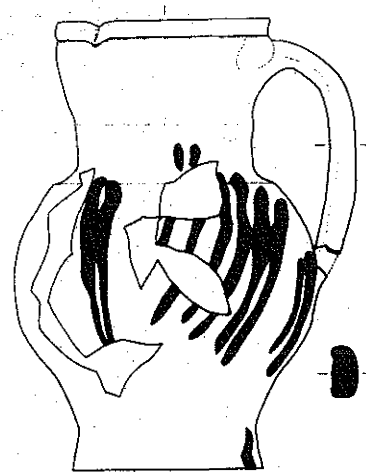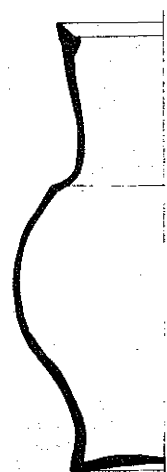
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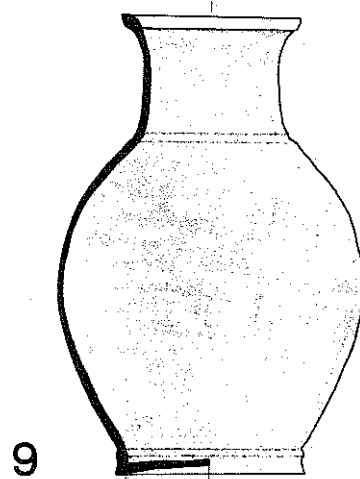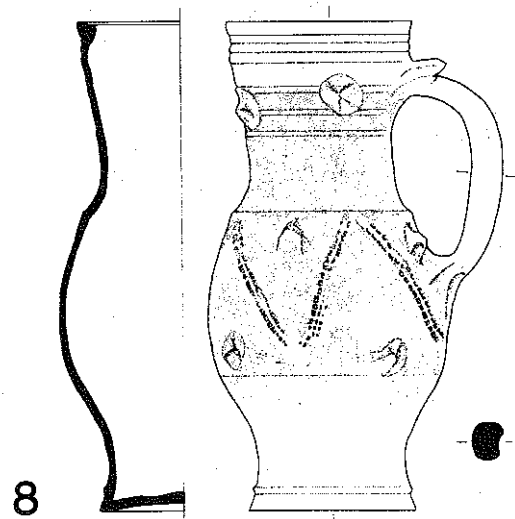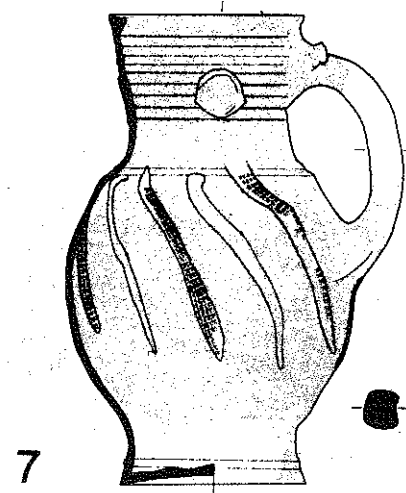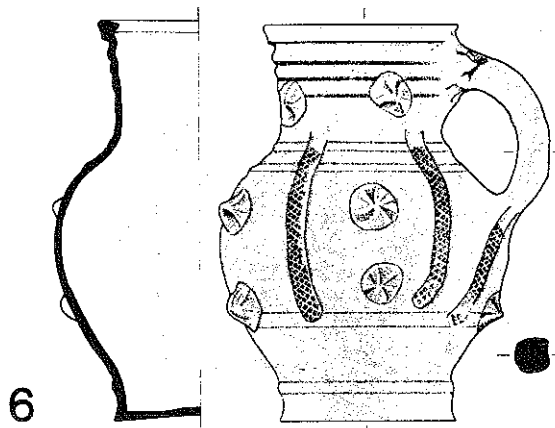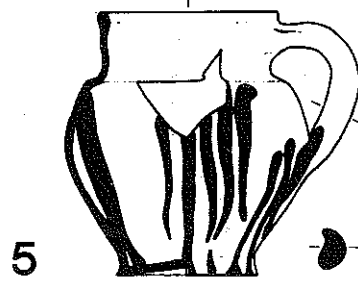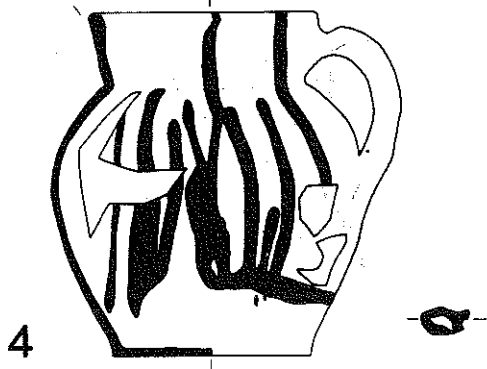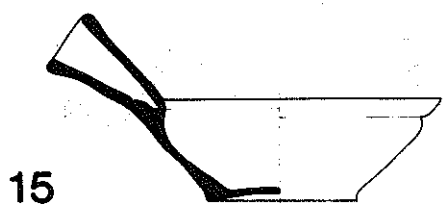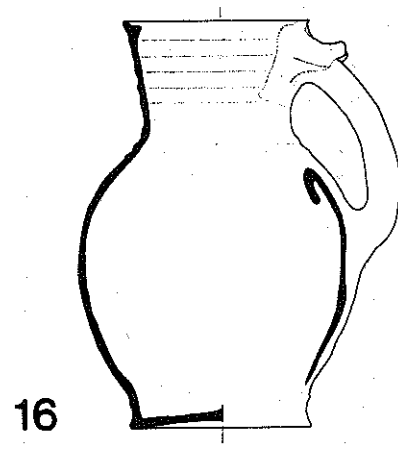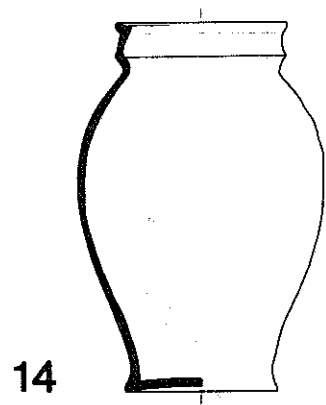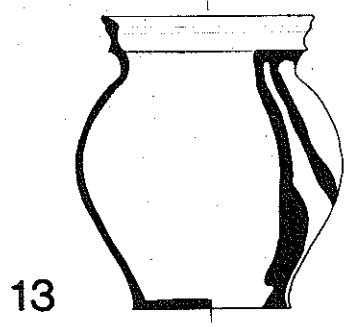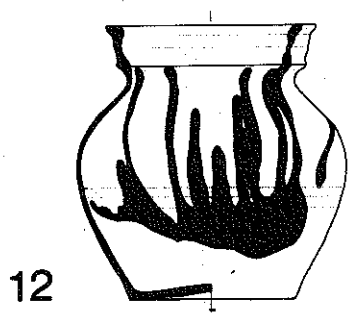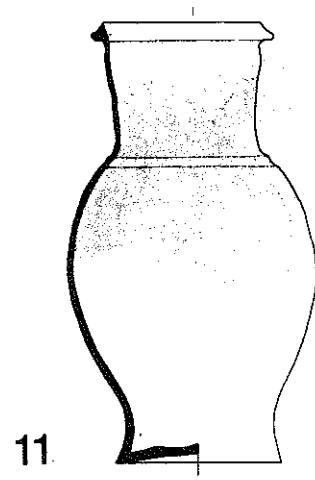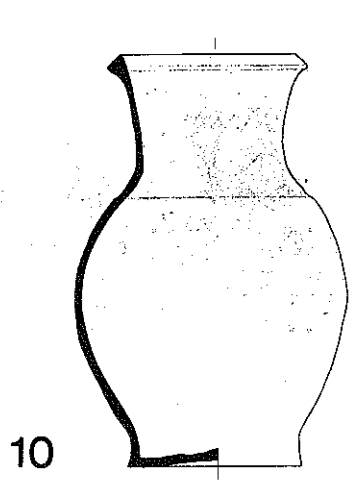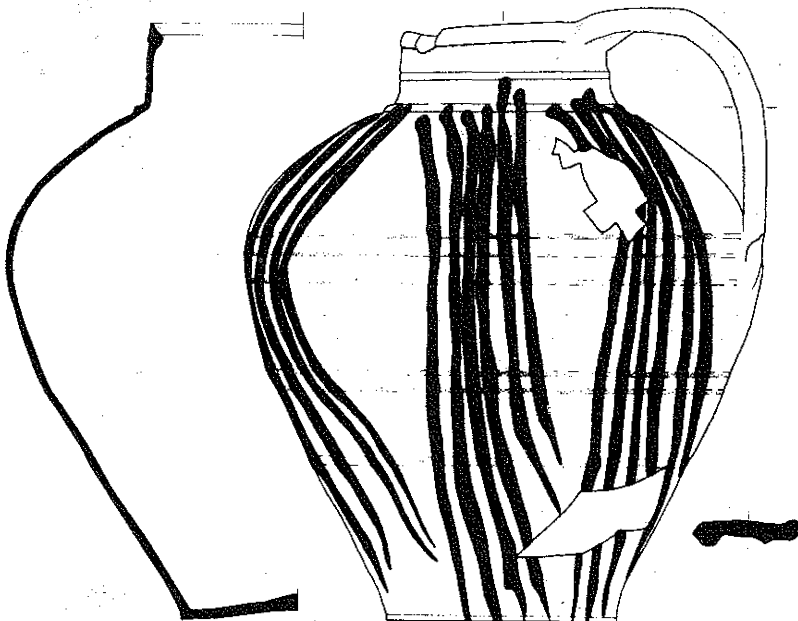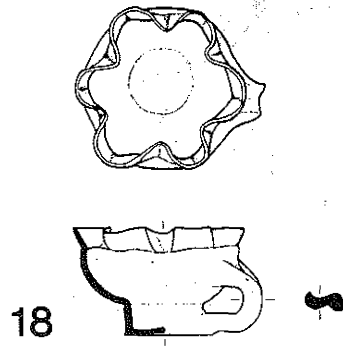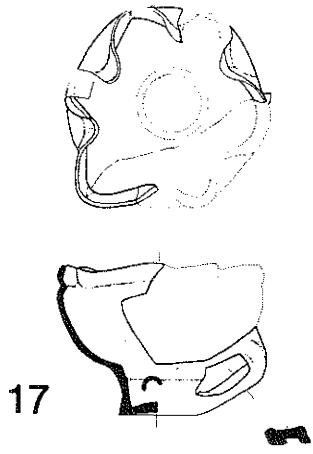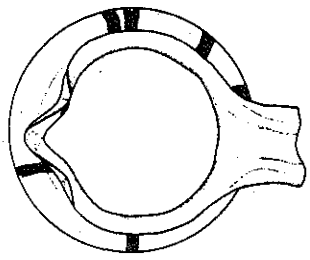
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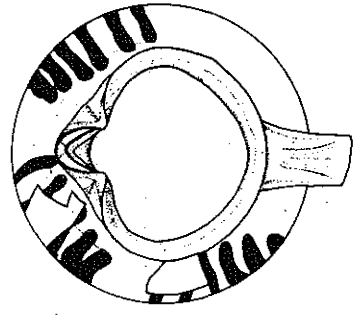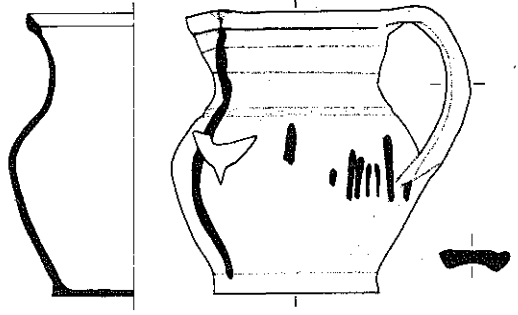
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Diagram (Fig. 1) shows the percentages of the various artefacts found in each of the three contexts. This study involves a total of 445 artefacts. For the purpose of the present exercise we have considered 11 principal pottery types (see Figs. 2 and 3).

1) Cooking pots: one handle, "flame" decoration (Figs. 4 and 5)

2) Glazed jugs: round handle; yellow or green glaze; applied decoration in strips (rouletted or not), pellets or small cones (Figs. 6, 7 and 8).

3) Vases: handleless pots with yellow or green glaze (Figs. 9, 10 and 11)

4) Jars: handleless vessels; banded rim; with or without "flame" decoration: never glazed (Figs. 12, 13 and 14)

5) Skillets: yellow or green glaze inside (Fig. 15)

6) Unglazed Jugs: fairly similar to glazed jugs but sometimes more globular bodied; no applied strips; occasionally "flame" decoration or "crosier"-shaped marks (Fig. 16)

7) Cups: multi-lipped; one handle; yellow or green glaze on the outside (Figs. 17 and 18)

8) Crocks: large vessels; one flat asymmetric handle; pulled spout; "flame" decoration (Fig. 19)

9) Jugs with pulled spout: handle either flat or with rectangular cross-section (Figs. 20 and 21)

10) Bottles: yellow or green glaze on the outside (Fig. 22)

11) Large cooking-pot: only one incomplete example found so far; two vertical handles (Fig. 23).

The distribution of the pottery types in the 3 groups examined (Fig. 24)

We can observe that types 5, 10 and 11 are only found in group C. Type 9, represented in A and C is not found in B.

Group C (11/218) can be readily seen to be more varied than B. The greater diversity of types bears witness to a "richer" assemblage; a relative "richness" influenced by the factors of time and socio-economic milieu.

Morphological changes

Marked changes are noticeable in most of the types. For instance:

Type 1: can be divided into two sub-types. Sub-type 1(a) which is, in A, the most represented, decreases in B and disappears in C where sub-type 1(b), until then less well-represented, takes its place.

Type 4: degenerates from A to C.

Type 7: the object, while preserving the same characteristics and proportions, decreases in size from A to C.

Type 2: degeneration of glaze and decoration.

Types 5, 10 and 11: appear in C.

The direction of the movement of time seems unquestionable, and is indeed borne out by the stratigraphic evidence. The observations define and underline B's intermediary position between A and C. Taking into account the general degeneration of almost all the types, the increasing impoverishment of the decoration, and the appearance of new types, we can conclude that A is older than B which in turn is older than C.
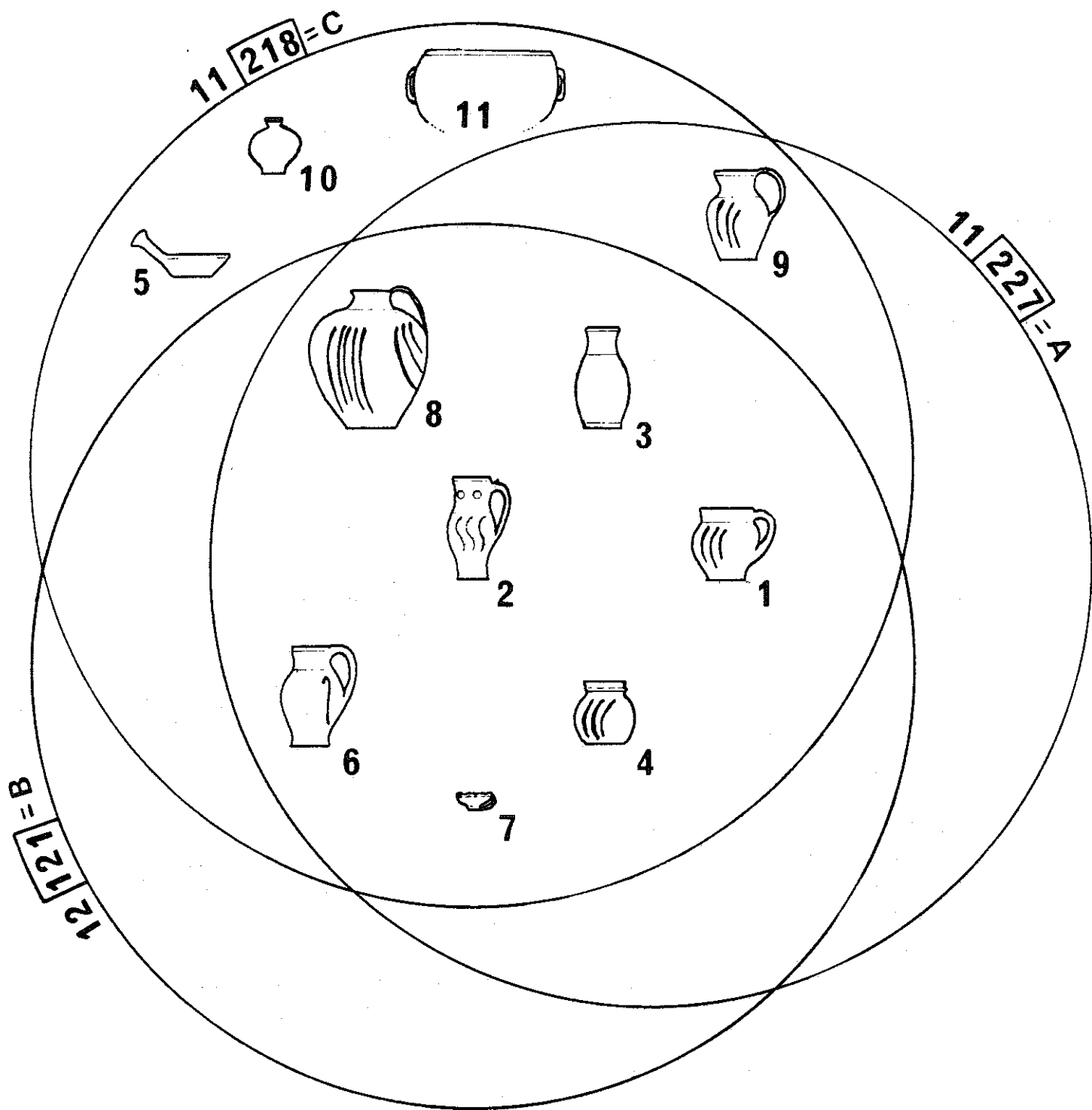
THREE GROUPS

Fig. 24

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<u>Typological distribution</u> (Fig. 25)

Method: The usual pottery-counting problem did not arise due to the nature of the three deposits: only virtually complete pots fragmented <u>in situ</u> were found and after restoration work the few remaining unattributed sherds were eliminated from this study. As a first step, we calculated the relative frequency of each type of pottery within its own group. From the three groups, we calculated the theoretical mean frequency for each pottery type; this mean was used as the reference-base for the diagram. For each pottery type in the three groups, we converted the difference between thetheoretical mean and the quantity actually represented (a percentage) to either a positive or a negative value. The variations in the frequency are sometimes significant: for instance in type 1 (cooking-pots) the frequency oscillates between +19.5 (B) and -8.7 (A) in relation to a theoretical mean of 30.03%.

Secondly, we wanted to compare the "affinities" between each group. In order to do that, we tried to quantify the affinities between pairs A-B, B-C and A-C.

Example: Type 1 (cooking-pots) is represented as follows:

Group A 18.86%
Group B 47.05%
Group C 24.18%

Thus giving an average of 27.61%.

The affinity between groups A and B, for example, for this pottery type is represented by the frequency difference between the two:

i.e. 47..05 - 18.86 = 28.19

This simple calculated was repeated for each pottery type, but since the quantitative value of each type was highly variable, the frequency difference obtained was multiplied by the mean frequency as a weighting measure. Thus, for the preceding example, we obtain 28.19 x 27 = 778.32. This operation was carried out for all 11 pottery-types and the results added together in order to obtain a theoretical value which gives a concrete form to the relative difference between a given pair of groups. Thus we obtain:

AB = 1352.17
BC = 1080.10
AC = 987.92

In order to make better use of these results, we chose to use not the differences between them but rather the inverse relationship, that is to say that which they have in common.

The inverse $\frac{1}{x}$ was multiplied by 10^5 to obtain simpler results, i.e.

$$AB = \frac{1}{1352.17} \times 10^5 = 73.95 \simeq 74$$

$$BC = \frac{1}{1080.10} \times 10^5 = 92.58 \simeq 93$$

$$AC = \frac{1}{987.92} \times 10^5 = 101.22 \simeq 101$$

These three factors demonstrate the relative affinity between our 3 groups. We can observe between A and C a factor of 101, indicating a strong affinity: this affinity is weaker between C and B (a factor of 93) and is even weaker between A and B (a factor of 74).

MEAN TYPOLOGICAL DISTRIBUTION OF THE POTTERY
FROM CONTEXTS: 11 227 =A
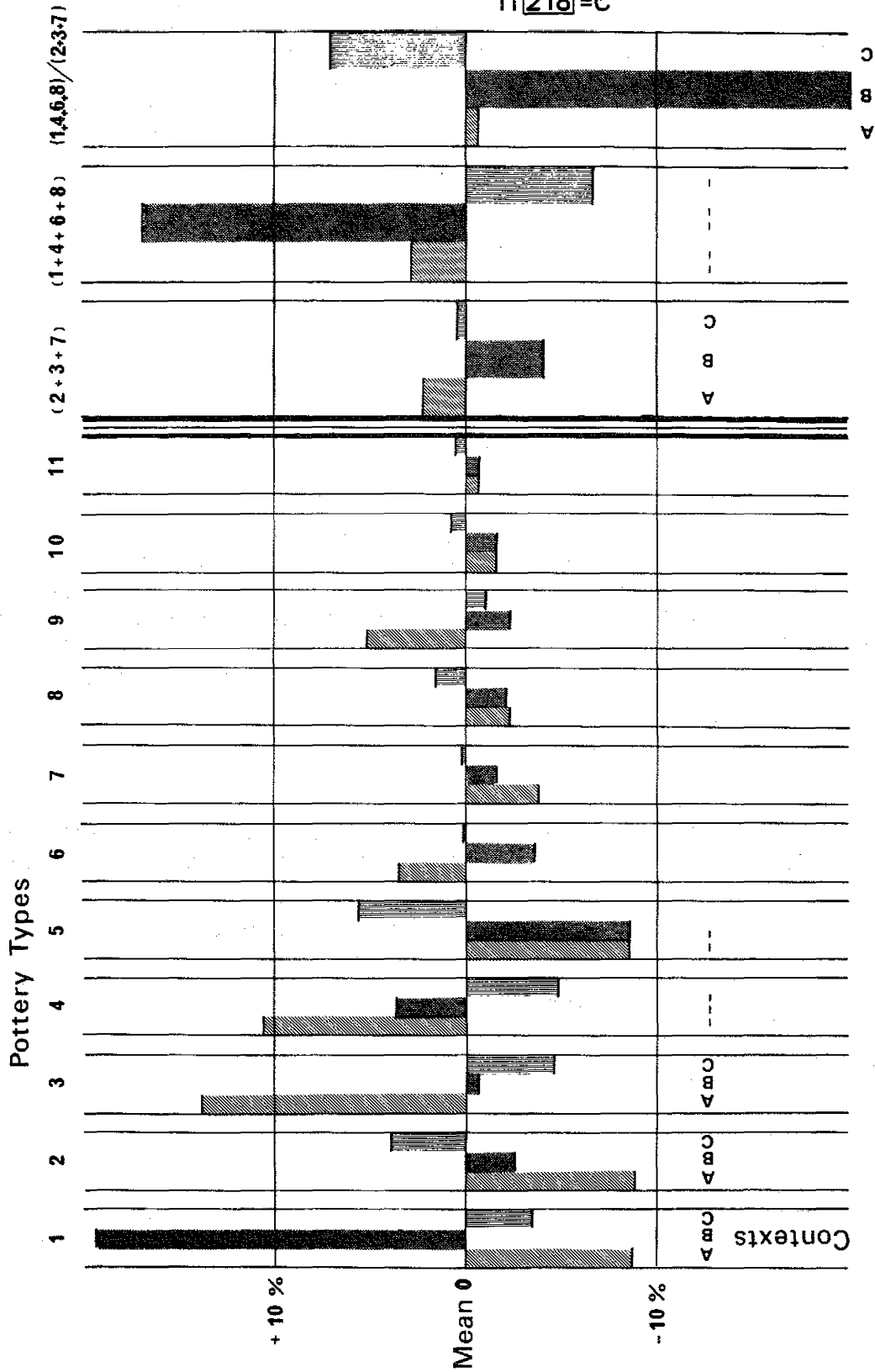12 121 =B
11 218 =C

Fig. 25

We went further in our observations by regrouping the pottery into its two main sub-groups: (1) the "ordinary" unglazed pottery intended for cooking and storage (types 1, 4, 6 and 8) and (2) the glazed "luxury" pottery intended for table-use (types 2, 3 and 7).

The same method of calculation was used as in the preceding exercise. Only those types represented in all 3 groups were included (types 5, 9, 10 and 11 were eliminated). (The results can be seen on the right-hand side of the diagram.)

We recognise that an extrapolation of simple economic and social relationships between the so-called "luxury" pottery and the so-called "ordinary" ware should be approached cautiously. However, we can observe that the two pottery sub-groups balance each other out in group A; in group C the "luxury" ware is dominant; in group B, on the other hand, there is a greater proportion of "ordinary" ware.

Observations

From a chronological point of view: Before attempting to compare the place in time occupied by our 3 groups respectively, we have to consider

(i) The length of time taken to create each of these assemblages. Is it possible that there may be partial or total overlap in time between certain groups?

(ii) The time during which each of these objects remained in use. The first problem may be in part resolved by strictly stratigraphic evidence (i.e. the physical aspect of the layers: their density, uniformity, the complexity of their internal structure etc. ...), which may give clues to the time taken for the layers to be formed.

The second problem may be tackled through an overall study of associated finds.

In the case of the present study, we may conclude with a fair degree of certitude that the 3 groups were formed relatively quickly. Moreover, the pottery in each group is, in theory, sufficiently uniform to be characteristic of a well-defined period in time.

The deposits can be classified in time in the ascending order A.B.C., due to the stratigraphic sequences from which they come. Observations of morphological changes seem to suggest a greater gap in time between B and C than between A and B.

From a cultural point of view: The simultaneous influence of several factors interferes with the interpretation of the data.

The quantitative increase of a pottery type may be linked either to its wider diffusion on the market or to the different economic level of its users.

As we have previously seen, the stratigraphical data may allow us to evaluate chronological influences thus enabling us to identify more easily factors of a purely economic nature.

Moreover, exactly what can these rubbish-pits tell us about their users? Are they indeed, as we have hypothesised, linked to a single domestic unit or at least to a uniform social-group?

In view of the many factors which affect the survival of archaeological material, how can we define a statistically-valid assemblage of domestic objects?

In conclusion, it seems to us that the method of treating large pottery-groups outlined here has potential. It is vital to take certain calculated risks in order to give our observations meaningful numeric values and thus progress beyond analyses of a purely descriptive nature. It is obvious that the larger and more numerous the assemblages are, the more reliable this kind of study will be.

This research will be continued on three new large pottery-groups coming from more recently excavated deposits of the same type.

FOOTNOTES

1. O. et N. Meyer, L. Bourgeau, D. Coxall, 1980, "Archéologie Urbaine à Saint-Denis, présentation d'une expérience en cours", Archéologie Médiévale, X, 271-308.

2. Barton, K. J., 1966, "The medieval pottery of Paris", Medieval Archaeology, X, 59-73.

3. Nicourt, J., 1974, "Productions médiévales des potiers de terre parisiens", Les dossiers de l'archéologie , 7, 117-130.

Extraite du rapport 1978 des Fouilles Urbaines de Saint-Denis, cette étude porte sur l'analyse comparative de 3 ensembles de céramiques provenant chacun de dépotoirs domestiques de nature comparable et s'étant constitués`a des époques proches (fin XIIème, début XIIIeme-XIVème siècle), Après avoir défini les 11 types de poteries représentés dans ces ensembles et avoir souligné leurs caractéristiques morphologiques, l'étude porte plus spécialement sur la répartition quantitative de chacun des types.

Les précautions qu'imposent les difficultés d'interprétation que soulèvent des ensembles céramiques ne doivent pourtant pas interdire les possibilités d'une interprétation des résultats dans une optique économique et sociale: durée d'utilisation des poteries, représentativité du mobilier mis au rebut, durée de la formation du dépotoir et homogénéité du groupe social qui l'utilise. La méthode qui est proposée n'est applicable qu'à des lots répondant aux exigences liées aux réserves avancées plus haut. Elle doit être validée sur un échantillonnage étendu.

Cet essai, déjà ancien, pourra être prochainement éprouvé`a une échelle supérieure grâce au produit des fouilles récentes.

Die vorliegende Untersuchung beinhaltet eine Analyse von drei spät-mittelalterlichen Keramikgruppen aus häuslichem Kontext, welche 1978 bei Ausgrabungen in Saint-Denis gefunden wurden. Zuerst wurden aus dem Fundkomplex heraus 11 Typen bestimmt. Im Anschluss daran konzentriert sich der Artikel auf die quantitative Verteilung der einzelnen Typen. Das Ziel dieser Analyse ist es, die gewonnenen Ergebnisse im Hinblick auf Probleme wie die Länge der Benutzungsdauer der Gefässe, deren Repräsentativität für diesen Keramikkomplex, den Prozess der zu dieser Zusammensetzung der Gruppen führte, sowie darauf welche Schlüsse auf soziale Verhältnisse aus diesen Fundkomplexen geschlossen werden können zu betrachten. Die hier angewandten Methoden sollten weitreichende Folgen haben auf die Interpretation von allem modern ausgegrabenen Material.