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Box 220 Holme Building
University of Sydney 2006
Telephone (02) 692 2763

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LE PETIT PROJET DU GARBAGE: An Approach to Teaching Archaeology

Julie Byrnes and Andrew Wilson

Introduction.

'The overall situation in teaching seems to overdose the student alternatively with theory or technique with no attempt at mediation or linkage between the two.' (Gould and Schiffer 1981:18).

With this familiar problem in mind Le Petit Projet du Garbage was instituted for the practical segment of Lent Term, 2nd year Historical Archaeology Course at Sydney University. The project was a student designed and operated analysis of the contents and scatter of several key garbage bins on campus. It produced excellent results in terms of general motivation, analytical thinking and practical application of archaeological principles. The practical sessions, along with tutorials, were designed to dovetail into the ten day May excavation programme at Regentville.

The stimulus for the use of this approach came from the well-known Rathje Garbage project at the University of Arizona (Rathje 1974). In the Rathje project large scale collection of disposable waste over a number of years illuminated behavioural variables in purchasing and consumption habits due to price fluctuations and varying incomes.

Background.

It was felt that excavating and processing artefacts from one site (in this case Regentville) was excellent practical experience but intrinsically particularistic and did not offer great scope for creativity and the development of analytical thought. Also, the Regentville programme was to include on site computerised auditing and cataloguing of artefacts and fill material for later quantitative analysis. Thus, it was also felt that an understanding of the principles of research design and the development and use of cataloguing variables would make the Regentville system comprehensible for the student and tighten the methodology aimed at quantitative study.

Primary Aims.

The primary aims of the project included the understanding and

the application of scientifically orientated research design, the formulation of research hypotheses, data collection methods, sampling methods, classification and analysis of material.

It was hoped that during the exercise students would heighten their powers of observation, learn to attribute significance to otherwise trivial phenomena, and perceive their surroundings in a different light. In achieving such a range of objectives we also hoped to encourage flexibility of thought.

Methodology.

Research Design.

The only part of the project that carried a predefined structure was the use of a research design. (Fig. 1)

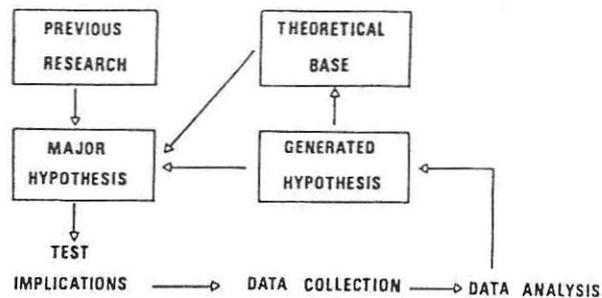


Fig. 1. LE PETIT PROJET DU GARBAGE RESEARCH STRATEGY

Variables and Indicators.

The range of variables influencing human behaviour for this exercise was unfortunately enormous but provided a useful illustration that archeological deposit does not necessarily directly reflect human behaviour. They included type of bin, throwing skills, proximity of the bin to an eating area or pathway, weather conditions, population density prior to data collection time, cleaning activity in the data collection areas - to mention a few.

Indicators in this exercise largely revolved around identifying processed and unprocessed food. For example, wrappers were selected as indicators of processed food.

Hypotheses Formation.

This was a difficult and time consuming area. The students were encouraged to relate their hypotheses to human behaviour, to ensure that their hypotheses could be addressed in practical terms, and to make extended observations.

The following hypotheses were postulated by one of the two groups of students:

1. There is more scatter around outside bins than inside bins. (People are more precise when disposing of rubbish inside a building than they are in an open space.)
2. There is a larger percentage of wrappers to organic matter within the scatter. (Students consume more processed than unprocessed food.)

3. There is a higher proportion of cardboard and aluminium containers than glass containers in the scatter. (Modern packaging is geared towards "soft" materials.)
4. There is more scatter in male toilets than in female toilets. (Males are messier than females.)

Data Collection.

Students were asked to design and implement collection strategies - including grid plans, labelling, bagging, sorting, drying and weighing. The system used for Regentville artefact analysis was largely adopted but students were not asked to use computer data entry or analysis.

Analysis Variables.

The major categories for analysis were "function" and "material" as follows:

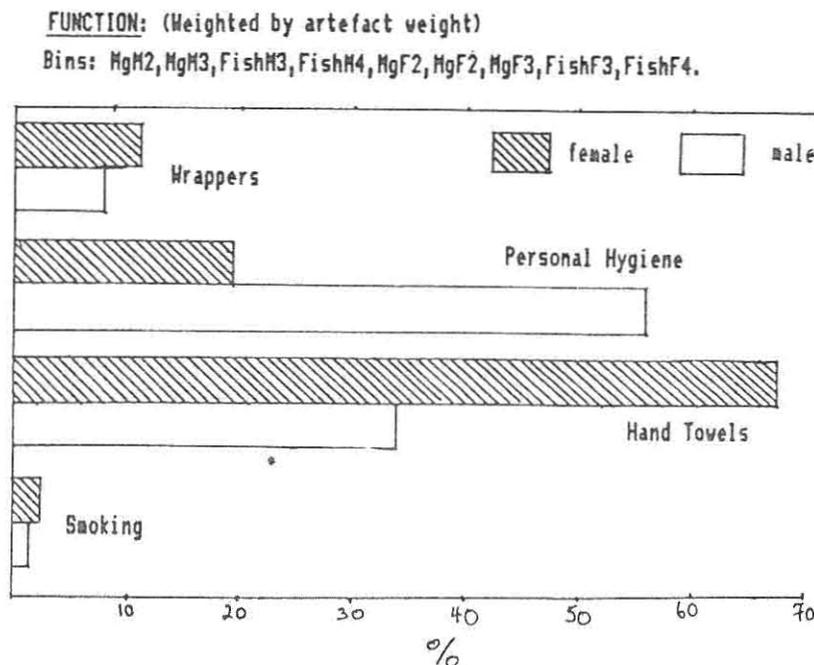
FUNCTION: Unidentified; Unidentifiable; Wrapper; Container; Lid; Smoking; Drinking Straw; Publication; Hand Written Material; Edible Organic Material; Inedible Organic Material; Currency; Receipts; Decoration; Personal Hygiene; Fastenings; Identification; Padding; Handles; Hand Towels; Record.

MATERIAL: Unidentifiable; Unidentified; Plastic; Paper; Metal; Wood; Rubber; Polystyrene; Glass; Foodstuffs; Synthetic; Textile; Vegetation.

Further, each of the "labels" within "function" and "material" was carefully defined - the purpose being to establish a precise and consistent system.

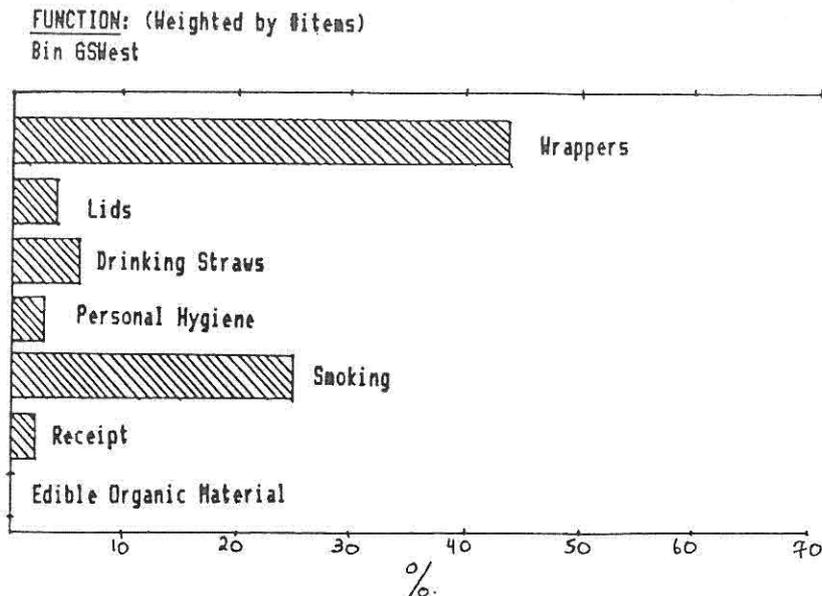
Results.

The combinations and permutations of graphic display of data and extended hypotheses were voluminous. Briefly, the most interesting results concerned Hypotheses 2 and 4.



In this analysis students observed the results of weighting variables. When these results are weighted by number of items the results differ markedly and both methods could be considered valid. Further, interpretation of "mess" as related to 'personal hygiene' and 'hand towels' proves difficult. Females tend to use more hand towels, males tend to use more items of 'personal hygiene' - what constitutes mess? Students also observed that the amount of garbage was less on higher levels of the buildings and that there was a possible correlation between scatter and wash room design.

Graph 1. Function Categories for Contents of Toilet Room Bins.
 Personal Hygiene e.g. = Tissues, Toilet Paper, First aid.
 Hand towel = Disposable paper towel



Graph 2. Major Function Categories of Scatter Surrounding Outside Bin 6S West.

The predominance of wrappers (taken as indicating processed food) and the absence of edible organic matter is typical of the pattern observed over the scatter of several bins. The findings led to several hypotheses concerning the disposal, deterioration, availability and consumption of fresh food. Students concluded that the contents as well as scatter should be examined for more meaningful results. Laboratory discussion related the situation to traditional field archaeology where further investigation may not be possible or desirable - thus highlighting the reality of problematic sampling and interpretation.

Shortcomings.

The major shortcoming of this experimental approach was an inability to relate findings to human behaviour. Students tended to be caught in the mire of data manipulation and interpretation of figures. We presume that we asked too much in too short a time and/or that this point was not sufficiently emphasised and explained. Also, sample sizes were exceedingly small. Consequently, we plan several modifications in some areas and extensions in others.

Summary.

The following quote from a student report is a very pleasing summary of Le Petit Projet du Garbage 1987;

"... the exercise proved to be worthwhile, exciting, stimulating, challenging and very educational. Le Petit Projet du Garbage enabled students to critically think while collecting and processing data and at the same time gain practical experience in recovering data and classification."

Select Bibliography

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