

**What is  
archaeology?  
3: dealing  
with finds**



# Finds

- Two types
  - Artefacts
    - Things made by human beings
  - Ecofacts
    - Things from the natural environment
- Both give us a lot of information
  - Their study is a specialisation within archaeology
- This is a very brief overview



# Artefacts

- Archaeologists often use the term 'material culture'
  - This covers all those things used by humans
  - And can even be extended to anything with physical existence
    - Human bodies, landscapes and so on
- It is traditionally used to distinguish humans from other animals
  - "Man the toolmaker"
  - We now know many other animals use tools
    - It's the human relationship with material culture that is unique
- Artefacts fall into many different types



# Definitions

- Renfrew & Bahn:
  - *“The buildings, tools, and other artifacts that constitute the material remains of former societies”* (ignore American spelling!)
- Physical remains
  - Artefacts (portable) and structures (fixed)



# Objects as evidence

- Historians traditionally rely on texts
  - Narratives about people and events
- Archaeologists traditionally rely on objects
  - Narratives about people and things
- We assume that artefacts are informative
  - They will give us information about the past
- How do we recover that information?
  - What do artefacts “tell” us?



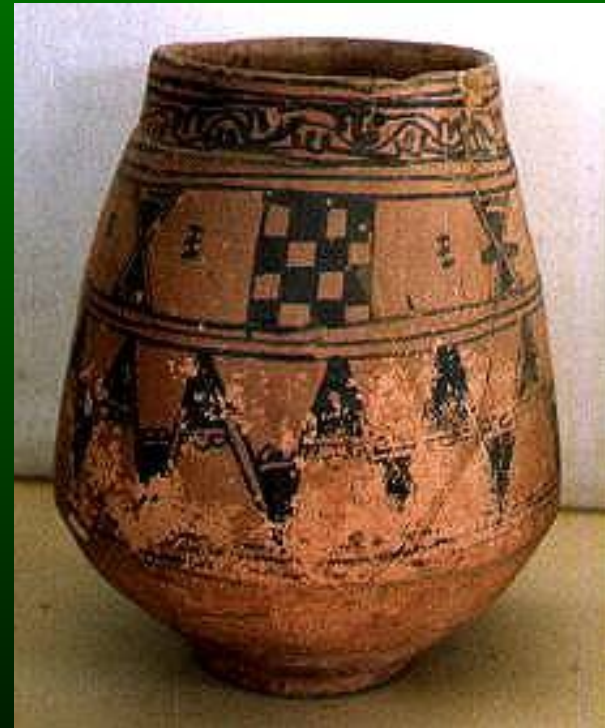
# Types of material culture

- Start by classifying by material and then subdivide
  - Stone
    - Lithics, whetstones, architectural pieces, querns, vessels, plaster and mortar
  - Ceramics
    - Vessels, building materials, drains, pipeclay, re-used pieces, ornamental
  - Glass
    - Vessel, window, decorative
  - Metalwork
    - Precious metals, copper alloy, iron, lead, coins and tokens
  - Industrial residues
    - Coal and coke, slag, clinker, hearth bottom, hammerscale
  - Organic artefacts
    - Bone, horn and antler, shell, wood, leather, textiles and plastics
- Some subdivisions are to do with form, others are to do with material



# Studying artefacts

- Quantification
  - How much of each material is present on site?
- Physical analysis
  - What sort of object is it?
    - Is it a tool, a decorative object or something else?
    - Do we know what it was used for?
  - Can it be dated?
    - Does it fit into a known type series?
- Specialist analysis
  - Specialists tend to deal with one class of material
    - Ceramicists, numismatists, flint specialists
- Need coordination with each other
  - And best to consult before the work starts
  - Are there any special circumstances or issues affecting the site?



# The artefact as object

- Artefact studies
  - Physical examination
    - Microscope
    - X-Rays
  - Chemical examination
    - Spectroscopy
    - X-Ray diffraction
- Typological studies
  - Artefact as part of a series





# Archaeology is broader than the study of material culture alone

- Archaeology considers any material remnant of human behaviour
  - Including 'negative' remnants like pits
- It also considers the *relationships* between remnants
  - The importance of **context**



# Traditional approaches

- Culture History
  - Material culture used to define 'cultures'
    - Seen as representing ancient ethnic groups
  - Typological sequences
    - To help with prehistoric dating
  - Regarded as a source of information about technology
  - Thought to reflect social identity
    - Material culture as a social badge



# Drawbacks of culture history

- Lack of sophistication
  - 'Cultures' don't seem to correspond to human groups
    - Though human groups do have distinctive material culture
    - Too much emphasis on specific artefact types
  - Too little effort put into understanding identity
    - And its expression through material culture



# The Art History paradigm

- To understand historical development
  - Like Culture History
  - But with an emphasis on High Culture
- To understand “intrinsic merit”
  - Purpose of the work
  - How well it fulfils it



# Drawbacks of art history

- Elitist
  - Who defines 'intrinsic worth' or 'artistic merit'?
  - Focus on complete and decorative objects
- Collector mentality
  - The connoisseur
  - Lack of regard for context



# Processual approaches

- Material culture as part of technological sub-system
  - Reflects technological capabilities
    - Form is determined by function
  - Determined by environmental factors
    - All human behaviour is environmental adaptation
- Material culture as part of economic sub-system
  - Artefacts can tell us about economic systems



# Drawbacks of processualism

- Material culture seen as passive
  - It reflects society
  - It only tells us about technology
- Material culture is constrained
  - By environmental factors
- Material culture defines social groups



# Postprocessual approaches

- Material culture is active
  - Used in reproduction of ideology
    - The *habitus*
  - Conveys meanings
    - Semiotics
    - Polysemous
  - Expressive of identity





# Drawbacks of postprocessualism

- Infected with post-modernism
  - Too little critical thought
  - Too willing to accept offbeat interpretations
- Occasionally obsessed with single objects
  - Failure to tackle the wider picture



# The evidence of material culture

- Three principal characteristics:
  - Technology
  - Sociology
  - Ideology
- Part of the cultural system
  - Both structured and structuring



# Examples

- Technological considerations
  - Technical capabilities
  - Function
- Sociological considerations
  - Status
- Ideological considerations
  - Communication



# Decoding material culture

- It's not just a matter of 'listening'
  - Material culture won't speak a straightforward language
    - Nor will texts
- The meaning of the individual artefact
  - Occasionally obvious



# How to get meaning from archaeological material?

- It's easy with modern material culture
  - We can recognise the contexts
- Cognitive archaeology
  - Search for common elements of design
  - Attempt to understand context of symbolism



# The range of materials

- Stone
  - Oldest technology
- Organic materials
  - Also very ancient
- Ceramics
  - Develops after Ice Age
- Metals
  - Develops at different times
- Glass
  - Seems to develop from ceramics and metallurgy



# Technologies of production

- Raw materials
  - Constraint and opportunity
- Manufacture
  - Technological capability
- Use
  - Function versus meaning



# Economics of material culture

- Distribution
  - Technologies of transport
  - Networks of exchange
  - Use as containers
- Value
  - Social status (intrinsic value)
  - Personal value





# How material culture becomes archaeological data

- Taphonomy
  - Transforms
    - Before deposition
    - After deposition
- Conservation
  - Stabilising fragile materials
- Classification
  - Typology and seriation



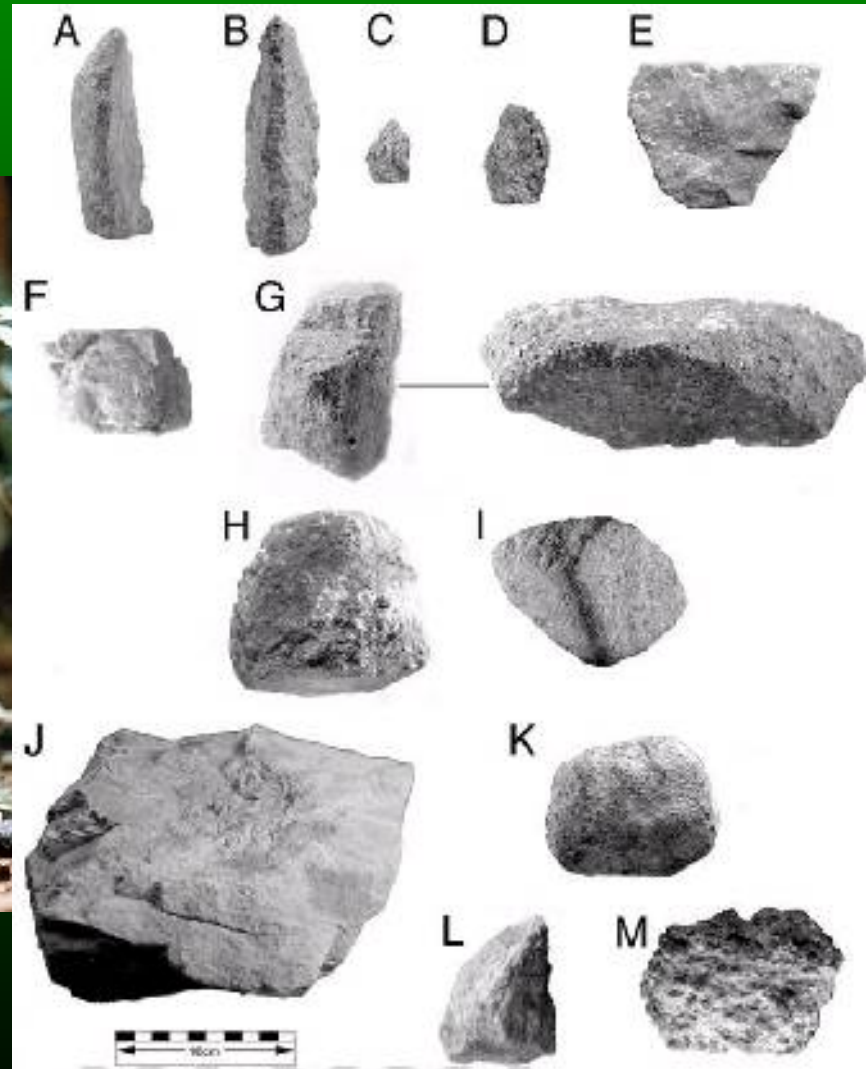
# What material culture does for us

- Consumption
  - Consumerism
- Supply and demand
  - Why producers make certain goods
- Waste
  - Fashion and display
  - Archaeological material as rubbish



# Meanings of material culture

- Functionalism
  - Minimalist interpretation
- Communication
  - Style
- Interactions with objects
  - Is it material culture that separates us from other animals?



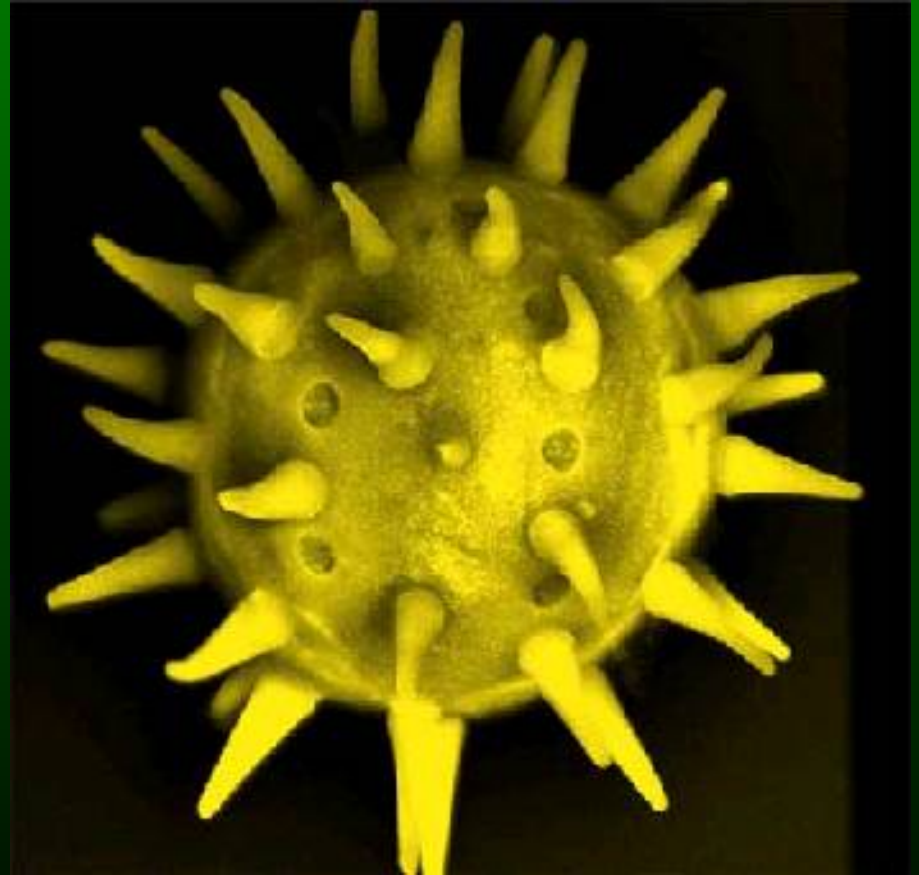
# Ecofacts

- A relatively new term
  - Refers to objects that tell us about past environments
    - Geoarchaeology is the overall study of past environmental evidence
  - Often used to define finds that are not artefacts
- Includes plant and animal remains
  - As well as human remains
- Human palaeoeconomy
  - The study of how ancient environments influenced human behaviour
- Palaeoecology
  - The study of ancient ecologies and the place of humans in them



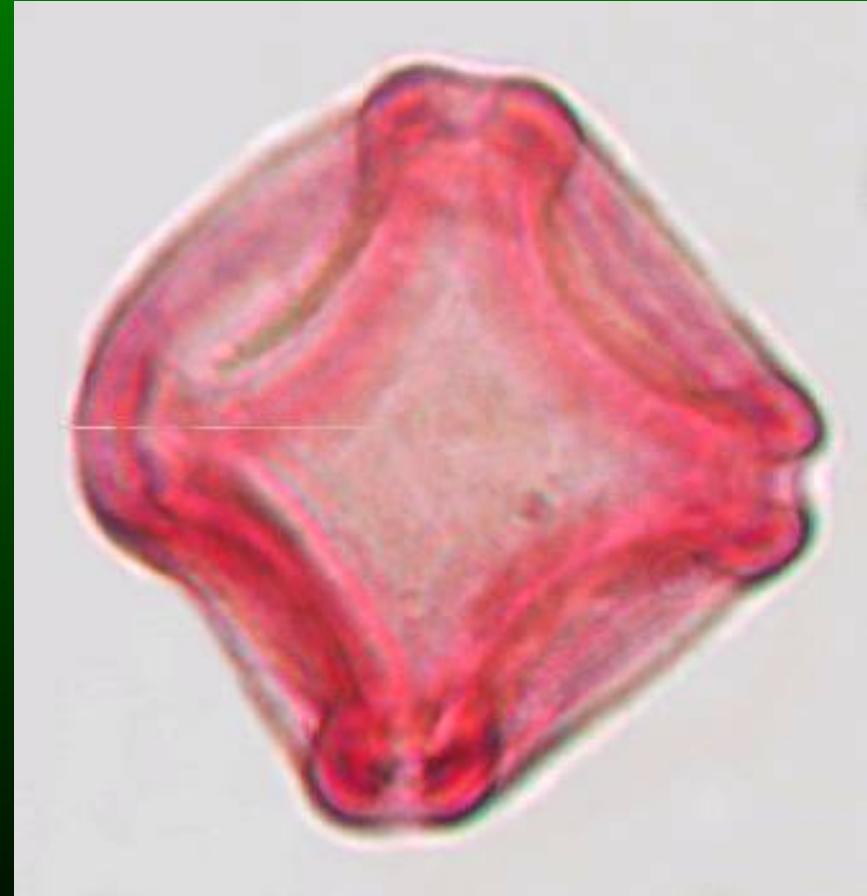
# Identifying ecofacts

- Modern reference collections are essential
  - So we know exactly what the ancient remains came from
- Plant materials
  - Pollen
  - Seeds
- Invertebrate remains
  - Insects
  - Molluscs
  - Crustaceans
- Vertebrate remains
  - Fish bones, scales and otoliths
  - Amphibian bones
  - Bird bones, feather and eggs
  - Mammal bones, horns and antlers



# Palynology

- Pollen analysis
  - Tracking ancient environments
    - And especially the spread of agriculture
  - Tracking environmental changes
    - Especially between the end of the Pleistocene and the origins of agriculture
- Recovery of pollen
  - Best from waterlogged sites such as peat bogs
    - Which tend to reflect regional environments
  - From features on archaeological sites
    - Tend to reflect local environments



# Insect remains

- Insects account for the majority of animal species
  - They occupy almost every habitat on earth
  - Each species has individual habitat preferences
- Good indicators of climate, vegetation, seasonality and local environment
  - Beetles especially useful
    - And very common



# Vertebrates

- Basic analyses
  - Which fauna are present?
    - Classes often easy to recognise
- Species analyses
  - Start by identifying the skeletal element
    - Gross morphology
      - Allows assessment of age at death and sometimes of sex
    - DNA is very precise but expensive
- Ageing
  - Bone formation
  - Tooth wear





# The role of finds

- Archaeology is not just about collecting objects
  - Objects are a form of evidence
    - Along with stratigraphy, physical and chemical analysis, documents and many other things
  - An object on its own cannot tell us much
    - This is the difference between an archaeologist and a collector
  - Archaeologists are excited by broken, corroded and mundane objects
    - Because they can often tell us most
- But objects are important because they are (almost) uniquely human
  - They tell us not just about the past but about what it is to be human
    - We form bonds with objects that no other animal does
    - We surround ourselves with a greater variety of material culture than any other animal



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