

TSE M1 – Semester 1 September 2018 Paul Seabright

Understanding Real World Organizations Week 2: The development of markets through history

## The Development of Markets through History

- The division of labor a history
- The evolution of trust
- A model of cooperation through repeated interaction
- The expansion of market exchange
- A formal model

# The division of labour: a history (1)

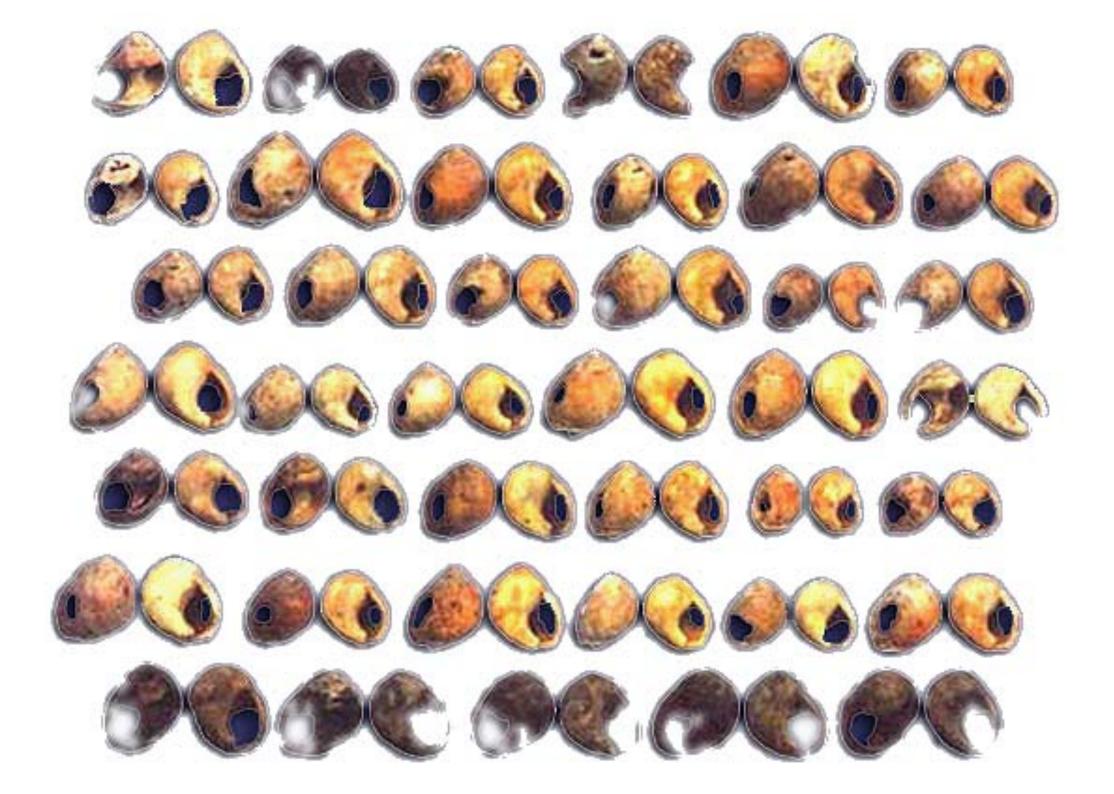
- Non-human animals have division of labour based on kinship alone
- Early humans probably lived in progressively increasing group size
  - Chimps 60 per band
  - Australopithecus c.70 (4.5 m years ago)
  - Homo habilis c.80 (2 m years ago)
  - Homo erectus c.110 (1.8 m years ago)
  - Homo neanderthalis c.140 (150 K years ago)

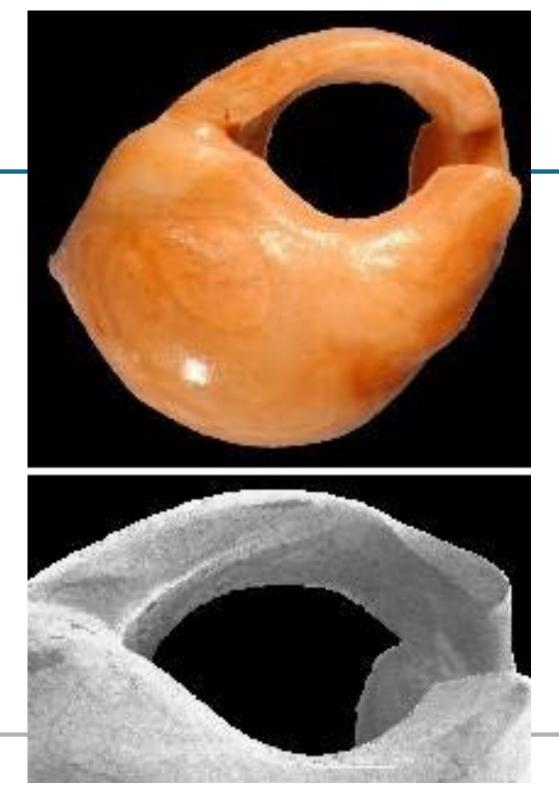
# The division of labour: a history (2)

A division of labour is inherent in sexual reproduction

- Social animals have divisions of function; primates engage in cooperation based on kinship and dominance hierarchy
- Explicit trading is rare (chimps and bonobos) and usually simultaneous
- First evidence of more complex trading comes from humans c. 40,000 years ago
- Controversial claims that it may date to 75,000 years ago but not before!







The division of labour: a history (3)

Trade in tools and objects of adornment

- Villages and towns; private versus public enforcement bodies
- The infrastructure of trade
  - Means of transport
  - Physical security
  - Trading posts
  - Money and credit



#### Kashgar market on the Silk Road



How would trade get started between people who have not traded before....? Herodotus describing trade between Libyans and visiting Carthaginians (5<sup>th</sup> century BC):

• "The Libyans put some gold on the ground for the goods, and then pull back away from the goods. At that point the Carthaginians..have a look, and if they think there is enough gold to pay for the cargo they take it and leave....neither side cheats the other...the Carthaginians do not touch the gold until it is equal in value to the cargo, and the natives do not touch the goods until the Carthaginians have taken the gold"

Arab geographer Ibn Battuta describing trade along the Volga river (14<sup>th</sup> century AD):

"Each traveler leaves the goods he has brought...and they retire to their camping ground. Next day they go back to...their goods and find opposite them skins of sable, miniver and ermine. If the merchant is satisfied with the exchange he takes them, but if not he leaves them. The inhabitants then add more skins, but sometimes they take away their goods and leave the merchants'. This is their method of commerce. Those who go there do not know whom they are trading with or whether they be jinn or men, for they never see anyone"

#### The evolution of trust

- Increasing group size based on gradual trust in familiar non-relatives
- Required increased neural processing power (larger brains)
- Modern society based on trust in strangers
- This is harder to explain for humans than other animals
- Costs of mistakes are higher

## The benefits of trust in strangers

Expands range of consumption possibilities enormously

- Yir Yoront aboriginals of N. Australia
- Used stone axes (but nearest stone quarries are 400 miles away)
- Produce stingray-barbed spears to trade
- Already had steel axes before 1st encounters with white traders in late 19th century
- Allows large-scale risk-sharing
- Dramatically reduces risks of "mistakes"

#### The foundation for trust in strangers

#### Combines two elements:

- Impersonal enforcement mechanisms (forward-looking)
- Reciprocity (backward-looking)

Most effective mechanisms are self-enforcing - such as money

- Improvided the basic conditions are right
- Those conditions involve an assurance of future cooperation
- Note also the importance of *observability*



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