

TECT and other European "cooperation" programmes



Ronald Noë

Ethologie des Primates

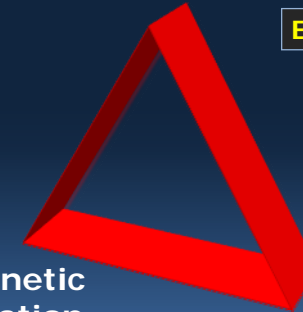
CNRS & Université Louis-Pasteur - Strasbourg, France

3 European programs

TECT

The Evolution of Cooperation and Trading

ESF – EUROCORES



GEBACO

Towards the Genetic Basis of Cooperation

EU – Framework 6
"What it means to be human"

INCORE

Integrating Cooperation Research in Europe

Together these programmes cover a wide range of cooperative interactions



kids in Halifax, Canada



Myxococcus social swarming

An introduction to TECT



The evolution of cooperation and trading

TECT

European Science Foundation

(www.esf.org)



- 78 funding agencies/30 European countries
- multi-disciplinary
- independent
- non-governmental



1 quai Lezay-Marnésia - Strasbourg



TECT

EUROCORES programmes



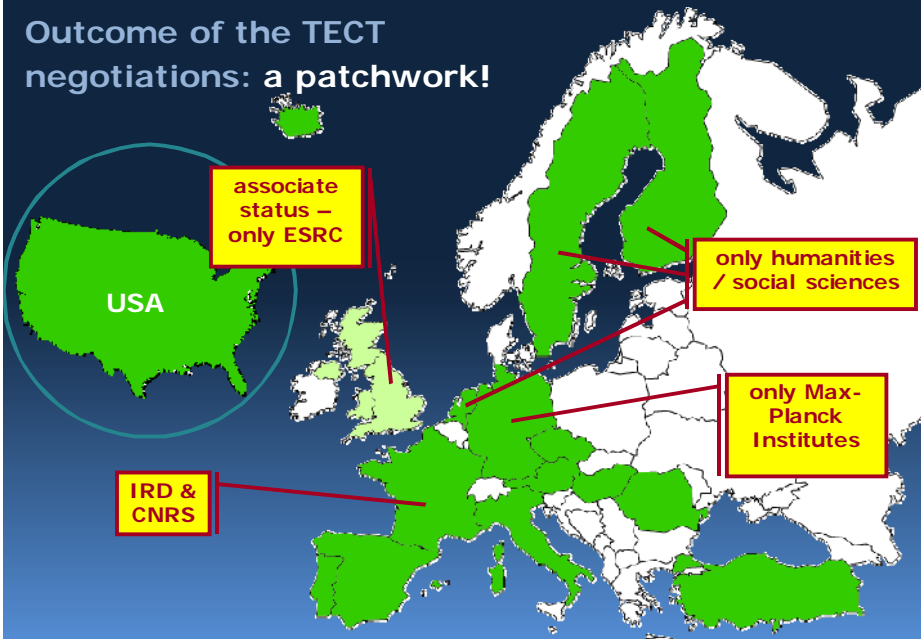
EUROCORES SCHEME

EUROPEAN SCIENCE FOUNDATION COLLABORATIVE RESEARCH

- specific (but broad) research theme
 - multi-national & often multi-disciplinary
 - proposed by group of scientists ('proposers')
 - funded by part of the members organisations
- ▶ many proposals of which few are developed further (4 of 52 in our round)
 - ▶ no *a priori* guarantees of funding
 - ▶ no advantages for proposers

TECT

Outcome of the TECT negotiations: a patchwork!



TECT

Total budget of TECT : about € 6 million

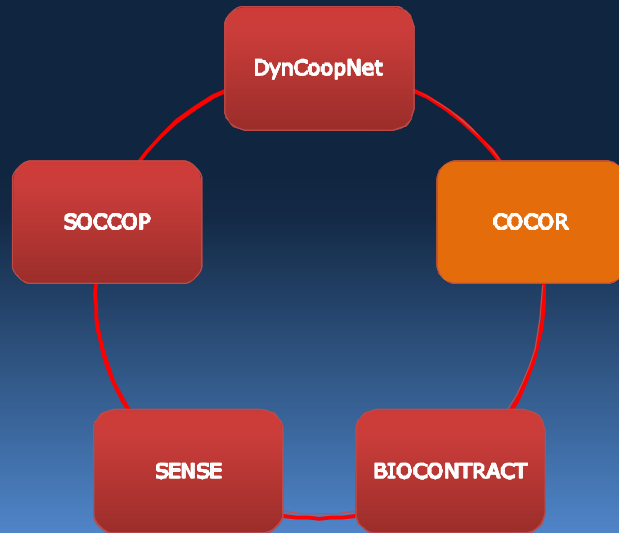
Further activities (paid by ESF) :

summer schools, meetings, workshops etc.

Examples of meetings planned so far:

- Communal meeting of 2 "biology & economics" consortia (Lisbon – Jan. 2008)
- Genetics of cooperation (Barcelona Nov. 2008)
- Theoretical basis of cooperation (IIASA, Austria 2008)

Consortia within TECT



BIOCONTRACT

Cooperation in mutualisms:
contracts, markets, space
and dispersal

- biologists and economists
- ant protection mutualisms
- contract theory
- spatial games

PL Naomi Pierce
Harvard, US

SENSE

Sustaining eco-economic
norms for a sustainable
environment

- economists and biologists
- (Tragedy of the) Global Commons
- cooperation and punishment
- social norms

PL Simon Levin
Princeton, US

The Social and Mental Dynamics
of Cooperation

SOCCOP

- economists, psychologists,
anthropologists, biologists
- self-interest vs other
regarding motives
- the 'cooperative' mind

PL Herbert Gintis
CEU Budapest

DynCoopNet

Dynamic Complexity of Cooperation-based Self-Organizing Networks in the First Global Age

- mainly historians
- Spain/Portugal 1400 – 1800
- long-distance trade
- GIS-based methods

PL Ana Crespo Solana
CSIC, Madrid

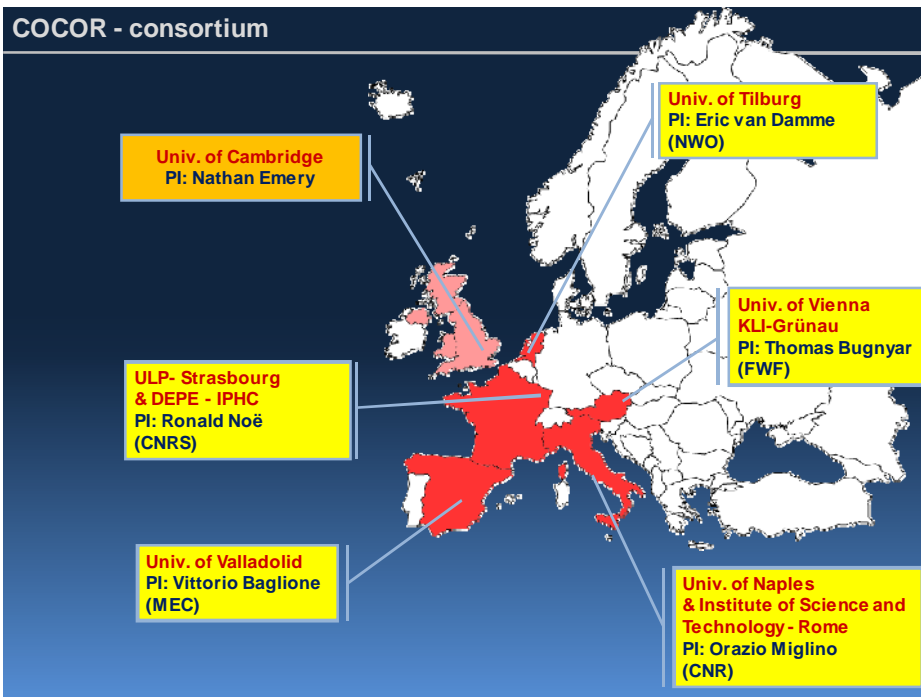


COCOR

Cooperation in Corvids

PL *that's me*

COCOR - consortium



What are corvids?

ravens, crows, rooks, jackdaws, jays, magpies



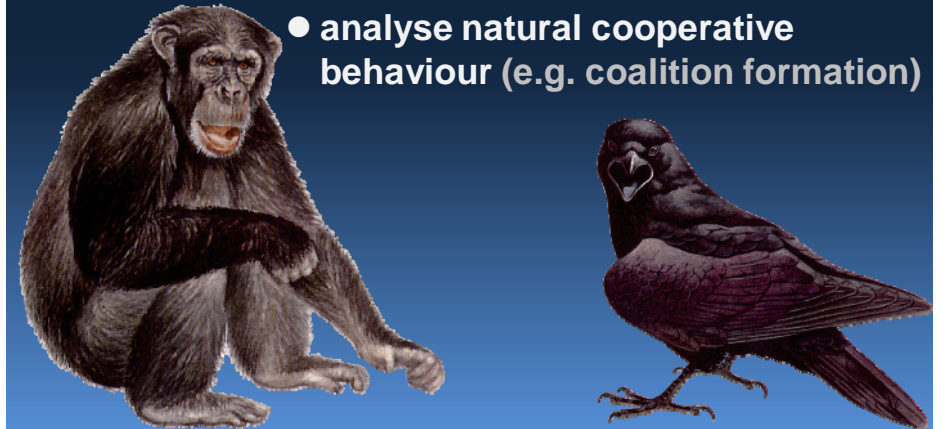
- large songbirds
- large variety of habitats
- broad spectrum of social organisations

Why cooperation in corvids?

- advanced cognitive capacities
 - ▶ tool use
 - ▶ perspective taking
 - ▶ deception
- comparable to **primates** in many aspects
- ... but few studies of **cooperative behaviour**

COCOR strategy (1) primate – corvid comparison

- repeat successful cooperation experiments done with primates
- analyse natural cooperative behaviour (e.g. coalition formation)



COCOR strategy (2) development of theoretical models

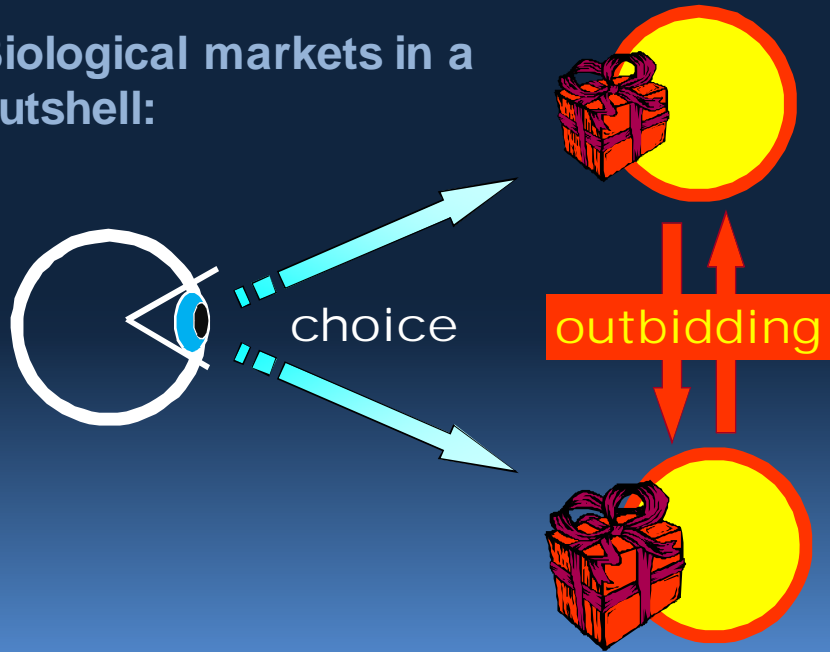
- ▶ economic theory
(PL Eric van Damme – CentER – Tilburg)
- ▶ robotics ("embodied agents")
(PL Orazio Miglino – Rome/Napels)



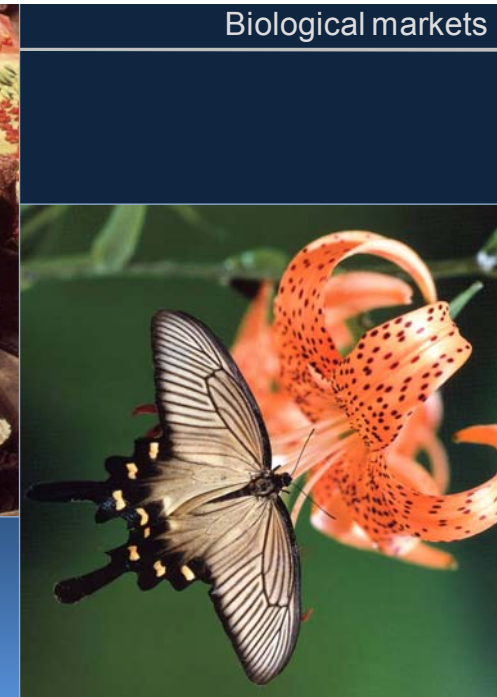
.. and a bit on my own research within these programmes

- ▶ **Evolution of cooperation** (biological markets)
- ▶ **Economic behaviour in vervet monkeys**
- ▶ **Cooperation in rooks**

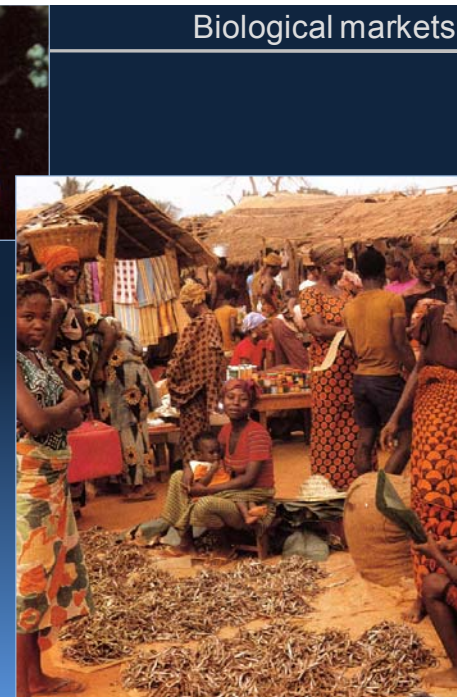
Biological markets in a nutshell:



participants exchange goods or services ("commodities")

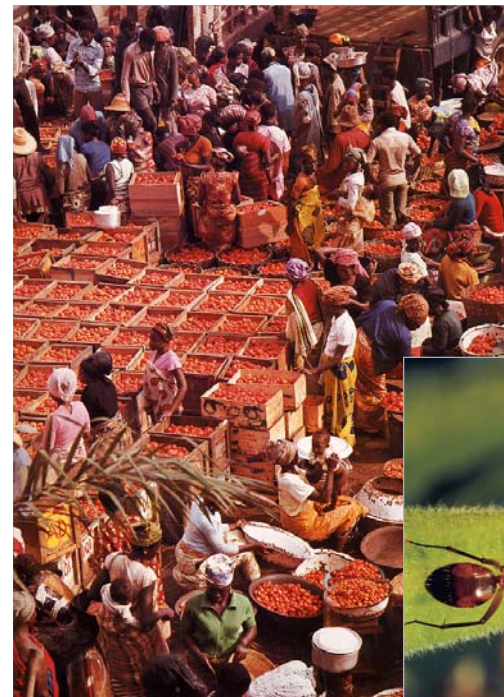


Biological markets



Biological markets

partner choice and outbidding are important mechanisms



supply and demand determine the exchange rate of commodities



Biological markets

Another well-known market ...



mating markets

ANALOGIES

economic markets

biological markets

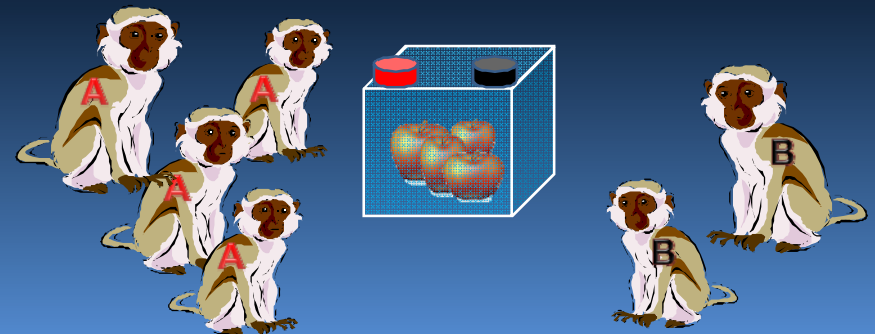
Loskop South-Africa



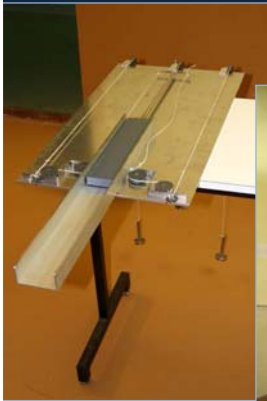
Vervets in Loskop – South-Africa

after Cécile Fruteau ..

Riccardo Pansini
(support: GEBACO)



Rook colony at the DEPE - Strasbourg



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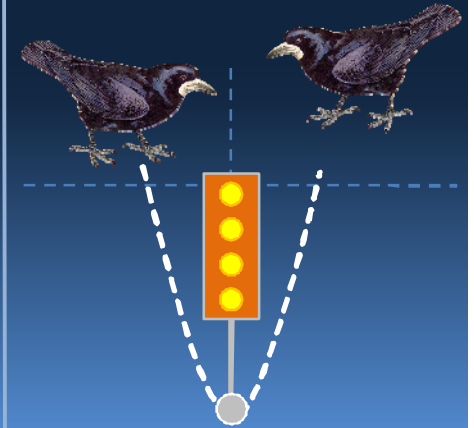
Cooperation in rooks

Food transfer:

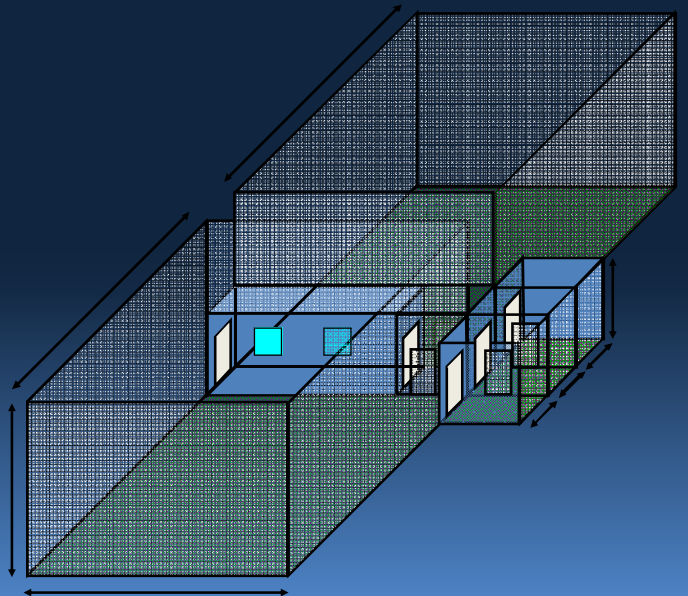
- ▣ active feeding
- ▣ passive sharing (tolerance)



'Personality' & performance in cooperation experiments



Design aviaries rooks campus Cronenbourg (Strasbourg)



drawing: Thomas Hindelang

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Summer schools

Two summer schools jointly organised by TECT and INCORE

September 2008 and September 2010

organisation:

- INCORE coordinator (Delphine Réminiac)
- ESF-office Strasbourg

Summer school 1

Title: **Tools of the trade in cooperation research**

Date: **30 August - 6 September 2008**

Venue: **Obernai – Alsace**

Duration: **7 days**



Participants: PhD-candidates & post-docs of GEBACO & TECT (+ others?)

Teachers: from pool TECT – GEBACO - INCORE (+ others?)

Summer school 1

Goals:

- strengthen theoretical and methodological basis
- improvement of ongoing projects
- exchange between students from different disciplines

Summer school 2

Title: **Presenting results of cooperation research**

Date: 1st weeks September 2010

Venue: nice place

Duration: 7 – 10 days



Participants : (partially) same as before

Teachers: different set

Summer school 2

Goals:

- improving presentations of results (oral, poster, publication)
- presentation to general public and members of other disciplines
- **exercise 1:** writing interdisciplinary chapters with multiple authors
- **exercise 2:** writing grant proposals

TECT-Meeting 2009?

Proposal for a TECT-programme meeting
"Interdisciplinary cooperation"

- ▣ near 'easy to reach' airport in Europe
- ▣ 3 days (July or September 2009)
- ▣ 60 – 100 participants
- ▣ plenary sessions (mornings)
 - special format: "tandem talks"
- ▣ workshops & round tables (afternoons)
 - 'same theme – different disciplines'

INCORE-TECT-Meeting 2009?

Larger conference
"Cooperation research in Europe"
proposed by David Skuse
(coordinator of GEBACO and INCORE)

- ▣ Greece?
- ▣ 5 days ?
- ▣ 400-500 participants
- ▣ general 'big conference format'

Thank you for your attention
and
enjoy your holidays

