Social Relationships and Organizations
(Area 2)

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Summary

▷ What the Social Relationships and Organizations area is about

▷ How ILIKS members are involved in this area

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- Sample joint work: “Delegation and Mental States”, presented by Nicolas Troquard (joint work with Emiliano Lorini, Andreas Herzig and Cristiano Castelfranchi)

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▷ Two general topics for possible collaborations
The social dimension

▷ Collectives/Groups of agents
  • *Interpersonal dimension*
    – mutual beliefs
    – trust
    – dependencies . . .
  • *Emergent dimension*
    – collective intentionalities
    – collective actions
    – collective acceptances
    – rules and conventions . . .
The institutional dimension

▷ Organizations/Institutions

- **Normative/Deontic dimension**
  [rules that influence agents’ interaction]
  - rights
  - obligations
  - powers . . .

- **Constitutive dimension**
  - rules that create a new level of entities (actions, roles, etc.)

- **Coordinative dimension**
  - artifacts structuring interaction to coordinate collectives
A multidisciplinary domain

▷ Different disciplines involved (cognitive science, computer science, economics, linguistic, mathematics, philosophy, sociology)

▷ Goals
  ● Fundamental/Theoretical
  ● Practical/Applicative

▷ Methods
  (A) Analytical (pre-formal)
  (F) Formal/Logical
  (I) Implementation/Application oriented
Different Focus

▷ Mental dimension of the collectives
  • collective intentionality (IRIT-LILaC, ISTC-{IAMCI, LOA, T3} [A/F])
    – mutual and group beliefs
    – group preferences
  • trust and delegation
    (ISTC-{IAMCI, T3}, IRIT-LILaC, UNITN-DIT [A/F])
Different Focus

▷ Social/Normative dimension

- power and control (ISTC-{IAMCI,T3} [A/F], UNITN-DIT [I/F])
- dependence and autonomy (ISTC-{IAMCI,T3}, UNITN-DIT [A/F])
- ownership (UNITN-DIT [I/F])
- mental counterpart of norms/org. (ISTC-{IAMCI,T3} [A/F])
- deontic (+temporal) logics (IRIT-{ACADIE,LILaC} [F])
- impact of technology and knowledge management in the organizational choices and structure (UNITN-DISA [A])
Different Focus

- Ontological nature of organizations
  (ISTC-{IAMCI,LOA,T3} [A/F])

- Organization modeling and analysis (UNITN-DIT, ISTC-LOA [I/F])
  - security analysis (UNITN-DIT, ISTC-LOA, IRIT-ACADIE [I/F])
  - risk analysis (UNITN-DIT [I])

- Organization design and design analysis
  (UNITN-DIT, ISTC-{IAMCI,LOA,T3} [I/F])
Common projects

▷ **MOSTRO:** MOdelling Security and Trust Relationships within Organizations.
   (ISTC-LOA, UNITN-DIT, IRIT-LILaC)

*Aim.* The development of a well founded ontology and of a methodology (based on that ontology) for modelling organizations with special emphasis to relationships among agents.

▷ **ForTrust:** Social Trust Analysis and Formalization.
   (IRIT-LILaC, ISTC-IAMCI+T3)

*Aim.* To provide an in-depth logical formalization of the concept of trust together with the implementation of a reputation-based platform for the interaction between intelligent agents.
Can the social and the institutional dimension be linked?

Even if it is possible to conceive

– the **social/emergent** dimension (allowing for tacit and/or *implicit* forms of interaction)

as conceptually different from

– the **institutional/normative** dimension (laws, contracts, companies and all the entities that are *explicitly* introduced)

they are linked.
How the social affects the institutional?

- Collective intentionality and organizations
- We attitudes, group preferences and deontic logic
- Trust, delegation and organizations
How the institutional affects the social?

▷ Organizations as designed (and “imposed” as) coordination artifacts

▷ Power and Social Control

▷ Social/individual impact of institutional/normative systems (impact of norms on cognitive processes)
What about the dynamics?

- Normally the institutional dimension seems more *stable* than the personal/social one

- But, norms and organizations can evolve too
  - meta-norms (difficulty of having to manage object- and meta-level at the same time)
  - impact of the use of technology in the evolution/change of organizations
  - ...