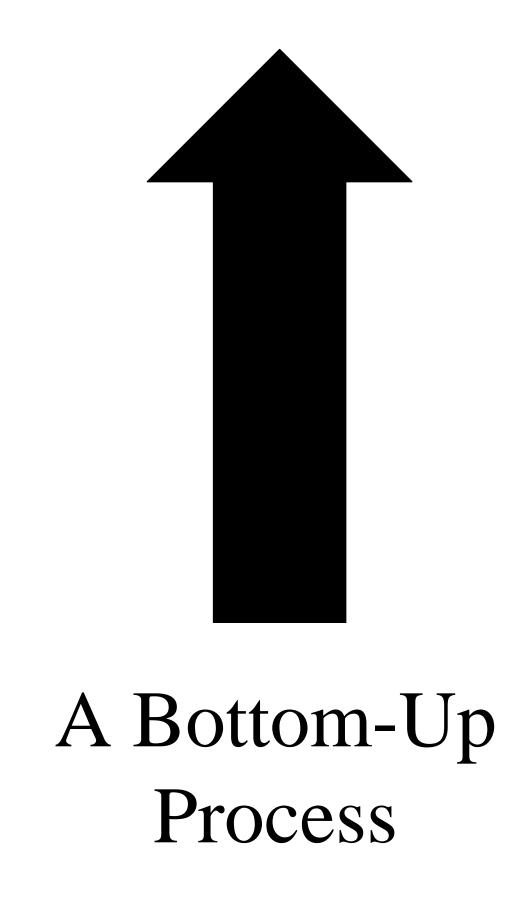
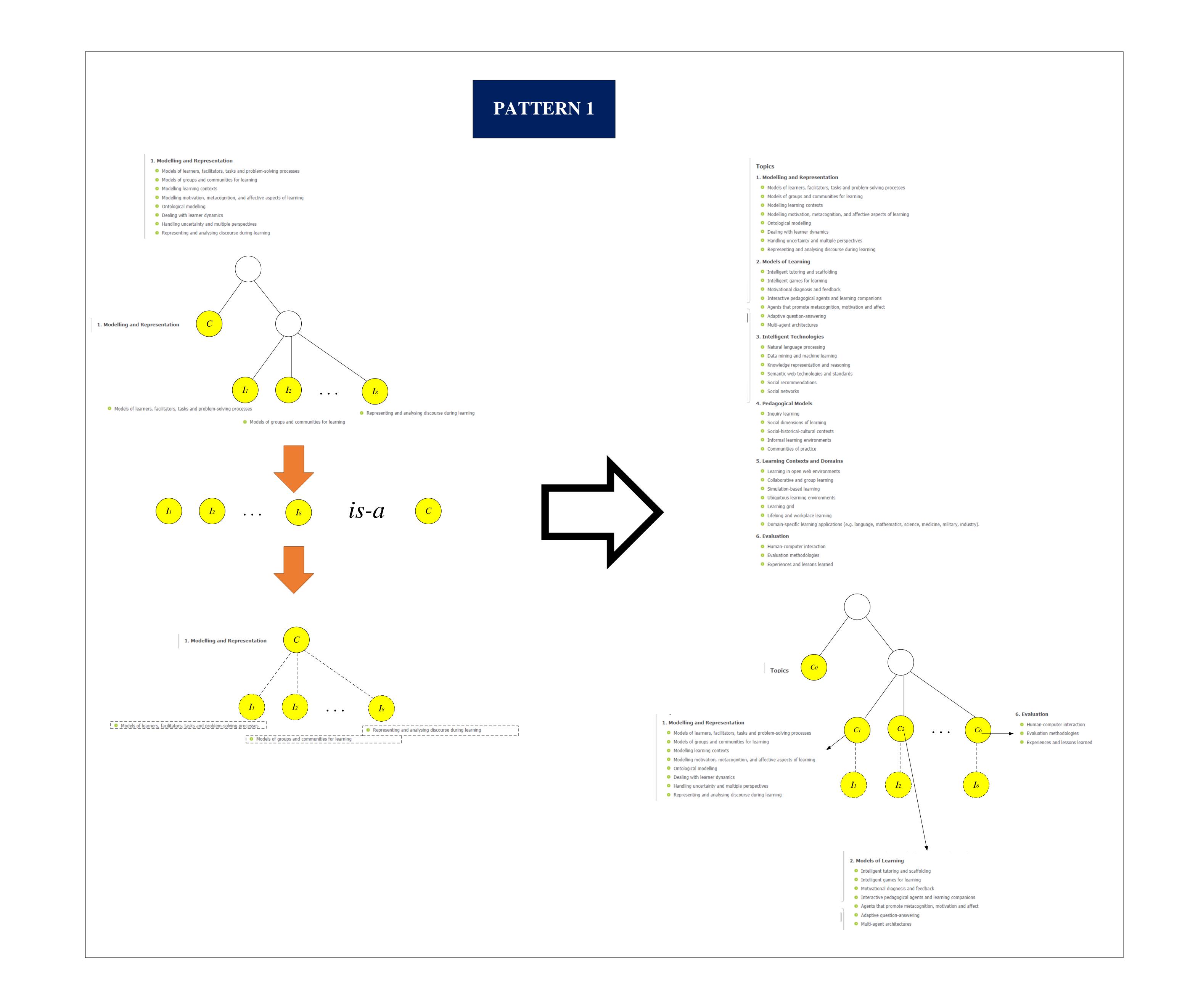
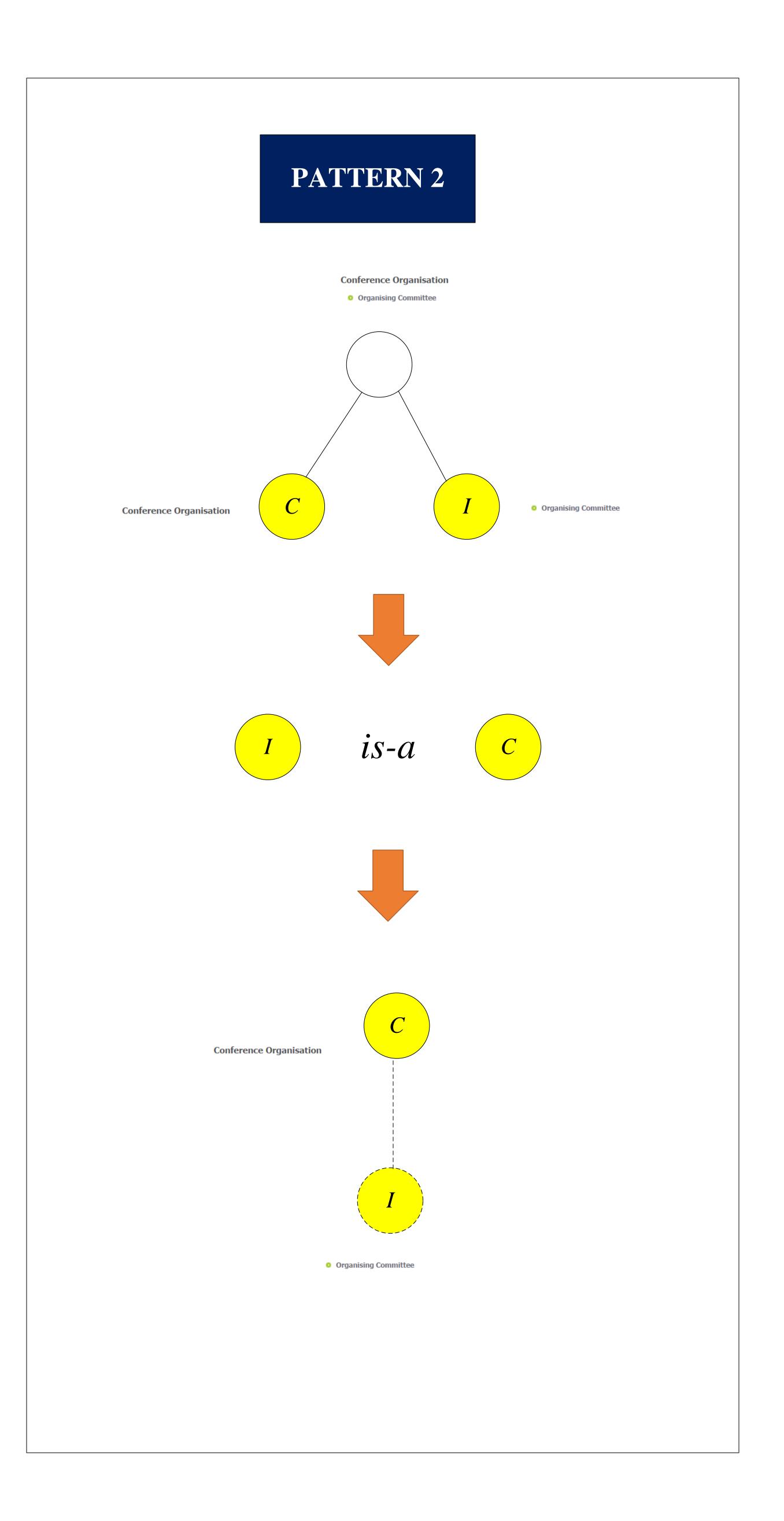
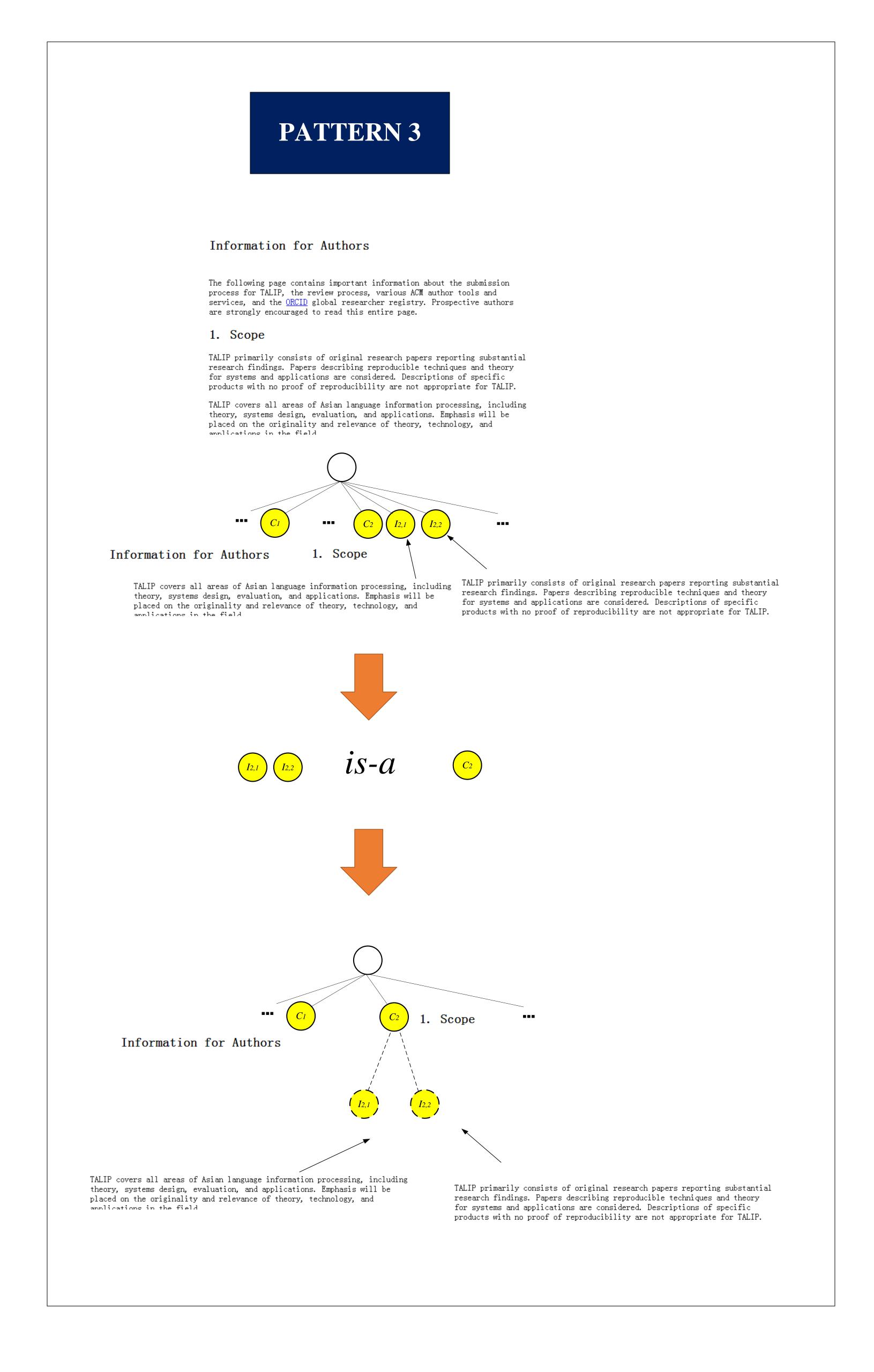
### Is-a Relations Learning









#### Basic Idea: Subset Partition

subclass-of relations learning:

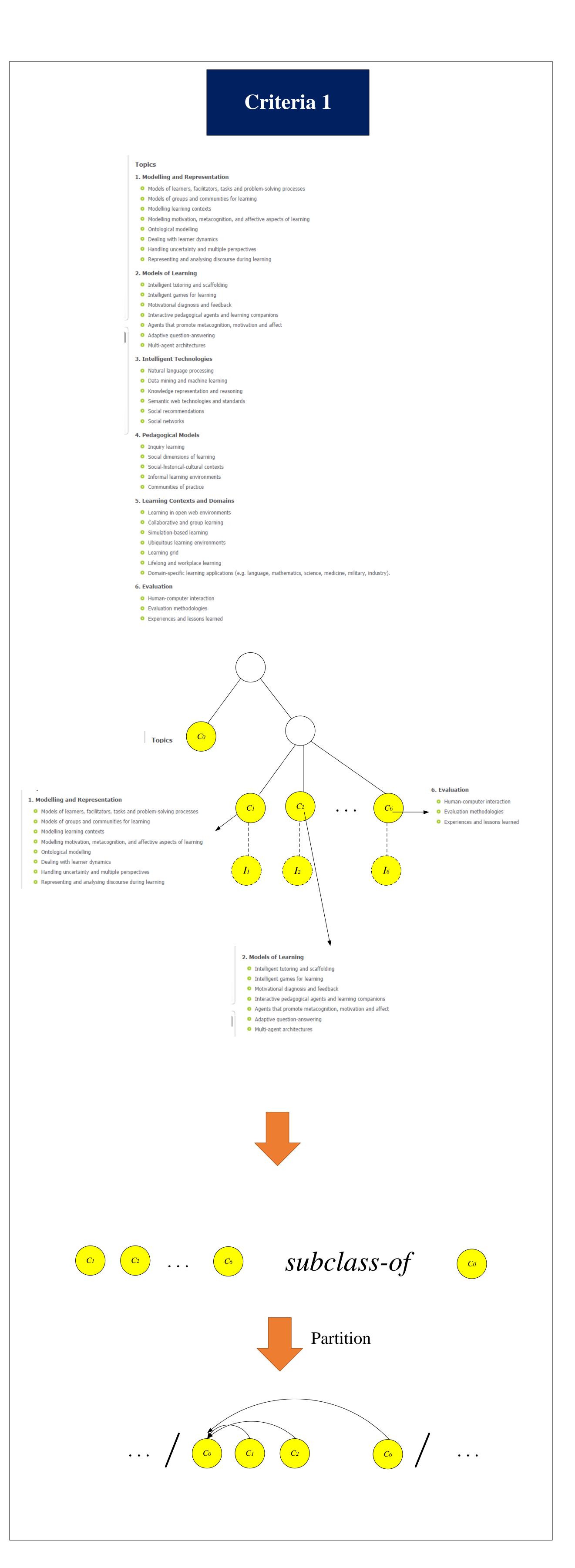
Step 1: After is-a relations learning, we clean all nodes labeled by I, then the only semantic node in the tree is labeled by C. Step 2: Traverse this tree based on **Depth First Search** algorithm to construct a concept sequence.

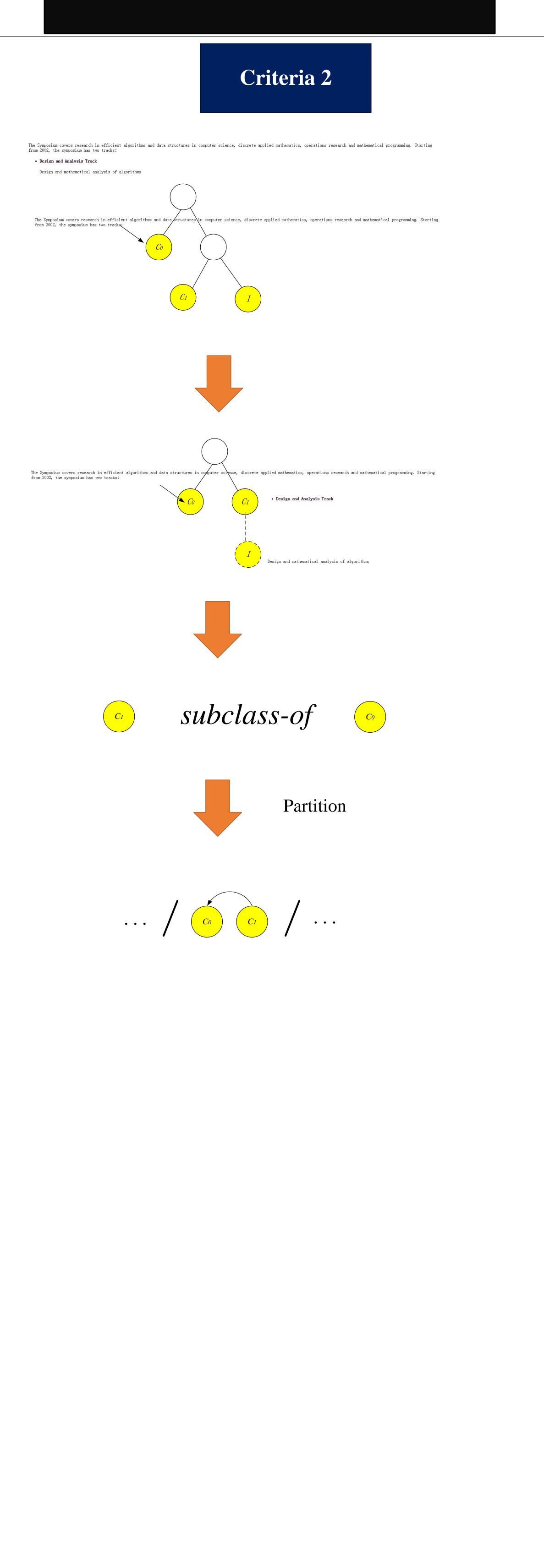
Step 3: Use a dynamic programming algorithm to segment this concept sequence to some subsets. Concepts in a same subset have some relations.

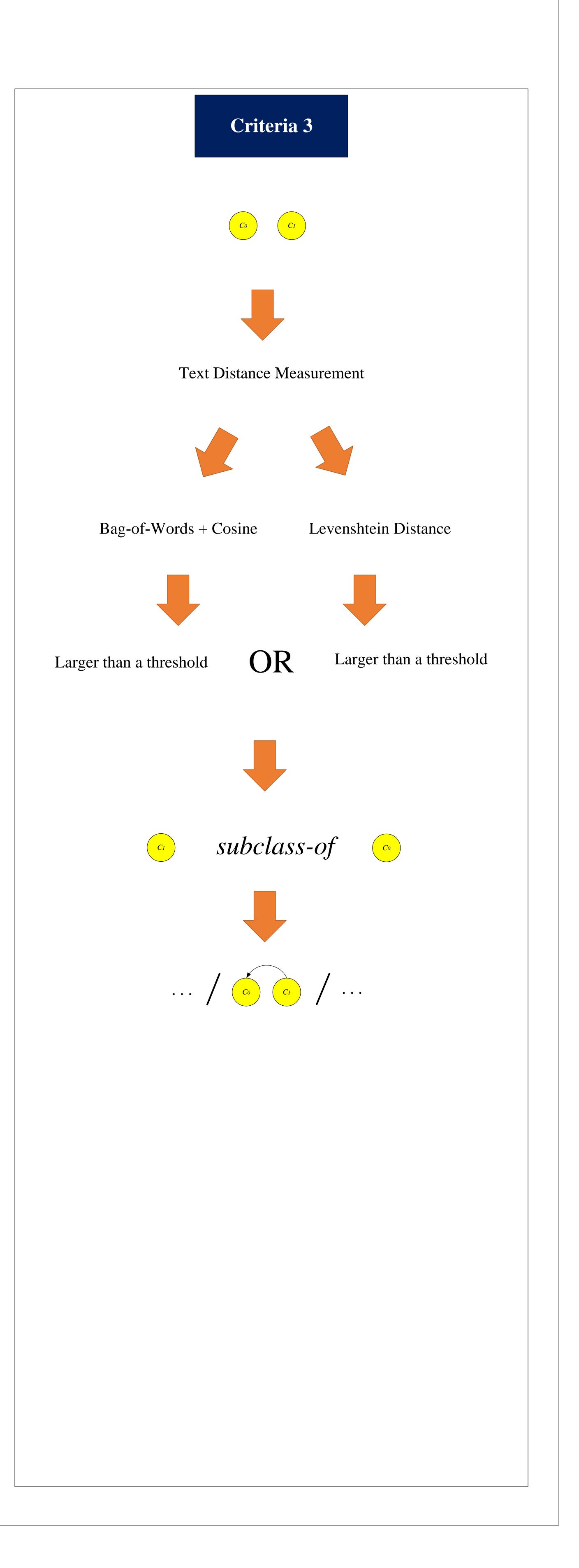
# Segment This Sequence to Some Meaningful Subsets: C1 / C2 C3 C4 / C5 C6 C7 C8 subclass-of subclass-of subclass-of

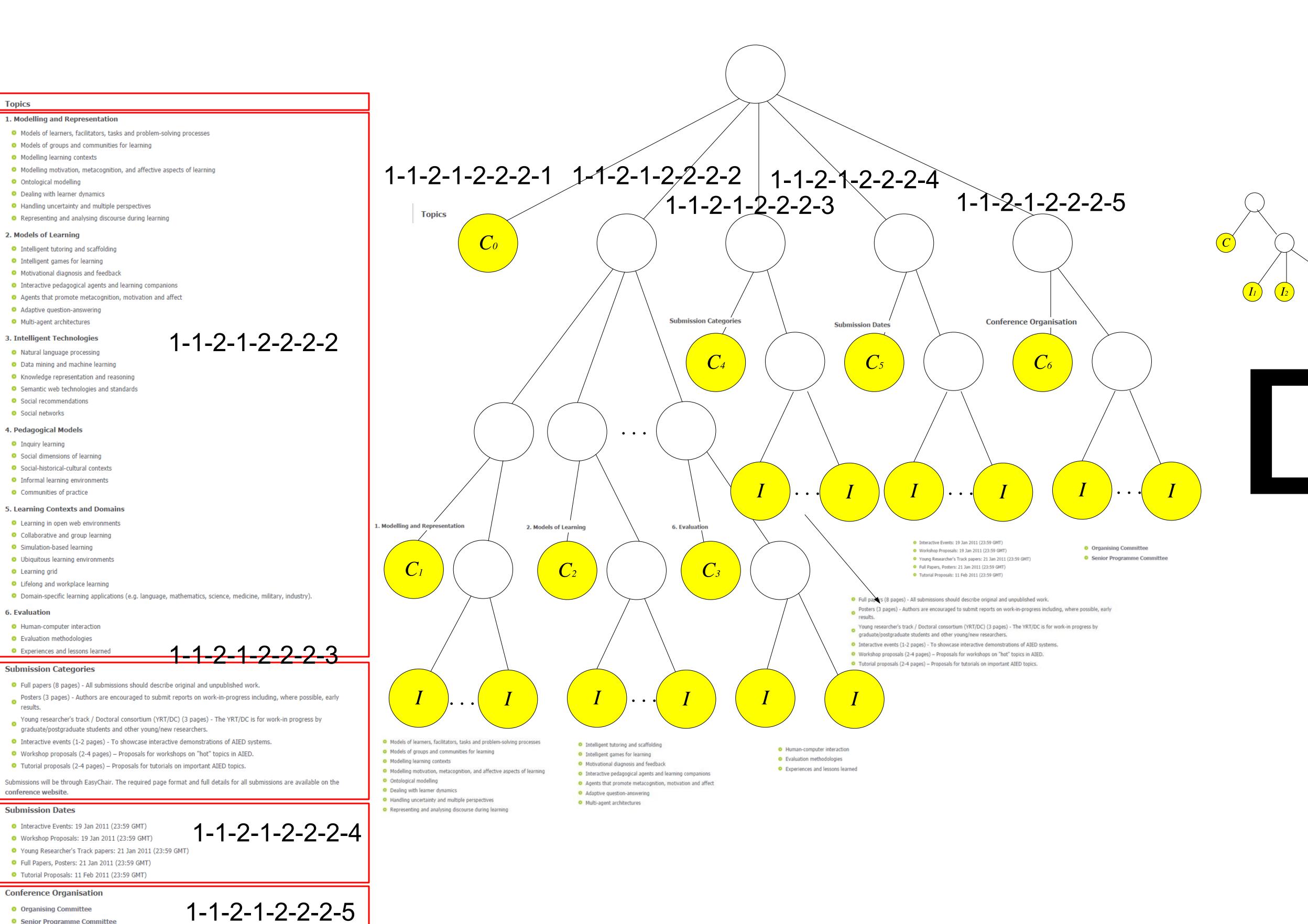
### Subclass-of Relations Learning

## Criteria of Subset Partition









1. Modelling and Representation

Modelling learning contexts

Dealing with learner dynamics

 Intelligent tutoring and scaffolding Intelligent games for learning

Motivational diagnosis and feedback

 Adaptive question-answering Multi-agent architectures

 Natural language processing Data mining and machine learning

Knowledge representation and reasoning

Semantic web technologies and standards

3. Intelligent Technologies

Social recommendations

4. Pedagogical Models

Social dimensions of learning

Informal learning environments

Communities of practice

Simulation-based learning

Learning grid

Social-historical-cultural contexts

5. Learning Contexts and Domains

Learning in open web environments

Collaborative and group learning

Ubiquitous learning environments

Lifelong and workplace learning

Human-computer interaction

Experiences and lessons learne

Evaluation methodologies

Submission Categories

conference website.

Submission Dates

Interactive Events: 19 Jan 2011 (23:59 GMT) Workshop Proposals: 19 Jan 2011 (23:59 GMT)

 Full Papers, Posters: 21 Jan 2011 (23:59 GMT) Tutorial Proposals: 11 Feb 2011 (23:59 GMT)

Conference Organisation

Senior Programme Committee

Organising Committee

Young Researcher's Track papers: 21 Jan 2011 (23:59 GMT)

Social networks

Inquiry learning

Ontological modelling

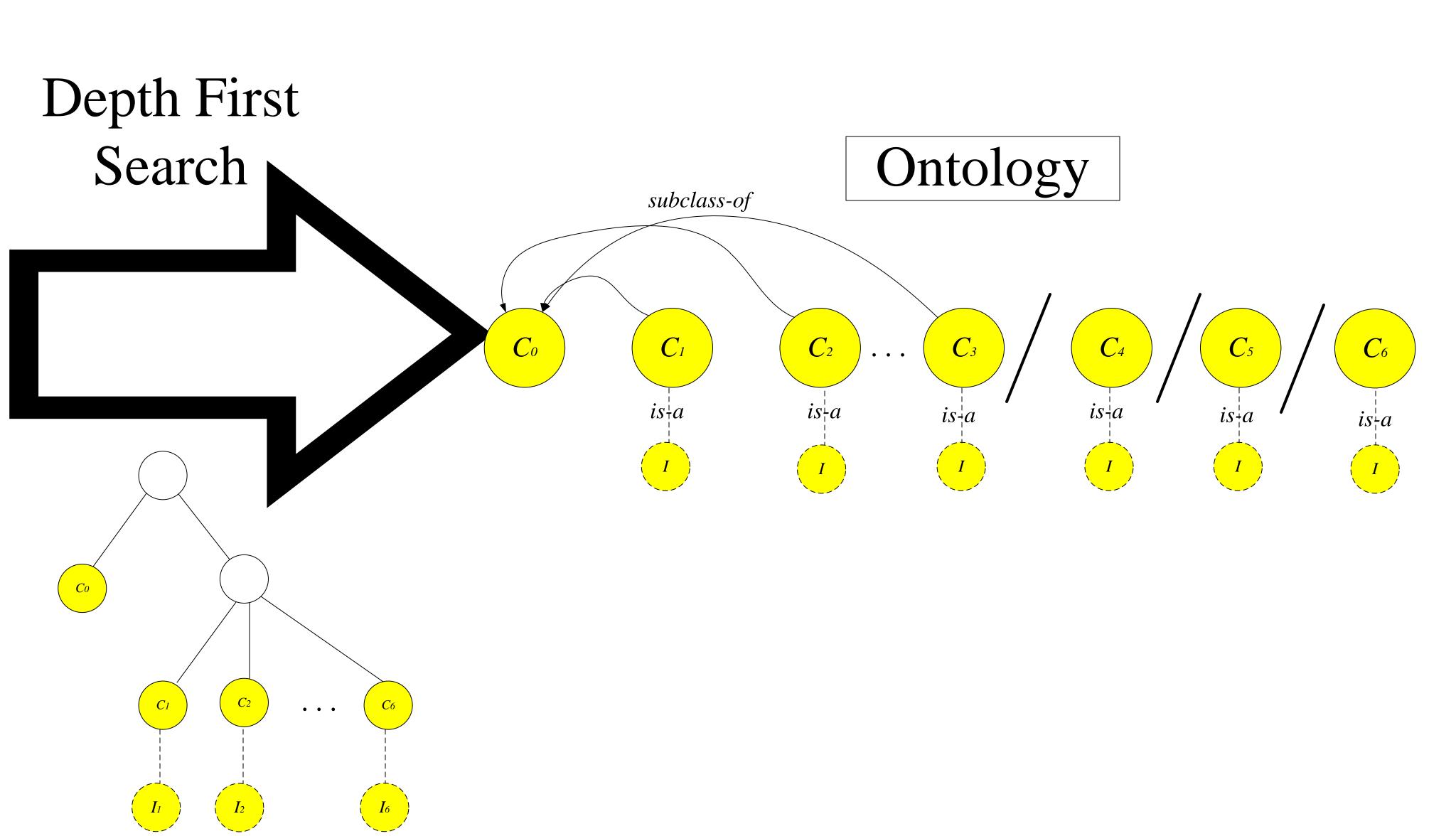
2. Models of Learning

Models of groups and communities for learning

Handling uncertainty and multiple perspectives

Representing and analysing discourse during learning

 Interactive pedagogical agents and learning companions Agents that promote metacognition, motivation and affect



Submission Categories

Human-computer interaction

Experiences and lessons learned

Evaluation methodologies

Intelligent tutoring and scaffolding

Motivational diagnosis and feedback

Interactive pedagogical agents and learning companions

Agents that promote metacognition, motivation and affect

Intelligent games for learning

Adaptive question-answering

Multi-agent architectures

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Full papers (8 pages) - All submissions should describe original and unpublished work.

 Interactive events (1-2 pages) - To showcase interactive demonstrations of AIED systems. Workshop proposals (2-4 pages) – Proposals for workshops on "hot" topics in AIED.

Tutorial proposals (2-4 pages) – Proposals for tutorials on important AIED topics.

graduate/postgraduate students and other young/new researchers.

Posters (3 pages) - Authors are encouraged to submit reports on work-in-progress including, where possible, early

Young researcher's track / Doctoral consortium (YRT/DC) (3 pages) - The YRT/DC is for work-in progress by

Young Researcher's Track papers: 21 Jan 2011 (23:59 GMT)

1. Modelling and Representation

Models of learners, facilitators, tasks and problem-solving processes

Modelling motivation, metacognition, and affective aspects of learning

Models of groups and communities for learning

Handling uncertainty and multiple perspectives

Representing and analysing discourse during learning

Modelling learning contexts

Dealing with learner dynamics

Ontological modelling