FONDAZIONE BRUNO KESSLER

ICT International Doctoral School

Ways of Analysing User Feedback in RE: Textual processing and Argumentation

Itzel Morales Ramirez
Center for Information and Communication Technology, FBK-ICT
International Doctoral School ICT- University of Trento, Italy

Advisor
Anna Perini

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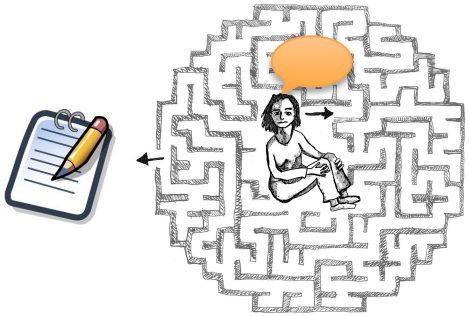
Outline

1.- Introduction

Context,
Problem &
Research questions

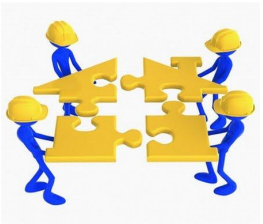


2.-Related work

Ways of collecting &
analysing

3.- Progress

User feedback meta-model
Intuition about argumentation



4.- Conclusion

Introduction
Definition

What is feedback?

Primary results of introducing the implemented software system into the real world. There is an immediate response to the system.
[Madhavji06]

Information about reactions to a person's performance of a task, etc., used as a basis for improvement.
[Oxford American Dictionary]

Introduction
Context

- User feedback

Meaningful information with the purpose of suggesting "____" to software applications.

open-source software

- New needs
- Modifications
- Strategic behaviours, etc.

Description

dubiel 2003-09-10 09:21:02 UTC Description [reply] [-]

It would be nice to save standard settings for that filter -- every time i have to choose tab as a separator, then deselect comma (decimal numbers), and delete text separator. This is very time consuming and I have to open very often csv files.

It would be also nice to select between comma and dot as a decimal point in numbers.

frank For instance [-]

Hi,

this i

The se settin

Frank

dubie [-]

For ex file w locale

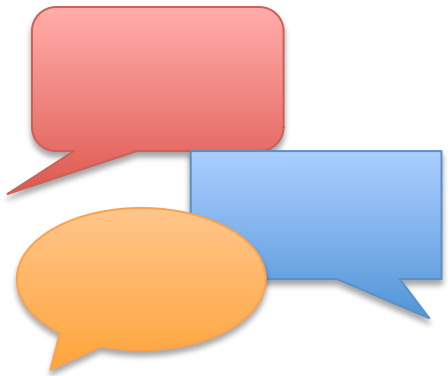
So my intention is not to make OO work with dot or comma that is set

UTC Comment 3 [reply] [-]

eature in O.o 2.0. dialog would have lution?

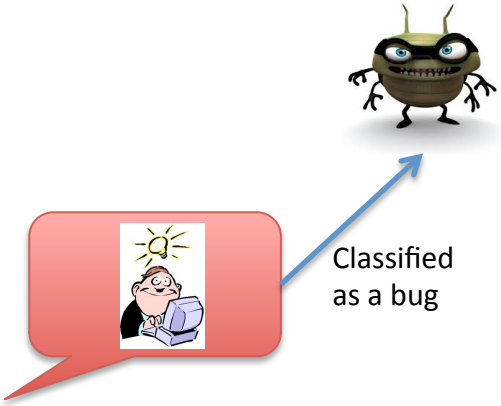
- Unstructured feedback organised by topics.
- Semi-structured feedback by product, component, version, summary (mandatory), issue type (optional)

Problem of managing end-user feedback



Heterogeneity of abstractions levels

Huge amount of feedback and discussions



Mismatching of the purpose

We believe that user feedback can be a valuable source of requirements knowledge contained in discussion forums of open-source software.

Research objective

?

- Define a systematic approach for acquiring user feedback and deriving requirements knowledge from it

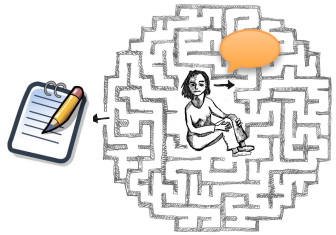
RQ1. What is the appropriate conceptualisation of user feedback?

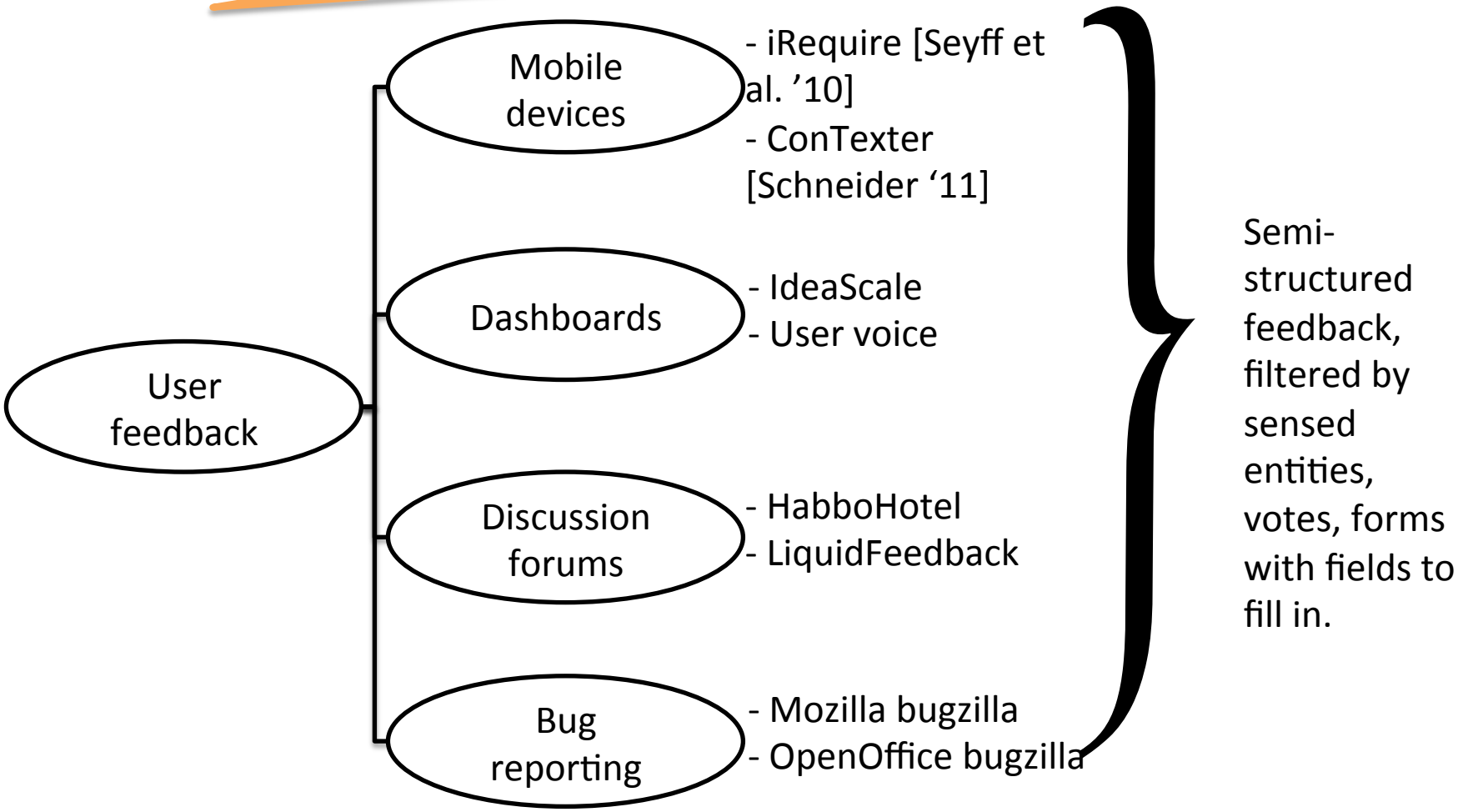
RQ2. Which are the suitable techniques to collect *explicit*, *direct* and *indirect*, user feedback?

RQ3. How can analysts derive requirements knowledge from it?

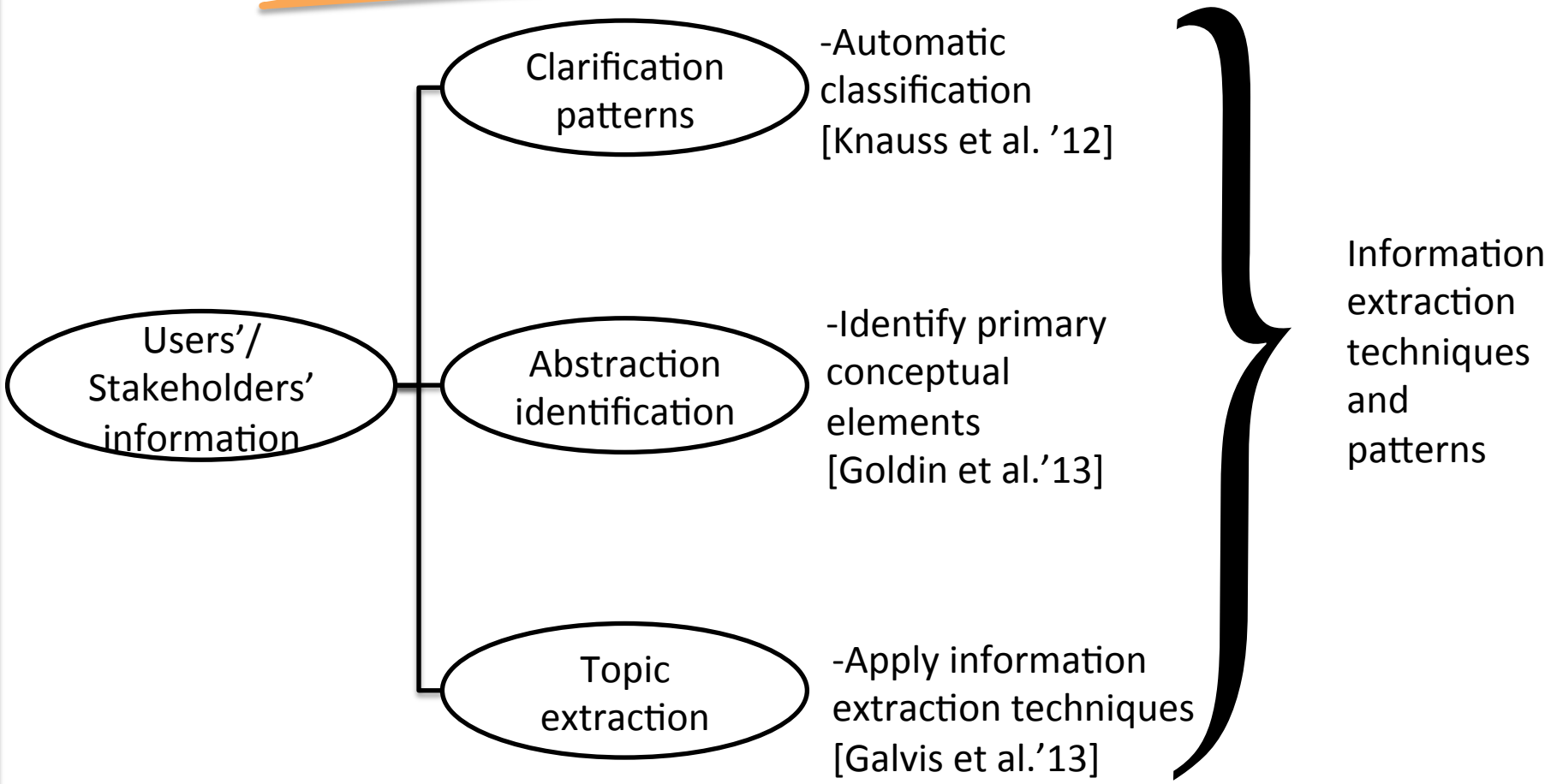
RQ4. What are the validations to assess if the proposed approach improves the management of user feedback?

Related works Collecting





Related works Analysing



Progress
User feedback conceptualisation

- Excerpt of the characterisations of types of feedback

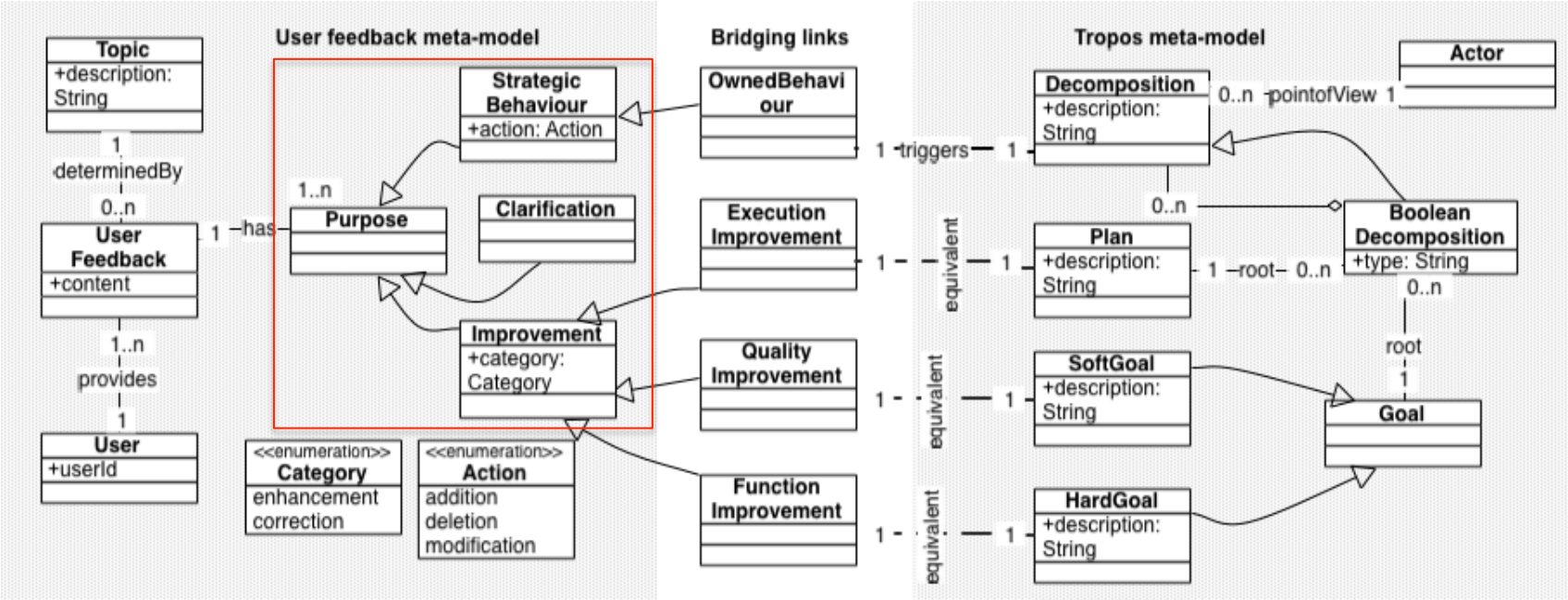
Dimension	Classification	Example
Acquisition	-Explicit (Active)	A message for asking feedback, e.g. "Please let us know your opinion."
	-Implicit (Passive)	Inferring information from the users' interaction.
		bringing the blood sugar back to the normal concentration.
	-Encouraging (Positive)	Ants lay down a pheromone that attracts other ants. When an ant travels down a path and finds food, the pheromone attracts other ants to the path.
	-Strategic behaviour	A peer can give another strategy for achieving a specific activity.
	-Clarification	A book can provide information to clarify ideas.

RQ1. What is the appropriate conceptualisation of user feedback?

Progress

Excerpt of the user feedback meta-model

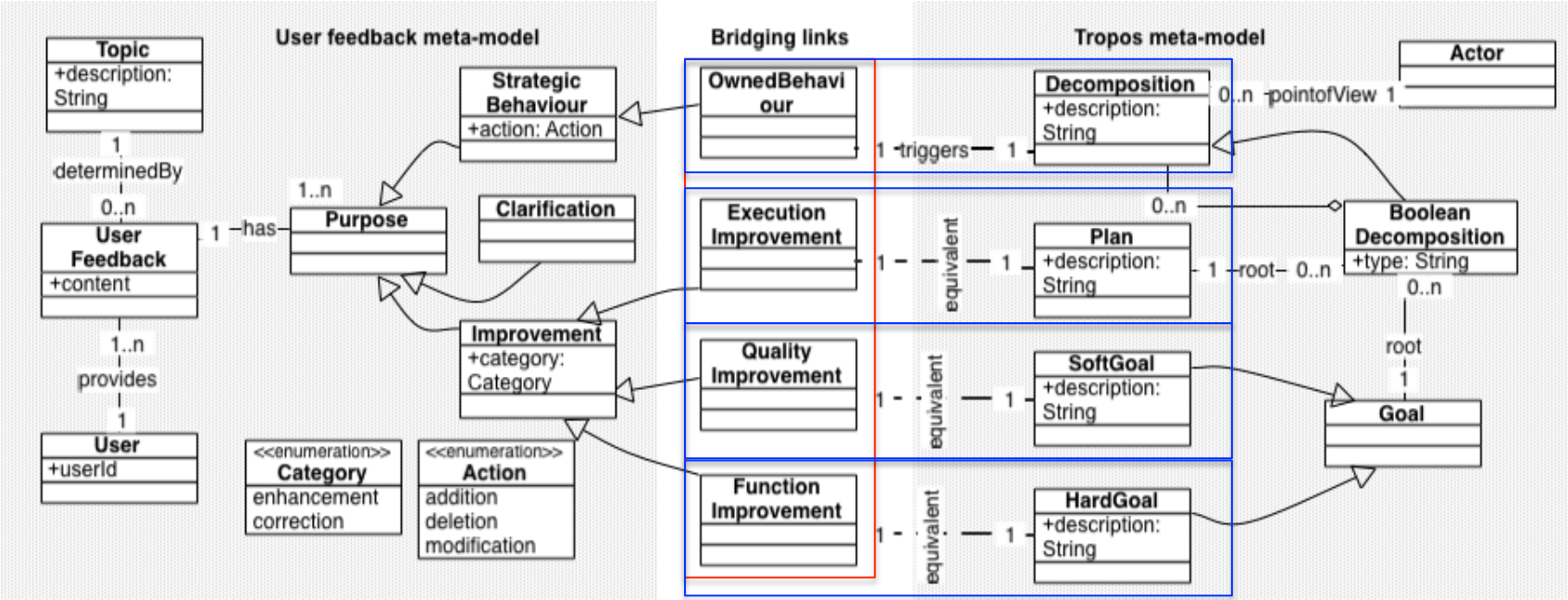
- Explore bridging links to Tropos meta-model [iStar2013]



Progress

Excerpt of the user feedback meta-model

- Explore bridging links to Tropos meta-model [iStar2013]



Progress
Example

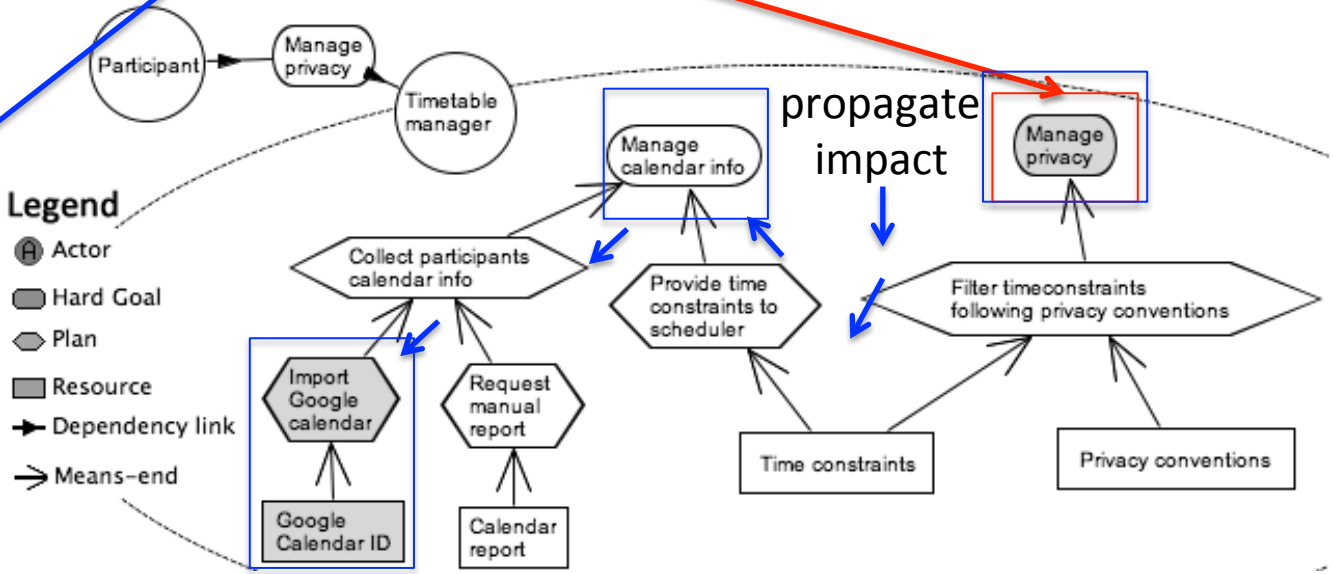
- Paolo "I do not want my full Google calendar to be considered, only the periods related to my working time" (Concerning privacy issues).

Purpose
'negative' wish, i.e. *Improvement*

Classified as *Clarification*
categorised under➔ Discussion

Key concepts
"full Google calendar"
"to be considered"

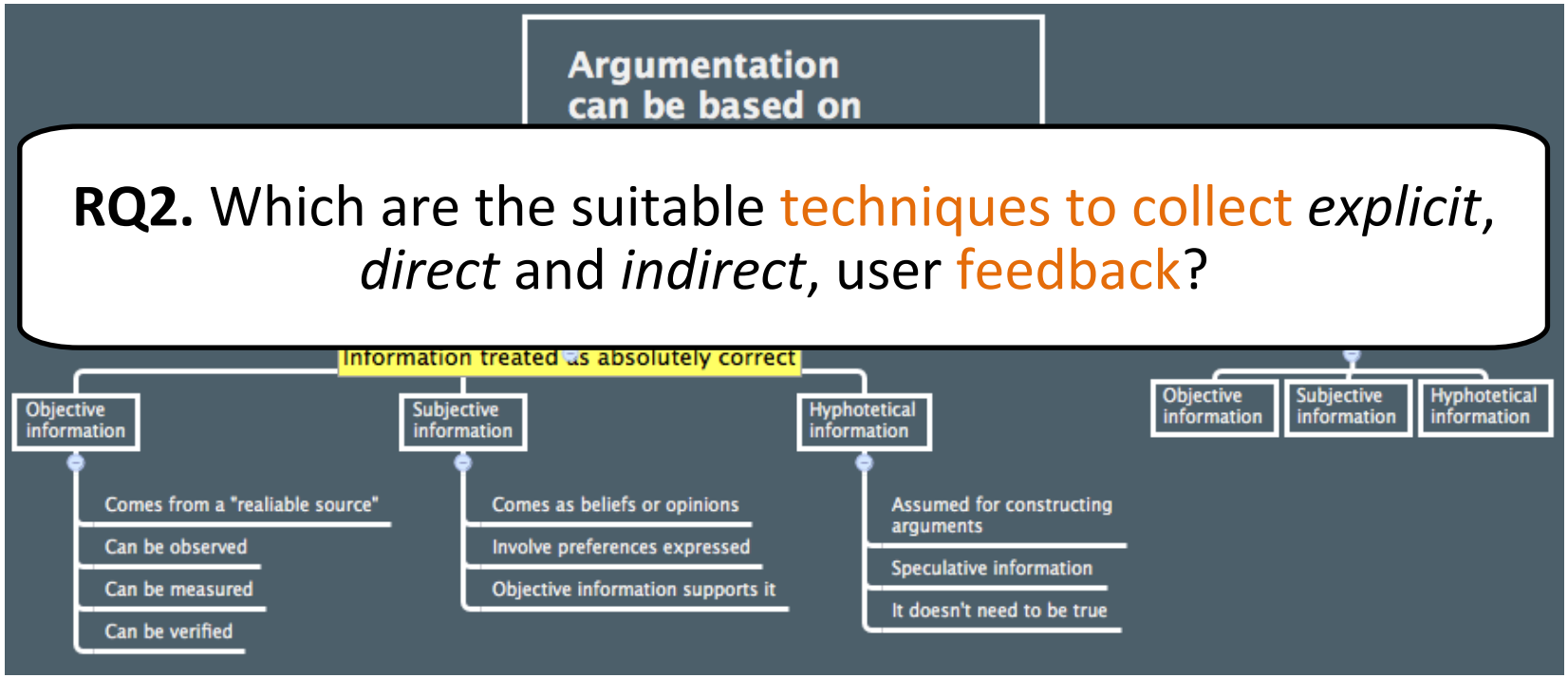
propagate impact



Progress

Intuition about argumentation

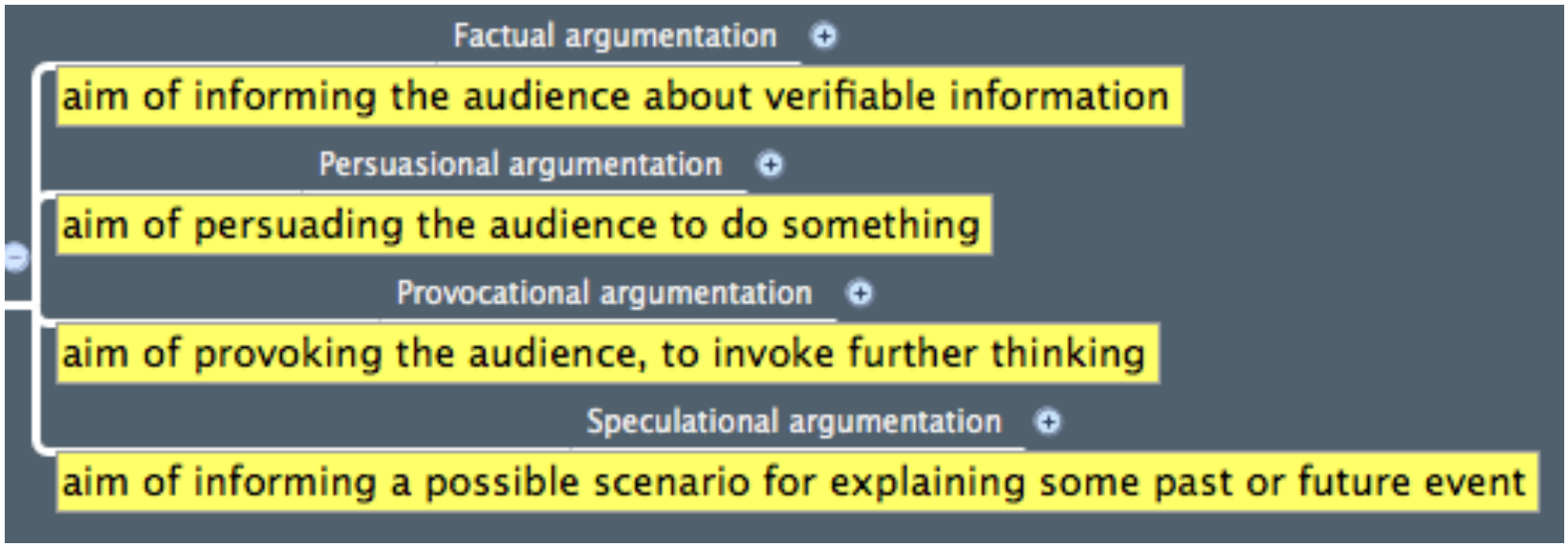
- Argumentation is an important cognitive process for dealing with conflicting information by generating and/or comparing arguments [Besnard 2009]



Progress

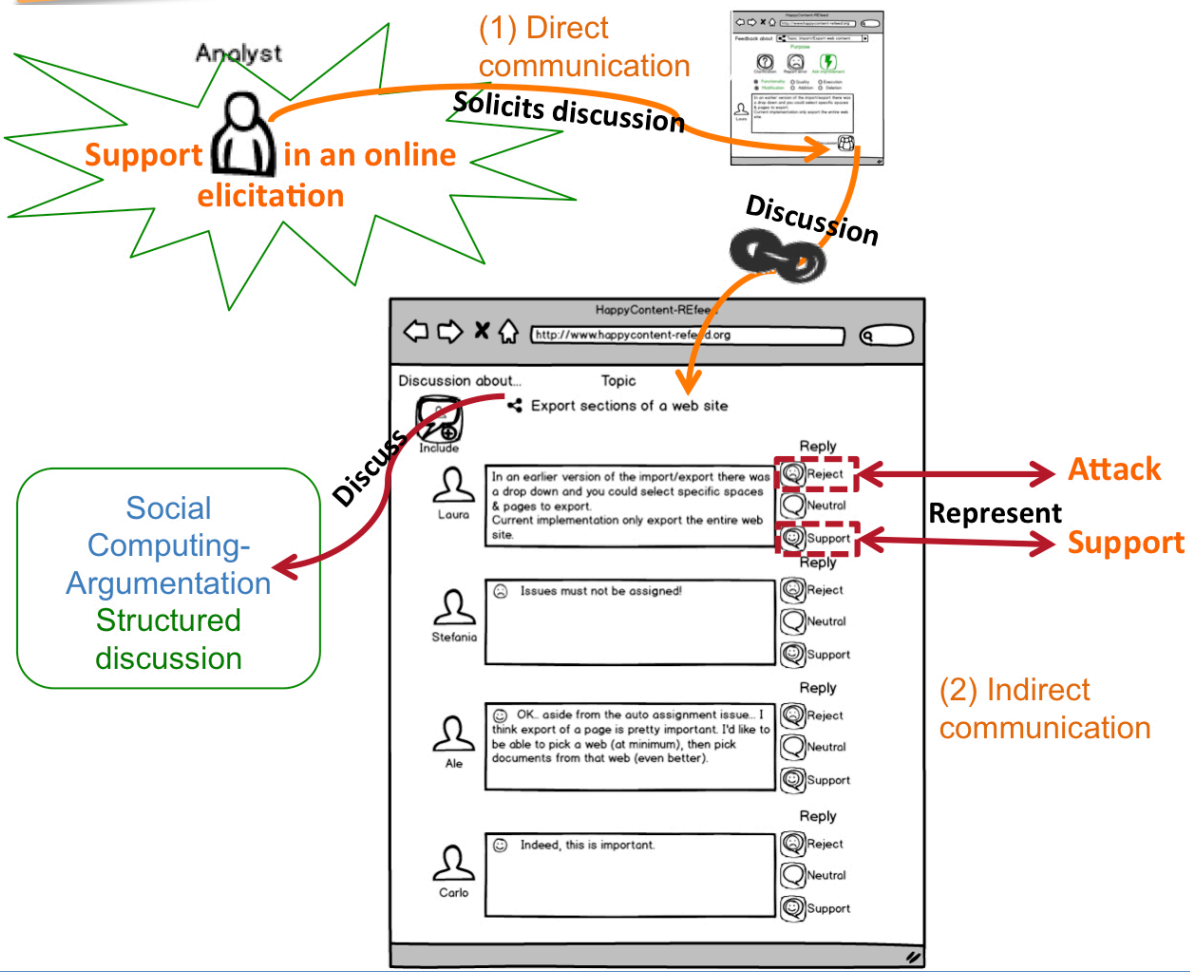
Intuition about argumentation

- Depending on the kind of information used and on the aim of the presenter.



Progress

Intuition about argumentation



Conclusion

- Context: software evolution driven by user feedback
- Problem: acquiring feedback and deriving requirements knowledge
- Progress:
  - Selected case study in the context of open-source software
  - Patterns and conceptualisation
  - Intuition about argumentation