The semantic Grail : robust and meaningful labels, intelligible to man and machine

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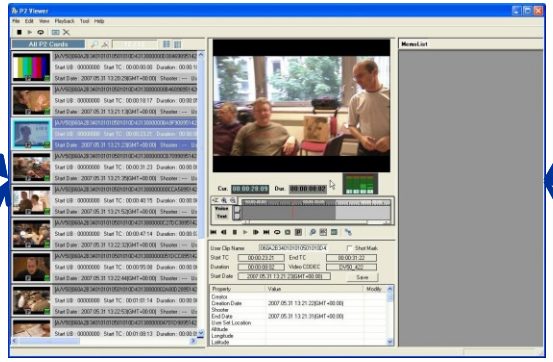
New usages



Added value of semantics

To handle the many assets coming from delinearized audiovisual contents, that should be autodescriptive and autonomous to be used;

To enable interoperability between tools used in AV production

To enable production that can be based on content creation or reuse.

Adding semantics…

Semantics: annotating non textual content by words more or less controlled.

→ **DOG**

But…

It’s enough for human beings:

The unreasonable efficiency of language

But, for the machine ?

What you say to your dog...

“go out of this trash!

do you hear, Toby !?!

go out of this trash!”

What your dog understands…

« Bla bla bla bla bla bla bla bla !

Bla bla bla **Toby** !?!

Bla bla bla bla bla bla bla bla ! »

What you write on your computer...

« I wrote an article about 'Audiovisual needs semantics' »

What your computer understands

« bla bla bla bla bla bla bla bla 'bla bla bla bla bla' »

Semantics for machines

understanding for human beings: natural language is semantics

Meaning **?**

DOG

Meaning **?**

<biology:naturalcategory: dog>

Meaning modelling: ontologies, formal semantics, etc., exploitable by machines

Two issues

Adding semantics for human beings

Problem:

Associating contents (textual, non textual content) with labels;

Which labels ?

Coming for social tagging (the more, the merrier);

- **But semantic gap: tags far from computable exploitation.**

Coming from authority lists, thesaurus, ontologies;

- **A compromise: hard to interpret, but formally computable (at least regarding ontologies)**

Coming from automatic analysis

- **but semantic gap: algorithmic results far from human understanding**

Adding semantics for machines

Problem:

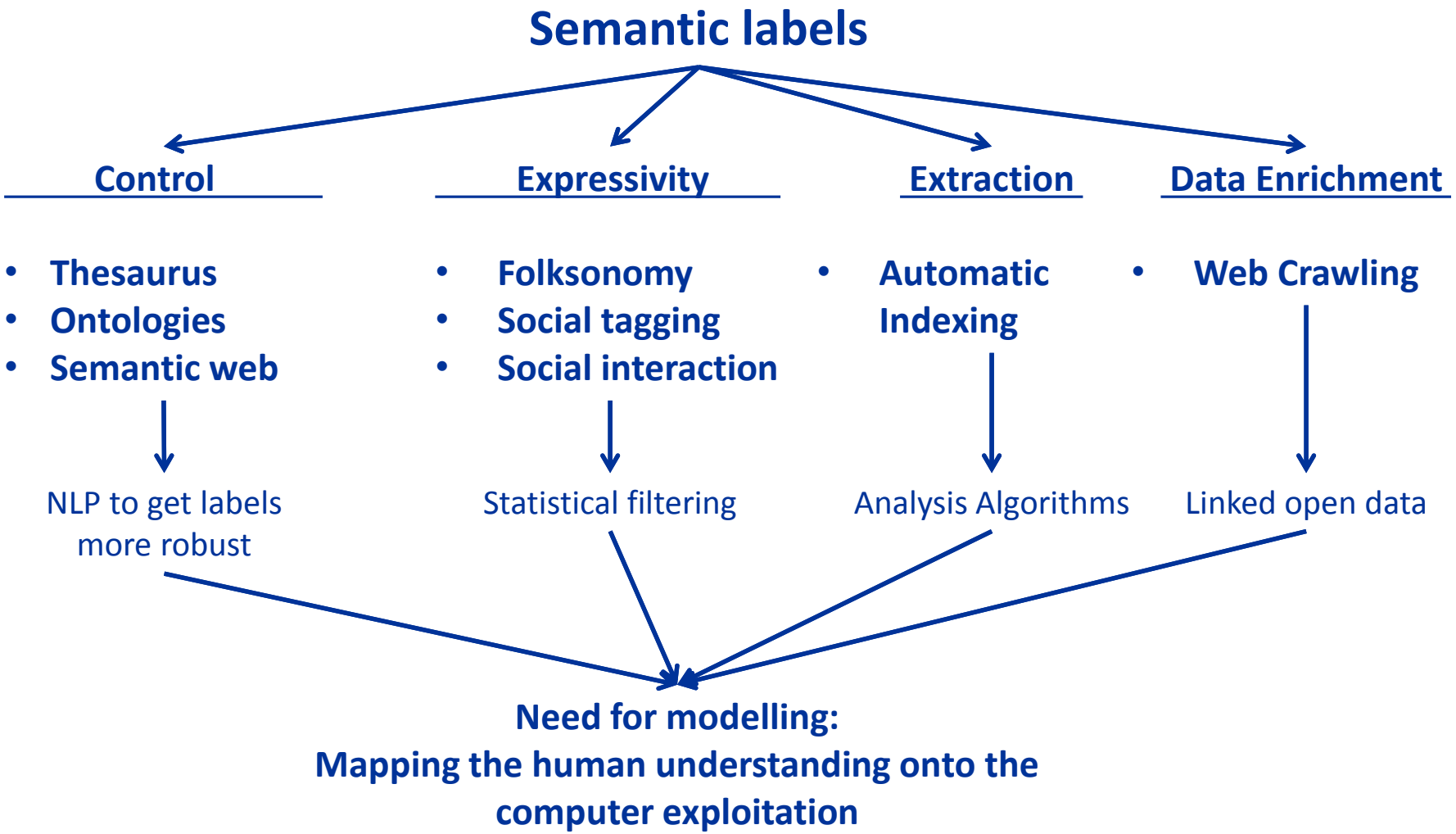
Providing with an operational and effective translation of content and associated labels : label is an instruction

Which labels:

Labels that are not simply strings or charsets but something computers can use.

- **Need for modelling to make the link between a label and an expected behaviour of the computer.**

Several strategies… none are the solution



As a conclusion

Such mappings can be defined locally, for some applications and usages

These mappings are necessary to ensure interoperability and intelligibility

GRAIL :

Robust and meaningful labels intelligible for human-being and machine

And now, ladies and gentlemen…

14:15 - 14:30: Gondwana: The link between the event and the broadcast information management (Steny Solitude – Perfect Memory)

14:30 - 15:30: Tools to bridge the semantic gaps: Authôt (Olivier Fraysse)-SeekioTech (Frédéric Beaugendre)-EarlyTracks (Patrick Watrin)-Fraunhofer (Uwe Kühhirt)

15:30 - 16:00: Embedding EBUCore metadata in MXF (Maarten Verwaest – Limecraft)

16:00 - 16:45: An approach to integrate hardware and software components based on FIMS (Guillaume Rachez – Perfect Memory)

16:45 - 17:00: Clipflo – mobile applications for artists to enable them to generate revenue from their art (Daniel Harris – Kendra)