VCOI Call Notes

*2 November 2020*

# Attendees

* Mike
* Claude
* Rob

# Agenda

* Continue from last time
* Blockchain PSIG feedback

# Meeting Notes

## The Nyms

Homograph is a union of Homonym and Heteronym

The Venn diagram can be shown as a cube

3 Dimensions:

* Meaning
* Spelling
* Pronunciation

For our purposes we are only interested in Spelling and Meaning – a square side of the cube.

MB have a go at doing the cube as a graphic and highlight the square.

This highlights the VCOI proposition of Word <> Meaning

(where Word = Term i.e. include multi-word terms and abbreviations)

### What to present

Formats:

* Tables
  + Wiki
  + Document inserts
* Stand-alone wiki page

### Stand-alone wiki page

What goes there? Word or Meaning?

* Probably words
* Humans tend to start with words

Then the page (for any multi-word concept?) has a ‘disambiguation’ page leading to pages for each

* Each what?
  + Each word with its meaning?
  + Each concept

#### Aside: Question with ontology development

Two approaches that exist:

1. Start with a word, put some OWL assertions around it
2. Start with a concept, then think about what word to use for it

2 possible approaches in ontology for labeling

1. Have opaque labels for each concept
2. Choose one, suitably broadly understood word (or phrase) for each concept

#### Then

The subsequent page you go to

* Is about and only about one concept
* Has a primary label (using approach (2) above)

**Possible problems with this:**

For concepts at the level of some of the philosophical stuff, that may be possible; or pages in the OMG Wiki, e.g. algorithmic governance – what’s the broadly understood word that uniquely identifies that concept in the first place?

We are dealing with ontological matters where the context is rich and nuanced. In something like BFO you have things at a rarified level.

Smith recommends (1). Would work if there was tool support for being able to surface different sets of words in different communities – i.e. Link the vocabulary to the ontology via THE CONTEXT!

Example:

* Commitment = helicopter view per REA
* Obligation = the perspective on that from one party’s PoV

In English they mean more or less the same.

Also e.g. Client v Customer.

We often have 2 concepts, and 2 words, but someone has to decide which label to use for which concept.

#### Implications

For this VCOI initiative, we want to be able roll this out to each of the TFs; would they be expected to have deep discussions about what labels to use to represent different underlying concepts.

Difficult to square with getting a set of terms from e.g. Lars that he wants to disambiguate for a general audience (like Algorithmic Governance)

Algorithmic Governance as an example – neither of the approaches above works well for that requirement. Better to come up with a solution that works for us, deal with the academic issues later.

In the case of Algo Governance, the definition the TF people ended up with was based on Algorithmic GovernMENT and was wrong – but this wasn’t even related to disambiguation per the Nyms. It happened because someone was determined to find a dictionary definition and so looked for one for the most similar term for which there was one.

Similarly Bitcoin – as a new term, lots of different assertions and ideas get thrown up about what someone thinks it means.

So for these new-tech notions, there may be no single definition but a constellation of possible meanings

e.g. for Algorithmic Governance:

* Using software to help govern
* Putting business rules into software to constrain the flow of regulatory information
* Or something else

i.e. here’s a new term, how do we find out what the TF intended to mean by it?

May have concepts that are related to each other but that would almost certainly be mutually exclusive:

* A kind of government
* A kind of governance
  + What is Governance a kind of?
* A kind of management strategy?
* A kind of response to a regulatory imperative
* Something else

This kind of issue is best solved by going straight to ontology.

Even if – we end up with 2 or more meanings

e.g. Blockchain:

* The kind of DLT that is a chain of blocks
* A generic marketing term for all DLTs

### Idea:

Do a word cloud of the existing usages of a word or term. Rather than try to pin it down.

**Agenda challenge:** what to present to a TF or SIG to get them to make the decisions about what they really meant?

**Answer:** Word cloud – show the ways

(MB: or is it a concept cloud?)

Or look at the 2nd and 3rd largest words, to give a clue as to what concepts are in play.

**Suggestion:** Can also do with SKOS broader / narrower relations?

e.g. with Blockchain – we still don’t know what someone means when they use the word in a given paper.

(if only papers did what documents do – have terms and abbreviations as well as References, as a standard section, like we do in OMG docs, so we know what someone means by the thing).

**Requirement:** Need to be able to say when the thinking is too fuzzy.

e.g.

* Blockchain
* Ontology
* Taxonomy
* Vocabulary

e.g. GBA Electronic Voting Security draft they came to the OMG with – they talk about Blockchain but never say if they mean Blockchain or ANY DLT. Has been mentioned to them. E.g. whether they should exclude other examples. Or if they really mean any new tech.

See also DIDO.

#### Examples

To help someone understand what the intended meaning of a term was, we also want to include Examples – including edge cases.

#### Detail

Another approach is to get the people who intend to define a term, so go down to another level of detail.

For example in Blockchain (in the broader sense) you have what the CORDA folks did, which to define a ‘Blockchain menu’. They took specifically the Satoshi paper, and broke it down into about 7 menu option. E.g.

* Permissioned v permissionless
* Proof of Work v Proof of Stake
* Trusted 3rd party present or absent
  + E.g. Fluree
  + IOTA with Coordinator
* Distributed v not distributed
* And a few others

THEN

We need to define the meanings of those variable. Ontology.

And then define meanings of kinds of DLT based on these concepts as differentiae (back to ontology again).

Then you can define things in the primary taxonomy of things you are trying to define (things that are kinds of Blockchain) based on these differentiae

### Challenge for this group:

The above example is v domain specific. We can end up writing out the structure but this does not help us get to a repeatable methodology that other groups can be taught how to sue.

Almost need a maturity model for how each TF or SIG needs or wants this level of maturity or sophistication or philosophical awareness. Maybe a word cloud is all they need. Need to identify what actually adds value to that TF to meet their needs.

We can talk about blockchain but that doesn’t help Retail define Point of Sale.

#### The Challenge for this Group

How do we create a portable methodology that deals with the traps and gotchas that require some philosophical understanding, but don’t bring along levels of philosophy that are not needed? How to create a set of tools and techniques, show them what we did, give examples of how other TFs for SIGs approached a given part of the problem.

Maybe come up with a palette of techniques:

* The Word Cloud idea
* The wiki pages for disambiguation
* The ontology for locally defined terms
* The way of originating the Terms and Definitions

We haven’t been back to Gov DTF.

### Blockchain PSIG Notes

#### LETS RFP

Uses an SBVR-derived approach. Ensures internal consistency within the document.

This is within the document, but not within the TF.

The idea of having the VCOI method let to define tables of document inserts, is that going forward, every new document produced by a given TF (or sent to TF by a SIG) would use the same words consistently.

* Is that impossible ?
* Is it desirable?

#### LETS RFP Recent work

* Kept some definitions where they already were.
* Others defined in the DSSID RFI and borrowed from there

**Other extreme:** the word ‘metadata’ is defined separately each and every time – seems unnecessary

Going to be times when you DO want a different concept for a given term in a given document.

Might have 2 things in Blockchain PSIG that use the word Blockchain differently.

**Conclusion:** sometimes the document wants to use the term the way the TF or SIG has already defined it, but in other cases a narrower meaning may be needed for that document.

### Outcomes

Rather than delivering a single methodology we should aim to deliver a bunch of useful techniques. For example the word clouds idea. No need to focus on levels of detail that end users won’t engage with. Want a tool that is helpful.

Also consider audience – use the pages we create to interest people in working with OMG – has to be user oriented, have recognizable things we are doing. Might be nice to have the nice technical stuff underneath it but not at the expense of delivering something.

### Do the Word Cloud Idea

On that: where would you get the corpora to extract the cloud from

* Have the TF do that – so they identify the docs they feel are relevant
* Then run the analysis on those
* Can define a procedure to that.

#### Tools and Techniques:

Focus on techniques, let the tools follow.

### AoB

No.