

Questionnaire on the relevance of DBPedia predicates for role representation of unstructured, contextualized values

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We are running a research aimed at recovering the semantics of sets of values, given the context where they occur. The values usually occur in tables or lists over the Web¹. We want to reconcile these unstructured data with respect to an ontology. More precisely, given a context (e.g., *books*) we want to infer that the *role* of values such as *J.R.R. Tolkien*, *J.K. Rowling* or *Isaac Asimov* is *author*.

The basic idea behind our approach is that we infer which ontology *predicate* is the most likely to be the role of all the values for a given context. For our experiments we choose the DBPedia Ontology. In order to evaluate our approach we need to compare its results with *relevance judgments* given by domain experts with some experience in Semantic Web and ontology design.

The file **questionnaire** (you can pick the *.ods* or the *.xls* file whether you are using LibreOffice or Excel to open it) contains 39 sets of values with a corresponding *context*, along with a set of DBPedia predicates that possibly represent the role of the values within the given context. You are asked to provide two different kind of judgments, **for each predicate**:

- How well a predicate represents the role of the values within the specified context. Please provide a relevance judgment between 0 (**not relevant**) and 2 (**definitely relevant**).
- Mark with an **X** the predicates whose **name** (as opposed to the explicit semantics provided by the RDF predicate itself) you would use to represent the role of the values of the group within the specified context.

Notice that for each group that you will be presented with there can be more than one relevant predicate. Moreover, notice that the predicates have been selected from a wider set of predicates, automatically discarding the ones that are clearly not relevant. As result, you may find that all the presented predicates are somehow relevant. In this case don't be afraid to assign the adequate relevance value, with the following interpretation:

- 0 - **not relevant**. The predicate *does clearly not represent* the role of the specified set of values within the provided context.
- 1 - **somehow relevant**. The predicate *can to some extent be used* to represent the role of the specified set of values within the provided context.
- 2 - **definitely relevant**. The predicate *rightly represents* the role the specified set of values within the provided context.

¹ See e.g., the Wikipedia Page on the episodes of the tv show [“How I met your mother”](#)

The evaluation questionnaire that you will be provided with looks like this:

Context

Here there are some examples of how the property have been used within DBpedia to link entities of different types

GROUP ID 1689442184	CONTEXT LABEL movies			
GROUP VALUES				
Action	Adventure	Animation	Biography	Comedy
Crime	Documentary	Drama	Family	Fantasy
Film-Noir	History	Horror	Musical	Mystery
Romance	Sci-Fi	Sport	Thriller	War
Western				
values				
DBPEDIA PROPERTY	PROPERTY NAME	RATE THE RELEVANCE OF THE PROPERTY	IS THIS PROPERTY NAME A CORRECT LABEL?	EXAMPLE 1
http://dbpedia.org/property/genre	genre			an agent has genre Reggae rock (an entity of type topical concept)
http://dbpedia.org/ontology/genre	genre			an organisation has genre House music (an entity of type genre)
http://dbpedia.org/property/tagline	tagline			an event has tagline What the World Has Come to
http://dbpedia.org/property/type	type			a work has type soundtrack
http://dbpedia.org/property/genres	genres			an agent has genres Alternative rock (an entity of type genre)
http://dbpedia.org/property/genre	genre			a work has genre Comedy-drama (an entity of type topical concept)
http://dbpedia.org/property/genre(s)	genre(s)			
http://dbpedia.org/property/genera	genera			a work has genera Horror film (an entity of type music genre)
http://dbpedia.org/property/influences	influences			a person has influences William Faulkner (an entity of type person)
http://dbpedia.org/property/topic	topic			a weapon has topic 1960.0

Insert here the relevance value for the specific property

Put an X here if you would use the predicate name as label for the role of the values in the group within the context

A more concrete example:

These people directed at least one television show episode

There is also a bit of ambiguity, since John Slattery is also an actor

GROUP ID 19037729	CONTEXT LABEL television shows			
GROUP VALUES				
Christopher Manley	Michael Uppendahl	John Slattery	Jennifer Getzinger	Phil Abraham
DBPEDIA PROPERTY	PROPERTY NAME	RATE THE RELEVANCE OF THE PROPERTY	IS THIS PROPERTY NAME A CORRECT LABEL?	EXAMPLE 1
http://dbpedia.org/ontology/director	director	2	X	a work has director Rick Salomon (an entity of type person)
http://dbpedia.org/property/producer	producer	0		a movie has producer Charles Roven (an entity of type agent)
http://dbpedia.org/ontology/creator	creator	1		a fictional character has creator Chris Warner (comics) (an entity of type agent)

The most common role that all these people have in the context of Television Shows is that they are directors. So I will give to the property <http://dbpedia.org/ontology/director> an high relevance judgment.

I will also consider the label **director** to be a correct label that represents the role of this group of values.

The questionnaire will take you about 30 minutes to complete. An Internet connection is needed to complete the questionnaire.

Once you completed it, please email it to riccardo.porrini@disco.unimib.it.

Thank you very much for your collaboration.