

# Annotation by category – ELAN and ISO DCR

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## Outline

- Introduction to ELAN
- Introduction to the ISO DCR
- State of ELAN - DCR interaction
- Future work, Known issues



## ELAN - Multimedia Annotation Tool

- written in Java programming language
- stores transcriptions in XML format (.eaf)
- available for Windows, Mac OS X, Linux
- sources available for non commercial use
- current version 3.5.0



## Main window of ELAN

The screenshot displays the ELAN software interface with the following components:

- Video Window:** Shows a scene with several people sitting on the ground in a traditional setting.
- Grid Panel:** Contains a table of annotations with columns for 'Nr', 'Annotation', 'Begin Time', 'End Time', and 'Duration'. The selected annotation (Nr 8) is highlighted in blue.
- Waveform:** A black waveform representing the audio signal, with a red vertical line indicating the current playback position.
- Text Grid:** A multi-layered grid showing various text tracks aligned with the audio. The tracks include:
  - Gloss1:** A red header track.
  - Gloss2:** A track with annotations like "You have sung them, sing t", "You sing those two part", "You (P) ask him (Kp)", and "that thing, you sung those 2 parts of Myää,|".
  - Kp:** A track with "mm" and "éé?".
  - Pius:** A track with "Myää mbwaa dè a ngi" and "Myää kn:ää ló y:i a nyi cha".
  - K:** A track with "mu cha ngí dé, mède ngí d", "Myää mbwaa dè...", "u kwo péé, nyi u kwo pé", "nyi u kwo p", and "mu tpile, mu Myää u mbwaa dè mu cha n".
  - Ricky:** A track with "= K?".
  - man outside vie**
  - child 1**
  - loudspeaker**



## Display of 0 to 4 videos

**Elan - r03\_v20\_s5.eaf**

File Edit Annotation Tier Type Search View Options Window Help

Grid Text Subtitles Controls

Gloss2

| Nr | Annotation  | Begin Time   | End Time     | Duration     |
|----|---|--------------|--------------|--------------|
| 1  | he's speaking into his 1/2 bush knife               | 00:00:31.708 | 00:00:32.708 | 00:00:01.000 |
| 2  | I am saying that he's talking into a half bushknife | 00:00:37.141 | 00:00:38.501 | 00:00:01.360 |
| 3  | everything we are saying is going inside            | 00:00:39.336 | 00:00:40.536 | 00:00:01.200 |
| 4  | See this fellow. he seems to me like a little frog  | 00:00:45.426 | 00:00:47.106 | 00:00:01.680 |
| 5  | it's collecting all these things?                   | 00:00:53.400 | 00:00:54.460 | 00:00:01.060 |
| 6  | it's recording                                      | 00:00:55.521 | 00:00:56.066 | 00:00:00.536 |
| 7  | You have sung them, sing them again                 | 00:00:59.412 | 00:01:00.942 | 00:00:01.530 |
| 8  | You sing those two parts of the MYää mbwaa          | 00:01:01.120 | 00:01:02.462 | 00:00:01.342 |

**Elan - 3\_cameras.eaf**

File Edit Annotation Tier Type Search View Options Window Help

00:01:18.636

Selection: 00:00:05.044 - 00:00:06.0

**Gloss1**

Gloss2 You have sung them, sing t

Kp mm

Pius

K mu cha ngí dé, mēdē ngí d

Ricky

man outside vie

child 1

loudspeaker





## Multiple synchronized viewers

The screenshot displays the ELAN software interface with the following components:

- Video View:** A window titled "Elan - r03\_v20\_s5.eaf" showing a video of people in a traditional setting. A red arrow points from the video to the text grid below.
- Grid View:** A table with columns: Nr, Annotation, Begin Time, End Time, Duration. It lists 11 numbered annotations.
- Audio Waveform:** A visualization of the audio signal with a red vertical line indicating the current playback position.
- Text Grid:** A multi-layered grid showing text for different glosses (Gloss1, Gloss2, Kp, Pius, K, Ricky, man outside vie, child 1, loudspeaker) aligned with the video and audio.
- Translation Windows:** Several overlapping windows showing translations for Dutch, English, and FRI (Frisian) for the selected text.
- Controls:** Playback controls (play, stop, fast forward, etc.) and window management options.

| Nr | Annotation  | Begin Time   | End Time     | Duration     |
|----|---|--------------|--------------|--------------|
| 1  | he's speaking into his 1/2 bush knife               | 00:00:31.708 | 00:00:32.708 | 00:00:01.000 |
| 2  | I am saying that he's talking into a half bushknife | 00:00:37.141 | 00:00:38.601 | 00:00:01.360 |
| 3  | everything we are saying is going inside            | 00:00:39.336 | 00:00:40.536 | 00:00:01.200 |
| 4  | See this fellow: he seems to me like a little frog  | 00:00:45.426 | 00:00:47.106 | 00:00:01.680 |
| 5  | it's collecting all these things?                   | 00:00:53.400 | 00:00:54.460 | 00:00:01.060 |
| 6  | it's recording                                      | 00:00:56.521 | 00:00:56.066 | 00:00:00.536 |
| 7  | You have sung them, sing them again                 | 00:00:59.412 | 00:01:00.942 | 00:00:01.530 |
| 8  | You sing those two parts of the MYää mbwaa          | 00:01:01.120 | 00:01:02.642 | 00:00:01.342 |
| 9  | You (P) ask him (Kp)                                | 00:01:03.000 | 00:01:04.000 | 00:00:01.000 |
| 10 | that thing, you sung tho                            |              |              |              |
| 11 | the next one  |              |              |              |



## Controlled Vocabularies

The screenshot displays the 'Edit Controlled Vocabulary' dialog box in the ELAN software. The dialog box has a title bar 'Edit Controlled Vocabulary' and a subtitle 'Edit Controlled Vocabulary'. It contains a 'Controlled Vocabulary' section with a 'Current CV's' dropdown set to 'phases', a text field for 'CV Name' containing 'phases', and a 'Description' text area. There are buttons for 'Import CV', 'Add', 'Change', and 'Delete'. Below this is an 'Entries' section with a list of entries: 'preparation', 'stroke', and 'hold'. The 'hold' entry is selected. To the right of the list are fields for 'Entry value' (containing 'hold') and 'Entry description'. There are buttons for 'Add', 'Change', and 'Delete' for entries, and a 'Close' button at the bottom.

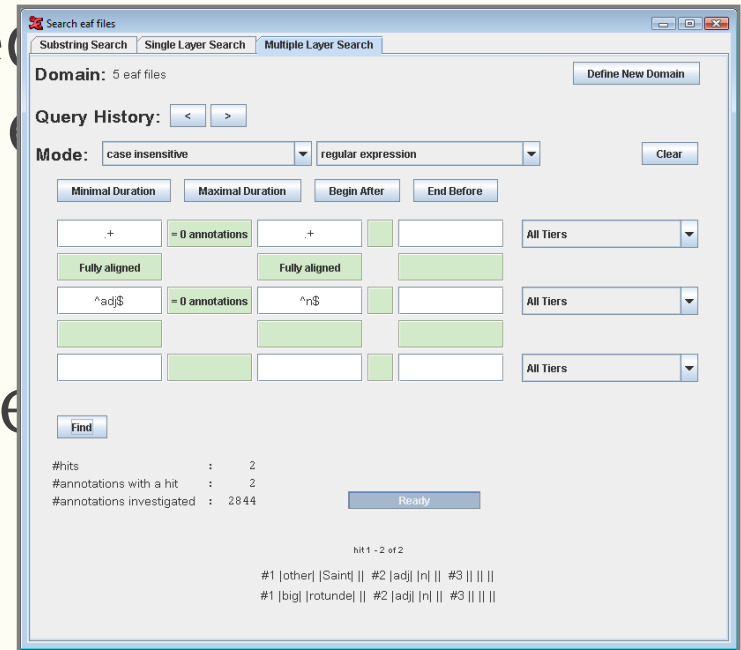
A callout box with the text 'select an entry from the list' points to the list of entries. Another callout box with the text 'CV entries' points to the 'hold' entry.

The background shows a portion of the ELAN interface with a table of entries and a waveform. The table has columns for 'notation', 'Begin Time', 'End Time', and 'Duration'. The waveform shows a signal over time with a red vertical line indicating a specific time point.



## Search

- simple and structured search, in a single file or in multiple files
- export of results to tab-delimited text file



## Import/export

- Import/export of Toolbox, CHAT, Praat, CSV/tab-delimited text



## The ISO Data Category Registry

- Standards for Language Resource management, creation and coding
- List of linguistic concepts
- Accessible online
- Provides services for tools
- Accommodates decision process
- [www.isocat.org](http://www.isocat.org)

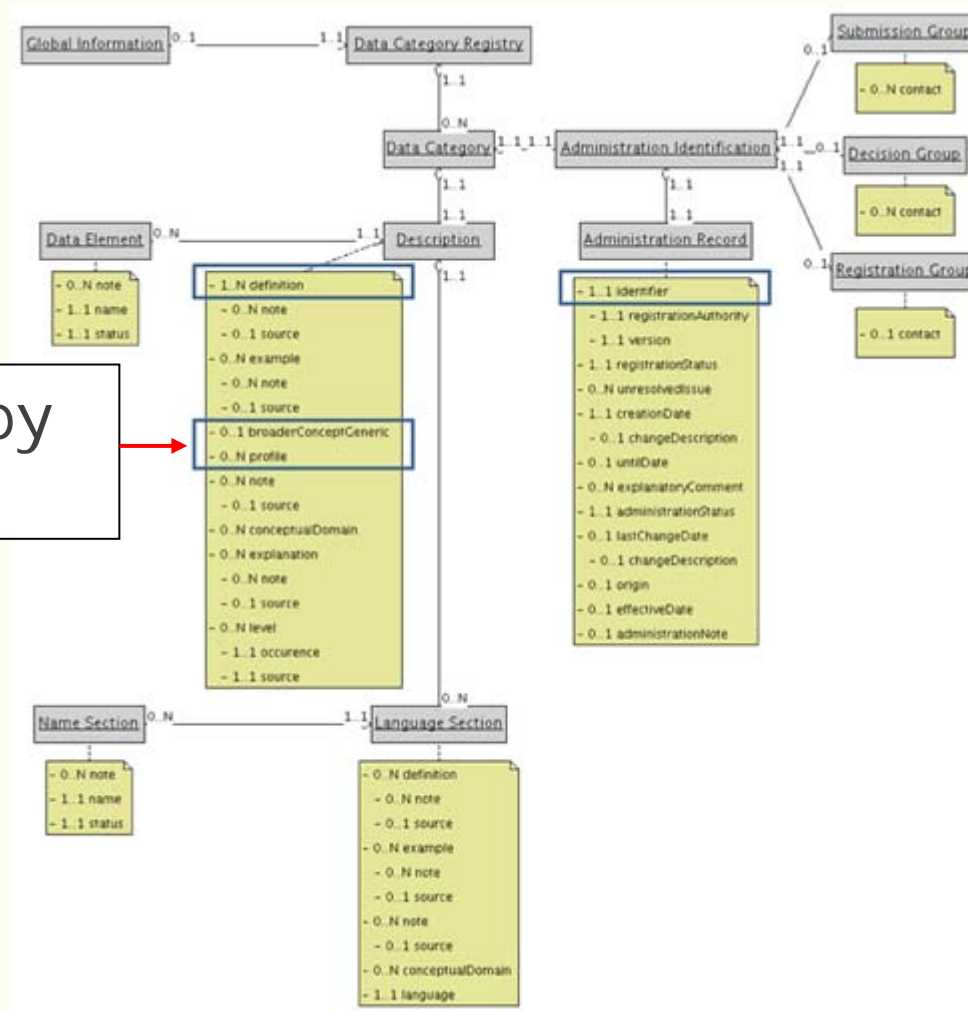


## ISO Data Categories

- Elementary descriptors of linguistic concepts
- Simple (atomic) vs complex (with a value range)
- Belong to 1 or more thematic Profile
- Can refer to a more general concept
- Unique ID



## The DCR datamodel



Accessed by  
ELAN



## www.ISOcat.org

ISOcat - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://lux12.mpi.nl/isocat/main.html

Getting Started Latest Headlines

Overview (Java 2 Platf... MPI for Psycholingui... People — Max Planck... ISO 12620 - Google z... synchronized - Defini... nu.nl | Het laatste nie... ISOcat InterGlott.com

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enter keywords here search

My Workspace

- public
  - Category Administration
  - DCR MetaModel
  - Terminology
  - Terminology MetaModel
  - MetaData
  - Morpho Syntax
  - Semantic
  - Dialog
  - DublinCore
  - Language Description
  - Syntax

| #  | Name                    | Version | Profile     | Scope    | Status   | Created on | Created by |
|----|-------------------------|---------|-------------|----------|----------|------------|------------|
| 79 | animate                 | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 80 | <b>inanimate</b>        | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 81 | otherAnimacy            | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 84 | applicationSubset       | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 85 | approvalDate            | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 86 | approvedBy              | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 88 | associative relation    | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 90 | audio                   | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 91 | authorizationFunction   | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 92 | authorizationIdentifier | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 93 | authorizationPassword   | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |
| 95 | broaderConceptPartitive | 1.0     | Terminology | Accepted | standard | 2004-07-09 |            |

+ add

Data Category: Terminology - inanimate - 1.0

key 80

1 administrationInformation

1.1 administrationRecord

|                        |                 |
|------------------------|-----------------|
| Identifier             | inanimate       |
| version                | 1.0             |
| Registration Authority | ISO/INRIA-LORIA |
| Registration Status    | standard        |
| Creation Date          | 2004-07-09      |

new save save as export

| # | Name | Version | Profile | Scope | Status | Created on | Created by |
|---|------|---------|---------|-------|--------|------------|------------|
|---|------|---------|---------|-------|--------|------------|------------|

Done

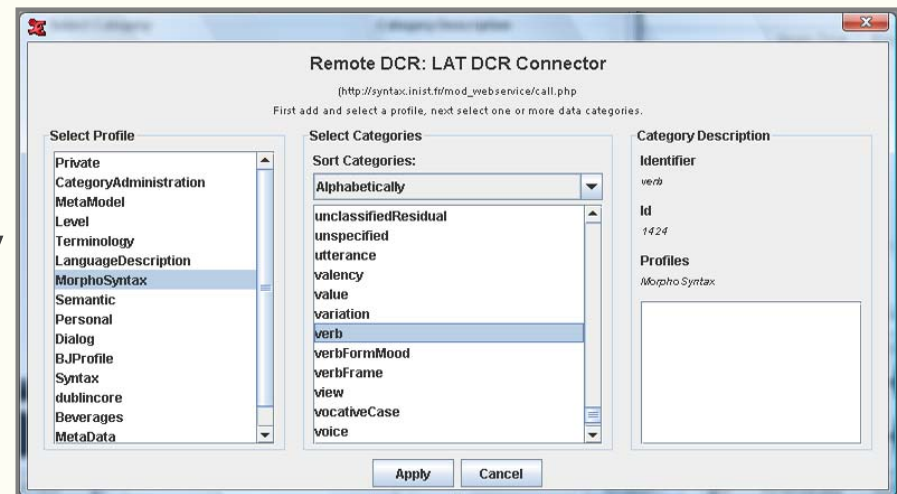
irc2008 DCR Control Panel ISOcat - Mozi... 2 Microsoft... 4 Adobe Re... Adobe Photo... Boot Camp C... HTML Help EN 16:11



ISOcat poster, P17

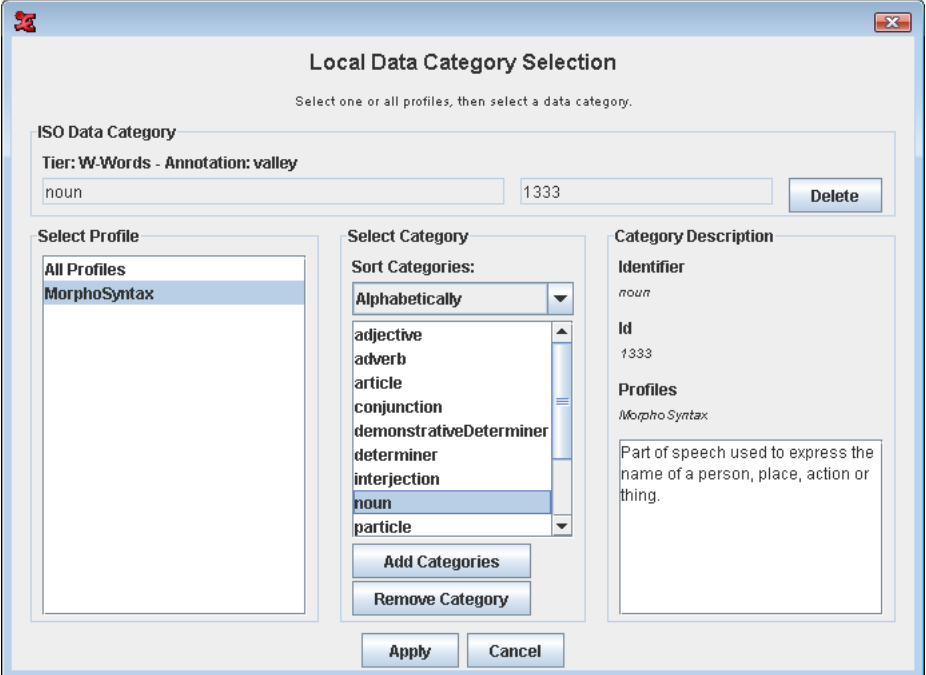
## ELAN's interaction with the ISO DCR

- Connection to server via DCR connector
- Selection of data categories, selection is stored in local cache for offline use
- Group by Profile
- Sort orders, 'broader concept' tree view



## Association of annotations with a DC

- Reference from individual annotations to a DC (as an additional attribute)
- Only the ID of the DC is stored



**Local Data Category Selection**  
Select one or all profiles, then select a data category.

ISO Data Category  
Tier: W-Words - Annotation: valley  
noun 1333 Delete

Select Profile  
All Profiles  
MorphoSyntax

Select Category  
Sort Categories: Alphabetically  
adjective  
adverb  
article  
conjunction  
demonstrativeDeterminer  
determiner  
interjection  
noun  
particle  
Add Categories  
Remove Category

Category Description  
Identifier  
noun  
Id  
1333  
Profiles  
Morpho Syntax  
Part of speech used to express the name of a person, place, action or thing.

Apply Cancel



## Association of CV entry with a DC

- When a CV entry is applied to an annotation, the DC ID is applied as well
- Only the ID of the DC is stored

Sp-1  
00:00:22.000 00:00:23.000  
you come down to the  
Sp-2  
Words-2  
you | com | down | to | the  
POS-2  
pro | v | ad | pre | art  
IPA-2  
ju: kʌm daʊn tə ðə

Edit Controlled Vocabulary

Controlled Vocabulary

Current CV's: POS

CV Name: POS

Description: Part of Speech

Entries:

- n
- v
- int
- adj
- pro
- det
- art
- prep
- adv
- con
- dem
- post
- part

Entry value: v

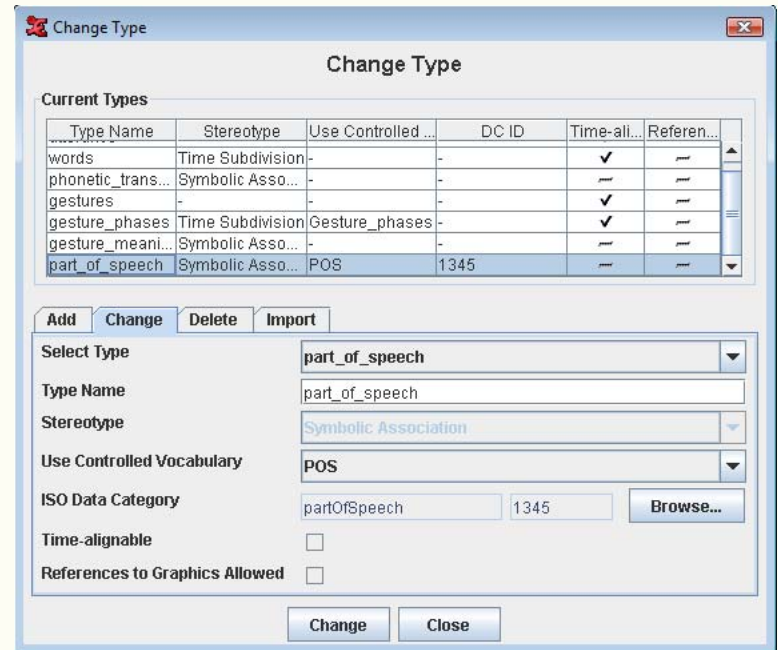
Entry description: verb

ISO Data Category: verb 1424



## Association of a Linguistic Type with a DC

- Way to label a tier to be e.g. a DC Part-of-Speech tier
- Only the ID of the DC is stored



## Future work, To Do

- Make the DC id's a search criterion
- Batchwise add DC id's to annotations based on DC id's of CV entries
- Automatic creation of a CV from a complex DC, based on a specified language



## Known issues

- No preferred/recommended way of referring to a category ID yet
- The DCR model may change



# Thank you

<http://www.lat-mpi.eu/tools/elan>

