

# Using ZLAN to Annotate Oral Discourse

2 Annotating with ELAN: dealing with oral discourse

AIM: Transcribing and annotating DRD in a conversational fragment

Framework: Val. Es. Co. model (Briez and Val. Es. Co. Group 2004, 2008)



Transcription procedure  
Annotation of DRD

③ Some final remarks

- Annotating oral discourse is challenging but not impossible.
- Problems such as delimiting the function of DRD arise; but we have ways to address them.
- Problems such as polyfunctionality call for solutions in the annotation procedure.
- Double tag system: IAS/M, MAS/T (Pvers, 2018)

1. Transcription procedure

Challenges:

- Noise, inaudible speech (marked as 'U. H.')
- Simultaneous speech (2+ speakers, marked as '1. 2.')
- Non-verbal and enunciative phenomena (tier for observations)

(b) (i) BVI: Transcribe orthographically a fragment of Penny's speech  
"right... my sister had her lunchbox but it was an accident (she over-drank)"

- 1) Open the "Videx.rtf" file (File > Open > select "Videx.rtf")
- 2) Search for a previous segment in the annotation (Search > Find (and Replace))  
a) Select "I mean"
- 3) Select a time interval by dragging the mouse and type the text.

The diagram illustrates the annotation of DRD using the ValExCo model. It features three main components arranged vertically:

- Challenges:** A circular box containing text about challenges in disease prediction, including uncertainty in diagnosis and treatment, and the need for more accurate and timely information.
- ValExCo model:** A central circular box containing the model's name and a brief description: "A framework for eliciting and combining subjective knowledge from experts in disease prediction, treatment planning, and prognosis." Below this is a detailed description of the model's architecture, including its components: **VALUATION**, **EXPERTS**, **COMBINATION**, and **DECISION**. The **VALUATION** component is described as "Elicitation of subjective knowledge from experts in disease prediction, treatment planning, and prognosis." The **EXPERTS** component is described as "Identification of experts in disease prediction, treatment planning, and prognosis." The **COMBINATION** component is described as "Combination of subjective knowledge from experts in disease prediction, treatment planning, and prognosis." The **DECISION** component is described as "Decision making based on the combined knowledge." A legend at the bottom defines the colors: blue for **VALUATION**, red for **EXPERTS**, green for **COMBINATION**, and orange for **DECISION**.
- Outputs:** A circular box containing text about the outputs: "An elicited and combined expert opinion of disease factors" and "A decision-making process using expert knowledge in disease prediction, treatment planning, and prognosis."

Orange arrows point from the Challenges box to the ValExCo model, and from the ValExCo model to the Outputs box. A large yellow arrow points from the ValExCo model down to the Outputs box.

Thank you very much!



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to Annotate Oral Discourse

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University of Valencia / Val.Es.Co. Group



# Using XLAN to Annotate Oral Discourse

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## 1 What is ELAN and how does it work?



- ELAN (EUDICO Linguistic Annotator), v. 5.0.0-alpha  
developed at Max Planck Institute for Psycholinguistics, Nijmegen (The Netherlands)
  - Free tool for annotating video and audio (multi-modal) resources



- INPUT: media files (.wav, .mpg, .mpge, .mov, .mp4)
  - OUTPUT: .eaf file ("EUDICO Annotation Format")

## (2) Annotating with ELAN: dealing with oral discourse

## **AIM: Transcribing and annotating DRD in a conversational fragment**

Framework: Val.Es.Co. model (Briz and Val.Es.Co. Group 2014, 2003)



1. Transcription procedure
  2. Annotation of DRD



## 1. Transcription procedure

### Challenges:

- Noise, inaudible speech (marked as "(( ))")
  - Simultaneous speech (1 tier per speaker, marked as "[ ]")
  - Non-verbal and extralinguistic phenomena (1 tier for observations)

### 3 Some final remarks

- Annotating oral discourse is challenging but not impossible.

- Problems such as delimiting the function of DRD arise; but we have ways to address them.

- Problems such as polifunctionality call for solutions in the annotation procedure.

-Double tag system: IAS/M, MAS/T (Pons, 2016)

# 1

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# ELAN - elan-example1.eaf

## Menu bar



File Edit Annotation Tier Type Search View Options Window Help



Video viewer

Grid Text Subtitles Lexicon Audio Recognizer Video Recognizer Metadata **Controls**

### Recognizers and viewers

Volume: 100

Rate: 100

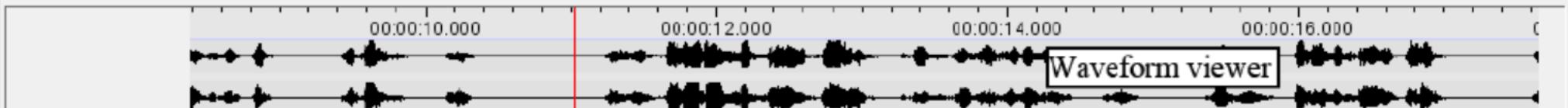
### Media controls

00:00:11:01

Selection: 00:00:00.000 - 00:00:00.000 0



## Annotation density viewer



Waveform viewer

K-Spch [8]	ja							
W-Spch [15]	is to the center of th							
W-Words [97]	own t t big rotunde							
W-POS [97]	p d adj n							
W-IPA [16]	t u ö s big rotunda							
W-RGU [1]								
W-RGph [59]	aratio stroke	hold	preparation	hol stroke	hold	preparatio stroke	hold	preparation hold
W-RGMa [19]	A roundabout			Going to		Going alo		G
K-RGU [1]								
K-RGph [1]								
K-RGMa [1]								

Timeline viewer



1

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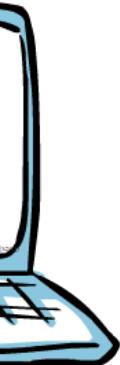
- INPUT: media files (.wav, .mpg, .mpge, .mov, .mp4)
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oes it work?



o-alpha  
Nijmegen (The Netherlands)

ti-modal) resources



.mp4)  
nat")

2

## Annotating with ELAN: dealing with oral discourse

3

**AIM: Transcribing and annotating DRD in a conversational fragment**

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1. Transcription procedure
2. Annotation of DRD



1. Transcription procedure

work: Val.Es.Co. model (Briz and Val.Es.Co. Group 201



# 1. Transcription procedure

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1. Transcription procedure

# 1. Transcription procedure

Challenges:

- Noise, inaudible speech (marked as "(( ))")
- Simultaneous speech (1 tier per speaker, marked as "[ ]")
- Non-verbal and extralinguistic phenomena (1 tier for observations)



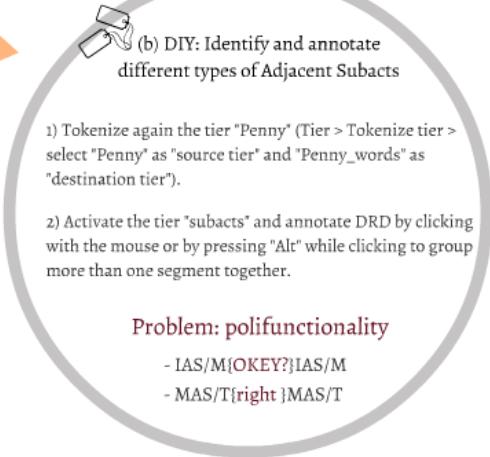
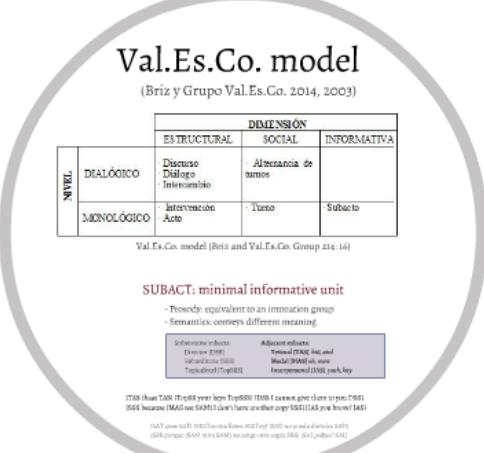
(a) DIY: Transcribe orthographically a fragment of Penny's speech

*"right↓ my sister shot her husband but / it was an accident they were drunk"*

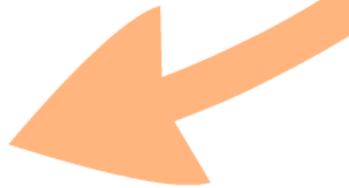
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## 2. Annotation of DRD



# Challenges:



- Oral vs. written discourse (informal vs. formal)
- Special features: concatenated syntax, continuous paraphrases, insertions, disfluencies, word order, indexical devices, direct speech, co-construction...

## DIFFERENT RESOURCES FOR DISCOURSE COHERENCE

(e.g. prosody, gestures...) But here we'll focus on explicit DRD

### DRD beyond the syntactic domain

- Invariable and independent units
- Don't function at the sentence level
- Procedural units that guide inferences

# Val.Es.Co. model

(Briz y Grupo Val.Es.Co. 2014, 2003)

NIVEL	DIALÓGICO	DIMENSIÓN		
		ESTRUCTURAL	SOCIAL	INFORMATIVA
	DIALÓGICO	- Discurso - Diálogo - Intercambio	- Alternancia de turnos	
	MONOLÓGICO	- Intervención - Acto	- Turno	- Subacto

Val.Es.Co. model (Briz and Val.Es.Co. Group 214: 16)

## SUBACT: minimal informative unit

- Prosody: equivalent to an intonation group
- Semantics: conveys different meaning

Substantive subacts:  
Director [DSS]  
Subordinate [SSS]  
Topicalized [TopSSS]

Adjacent subacts:  
Textual [TAS] *but, and*  
Modal [MAS] *oh, wow*  
Interpersonal [IAS] *yeah, hey*

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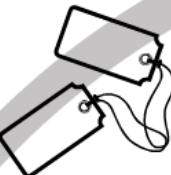
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Adjacent subacts:

Textual [TAS] *but, and*  
Modal [MAS] *oh, wow*  
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{TAS thaat TAS} {TopSS your keys TopSSS} {DSS I cannot give them to you DSS}  
{SSS because {MAS see SAM} I don't have another copy SSS} {IAS you know? IAS}

{SAT quee SAT} {SSSTop tus llaves SSSTop} {SSD no puedo dárte las SSD}  
{SSS porque {SAM mira SAM} no tengo otra copia SSS} {SAI ¿sabes? SAI}



### (b) DIY: Identify and annotate different types of Adjacent Subacts

- 1) Tokenize again the tier "Penny" (Tier > Tokenize tier > select "Penny" as "source tier" and "Penny\_words" as "destination tier").
- 2) Activate the tier "subacts" and annotate DRD by clicking with the mouse or by pressing "Alt" while clicking to group more than one segment together.

Problem: polifunctionality

2) Activate the user surfaces and annotate DRC by clicking with the mouse or by pressing "Alt" while clicking to group more than one segment together.

## Problem: polifunctionality

- IAS/M{OKEY?}IAS/M
- MAS/T{right }MAS/T

### 3

## Some final remarks

- Annotating oral discourse is challenging but not impossible.
- Problems such as delimiting the function of DRD arise; but we have ways to address them.

Position	Unit				I-D Topic change
	Subject	Act (A)	Intervention	Dialogue (D)	
Initial (I)	I-DSS Initiative subject (DS)	I-SSS Initiative subject (SI)	I-A	I-II Intervention (I) Intervention (II)	I-R I-D Topic change
Middle (M)	M-DSS	M-SSS	M-A Formulation	Ø	Ø
Final (F)	F-DSS	F-SSS	F-A	Ø	Ø
Independent (Ind)	Ø	Ø	Ø	Ind-II Ind-RI	Ø

(Pons and Estellés 2014)

- Problems such as polifunctionality call for solutions in the annotation procedure.

# Unit

	<i>Subact</i>	<i>Act (A)</i>	<i>Intervention</i>	<i>Dialogue (D)</i>		
<i>Position</i>	Directive substantive <i>subact (DSS)</i>	Subordinate substantive <i>subact (SSS)</i>	Initiative <i>intervention (II)</i>	Reactive <i>intervention (RI)</i>		
Initial (I)	I-DSS	I-SSS	I-A	I-II	I-RI	I-D Topic change
Medial (M)	M-DSS	M-SSS	M-A Formulation	Ø	Ø	M-D Digression
Final (F)	F-DSS	F-SSS	F-A	Ø	Ø	F-D Regression
Independent (Ind)	Ø	Ø	Ø	Ind-II	Ind-RI	Ø

	Initial (I)	I-DSS	I-SSS	I-A	I-II	I-RI	I-D Topic change
Position	Initial (I)	M-DSS	M-SSS	M-A Formulation	Ø	Ø	M-D Digression
	Medial (M)						
	Final (F)	F-DSS	F-SSS	F-A	Ø	Ø	F-D Regression
	Independent (Ind)	Ø	Ø	Ø	Ind-II	Ind-RI	Ø

(Pons and Estellés 2014)

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# Thank you very much!



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