



Developing the Multilingual Annotation Tool

Ely Matos, Tiago Torrent

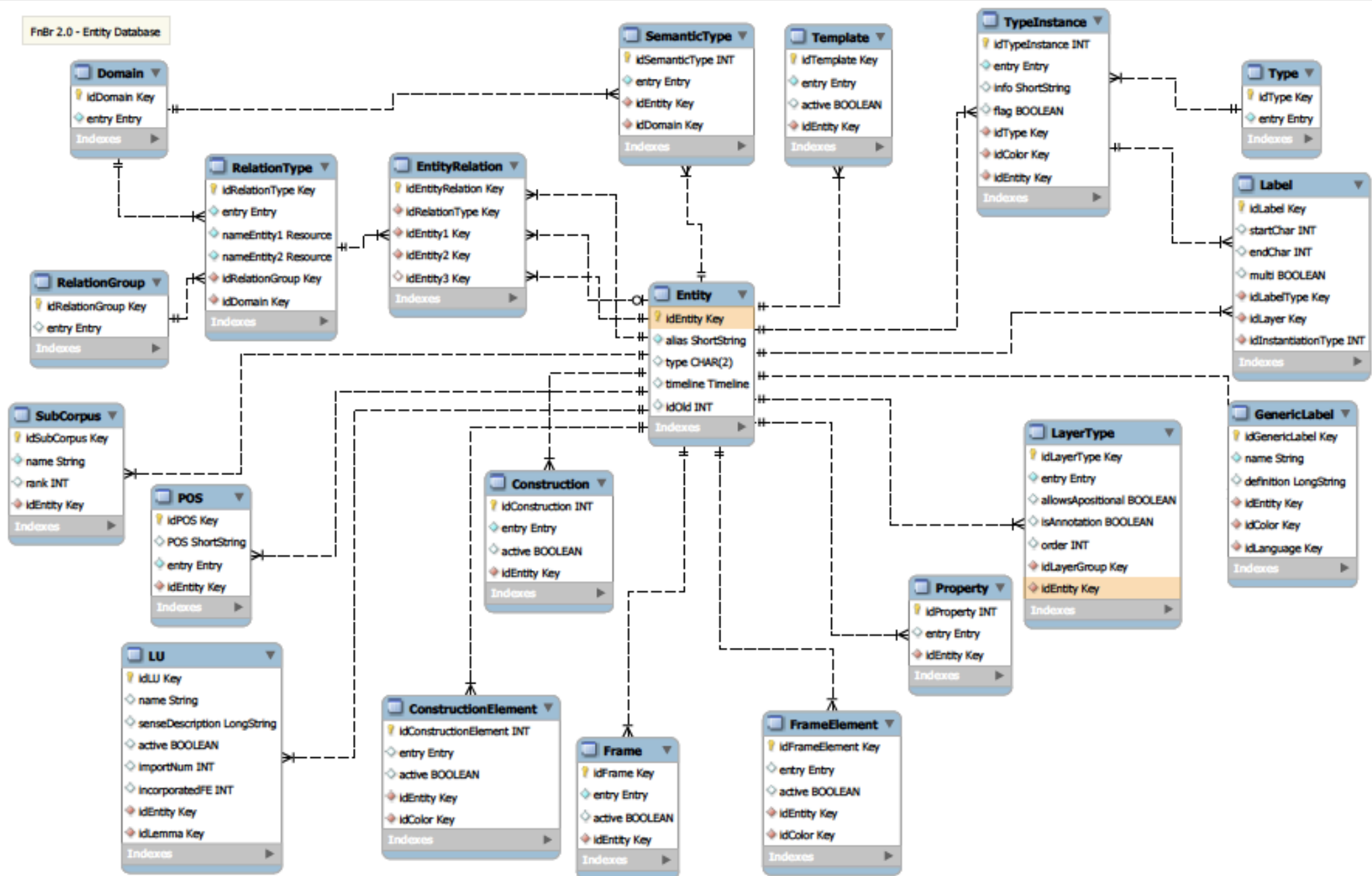
Federal University
of Juiz de Fora

Background

- The FN-Br WebTool is being developed since 2014 with the purposes of
 - allowing web-based remote annotation
 - supporting annotation in multiple languages
 - providing a flexible environment for language modeling, integrating lexicon and construction
 - enriching FrameNet with other kinds of semantic or ontological structure
 - building an annotation chain

Key Features

- Entities and Relations
 - Entities: model objects
 - Frames, FEs, Constructions, CEs, LUs, Sem Types, Corpora, Annotation Sets, Lexemes, Word forms...
 - Relations: links between entities
 - Any kinds of entities
 - Frame to Frame
 - Frame to Frame Element
 - Construction to Frame
 - LU to LU
 - Construction Element to LU
 - ...

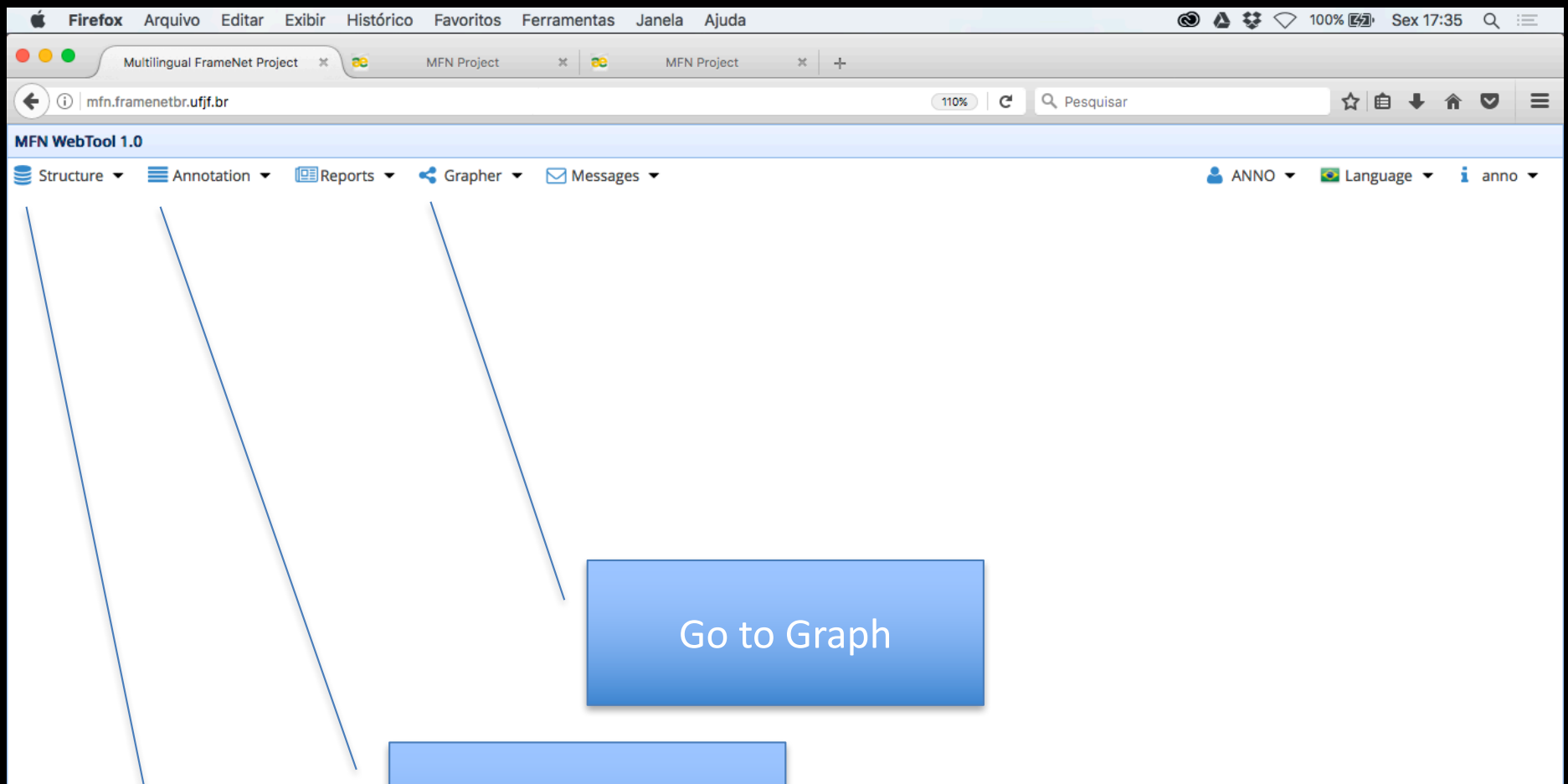


Multilingual FN Challenges

- Support diverse languages
 - Right to left
 - Ideograms
 - Non-Latin alphabets
- Allow customization of the annotation structure
 - New layers
 - New labels

Multilingual FN Challenges

- Reduce the need for tech support by providing an user-friendly interface for admins
 - Ex.: Missing word forms
- Change interface features from Br-PT to En
 - Ongoing



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mfn.framenetbr.ufjf.br 110% Pesquisar

MFN WebTool 1.0

Structure Annotation Reports Grapher Messages ANNO Language anno

Frames

Select Domain Search Frame Search FE Search LU

- Age
 - Age
 - Attribute
 - Degree
 - Entity
 - Expressor
 - Duration
 - Time
 - Circumstances
 - Descriptor
 - com.prep
 - de.prep
 - ter.v
- Aggregate
- Aging
- Agree_or_refuse_to_act
- Agriculture
- Aiming
- Alignment_image_schema
- Alliance
- Alternatives
- Alternativity
- Amalgamation

Age

Definição

An **Entity** has existed for a length of time, the **Age**. The **Age** can be characterized as a value of the age **Attribute**, or a **Degree** modifier may express the deviation of the **Age** from the norm. The **Expressor** exhibits qualities of the age of the **Entity**. This building is twenty thousand years old. My grandpa is really old Junior is only five weeks old. A cunning oldish voice called out from the crowd. His age was 23 at the time. People of age 55 or older should consult their physician. I have a 13-year-old cousin My grandma is old There are additional patterns that the LUs in this frame occur in which are not licensed by a particular lexical head but by a construction. Additionally, there are patterns that evoke this frame without any overt lexical head that are part of this frame. She is 45 years of age. Billy is 13.

Exemplo(s)

Elementos de Frame Nucleares

Age [Age]	A quantity or other characterization of the Entity's age.
Attribute [Att]	The feature of an Entity which is a function of the amount of time that the Entity has existed.
Degree [Deg]	A modifier expressing the deviation of the Age from the norm.
Entity [Ent]	The Entity for which a particular age is under consideration.

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Frames

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 - com.prep
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 - ter
 - Edit LU
 - Delete LU
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Attribute [Att]	The feature of an Entity which is a function of the amount of time that the Entity has existed.
Degree [Deg]	A modifier expressing the deviation of the Age from the norm.
Entity [Ent]	The Entity for which a particular age is under consideration.
Expressor	The Frame Element Expressor marks expressions that indicate a body part, gesture or other expression of the Entity that reflect its age. "Who's

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LU: Age.ter.v

Close Save

Sense Description: to be X years old.

Incorporated FE:

Not the Best Fit Frame because:

If 'Other' for not the BFF, explain:

- Name
- Different Perspective
- Different Causative Alternation
- Different Inchoative Alternation
- Different Stative Alternation
- Too Specific
- Too Generic

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Messages

Frames

Select Domain Search Frame Search FE ter

Frames

- Activity_stop
- Age
 - Age
 - Attribute
 - Degree
 - Entity
 - Expressor
 - Duration
 - Time
 - Circumstances
 - Descriptor
 - com.prep
 - de.prep
 - ter.v
- Buildings
- Cause_to_experience
- Death
- Desirability
- Emotion_directed
- Experiencer_focus
- Experiencer_obj

LU: Age.ter.v

Close Save

Sense Description to be X years old.

Incorporated FE

Not the Best Fit Frame because Help

Different Perspective: the LU imposes a perspective that is different from the one in the original frame.

Different Causative Alternation: the LU requires a causative interpretation that is not present in the original frame, which may be either inchoative or stative.

Different Inchoative Alternation: the LU requires an inchoative interpretation that is not present in the original frame, which may be either causative or stative.

Different Stative Alternation: the LU requires a stative interpretation that is not present in the original frame, which may be either causative or inchoative.

Too Specific: the LU is more generic than the background frame.

Too Generic: the LU requires a frame more specific than the one available in the original database.

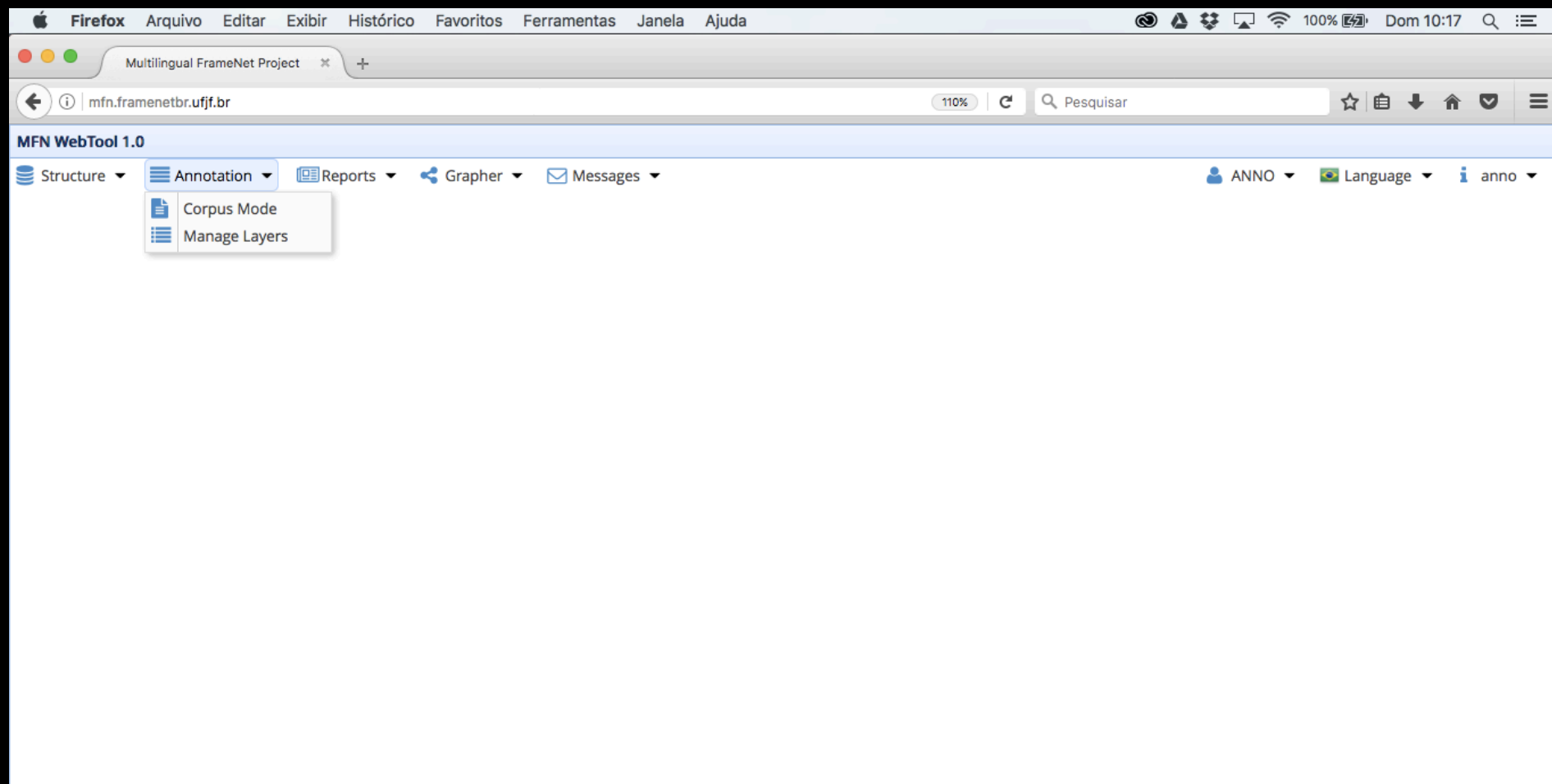
Different Entailment: the LU has different entailments than the ones afforded by the original frame.

Different Coreness Status: some non-core FE should be core in the target language.

Missing FE: there should be a FE in the original frame that is missing. The missing FE must be listed in the Other/Missing FE field.

Other: all other non-listed cases. The difference must be specified in the Other/Missing FE field.

TRACY 1279.3 ms



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Structure Annotation Reports Grapher Messages

ANNO Language anno

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- Age
 - Age
 - Attribute
 - Degree
 - Entity
 - Expressor
 - Duration
 - Time
 - Circumstances
 - Descriptor
 - com.prep
 - de.prep
 - ter.v
 - manually-added [4]
 - Aggregate
 - Aging
 - Agree_or_refuse_to_act
 - Agriculture
 - Aiming
 - Alignment_image_schema
 - Alliance
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 - Alternativity

Layers Management

Save

<input checked="" type="checkbox"/>	Name
<input checked="" type="checkbox"/>	FE
<input checked="" type="checkbox"/>	Target
<input checked="" type="checkbox"/>	GF
<input checked="" type="checkbox"/>	PT
<input checked="" type="checkbox"/>	Other
<input checked="" type="checkbox"/>	Adj
<input checked="" type="checkbox"/>	Adv
<input checked="" type="checkbox"/>	Noun
<input checked="" type="checkbox"/>	Prep
<input checked="" type="checkbox"/>	Verb
<input checked="" type="checkbox"/>	BNC

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Corpus

Search Corpus Search Corpus

- crp_mfn
 - doc_mfn_ar [3]
 - doc_mfn_jp [5]
 - doc_mfn_pt [2]
 - doc_mfn_ru [2]
 - doc_ted_de [235]
 - doc_ted_pt [271]**

Corpus Annotation

. [] - Stats: (Total: 0) - Status: Complete

Notify Supervisor Selecteds > IGNORE Selecteds > DOUBT

<input type="checkbox"/>	idSentence	Sentence	Status
<input type="checkbox"/>	737	Bom dia.	AST_DOUBT
<input type="checkbox"/>	738	Como estão?	AST_DOUBT
<input type="checkbox"/>	739	Tem sido ótimo, não tem?	MANUAL
<input type="checkbox"/>	740	Fiquei maravilhado com a coisa toda.	MANUAL
<input type="checkbox"/>	741	Na verdade, estou indo embora.	MANUAL
<input type="checkbox"/>	742	Existem três tópicos abordados ao longo da conferência que são relevantes para o que eu vou falar.	MANUAL
<input type="checkbox"/>	743	O primeiro é a extraordinária evidência da criatividade humana em todas as apresentações que tivemos e em todas as pessoas presentes.	MANUAL
<input type="checkbox"/>	744	Sua variedade e multiplicidade.	MANUAL
<input type="checkbox"/>	745	O segundo é o fato de que não fazemos a menor idéia do que vai acontecer no futuro.	MANUAL
<input type="checkbox"/>	746	Nenhuma idéia do que nos espera.	MANUAL
<input type="checkbox"/>	747	Eu me interesso por educação.	MANUAL
<input type="checkbox"/>	748	Na verdade, eu descobri que todo mundo se interessa por educação.	MANUAL
<input type="checkbox"/>	749	Vocês não?	MANUAL
<input type="checkbox"/>	750	Eu acho isso muito interessante.	MANUAL

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mfnn.framenetbr.ufjf.br/maestro/index.php/mfn/annotation/main/layers/742/741/c 110% Pesquisar

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Layers Pane

Save Doubt Ignore Remove AS Label Help

[742] MANUAL	NI	Existem	três	tópicos	abordados	ao	longo	da	conferência	que	são	re
Existence.existir.v		Existem										
FE				Entity							Depictive	
GF				Ext							Dep	
PT				NP							SFinRel	
Other												
Verb												
Sent												
Cardinal_numbers.três.num			três									
FE	INC			Entity								
GF				Núcleo								
PT				N								
Other												
Sent												
Topic.tópico.n				tópicos								
FE	INC				Text						Explanatio	
GF					Dep						Dep	

To Do List

- Report system for MLFN Shared Anno tasks
 - Extract possible general distinctions between the languages involved (BFF)
 - Analyze FN 1.7 Coverage and Suitability
- **Implement annotation flow**
- Improve messaging system
- Add tutorials

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FrameNet Brasil - WebTool MFN WebTool

webtool.framenetbr.ufff.br

FrameNet Brasil WebTool 2.0

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Frames

quebrar Search LU

- Causar_fragmentar
 - arrebentar.v
 - quebrar.v
 - quebrar_todas [119]
 - romper.v
- Despedaçar
- Experienciar_ferimento_corporal
- Quebrar
- Tornar-se_não-operacional

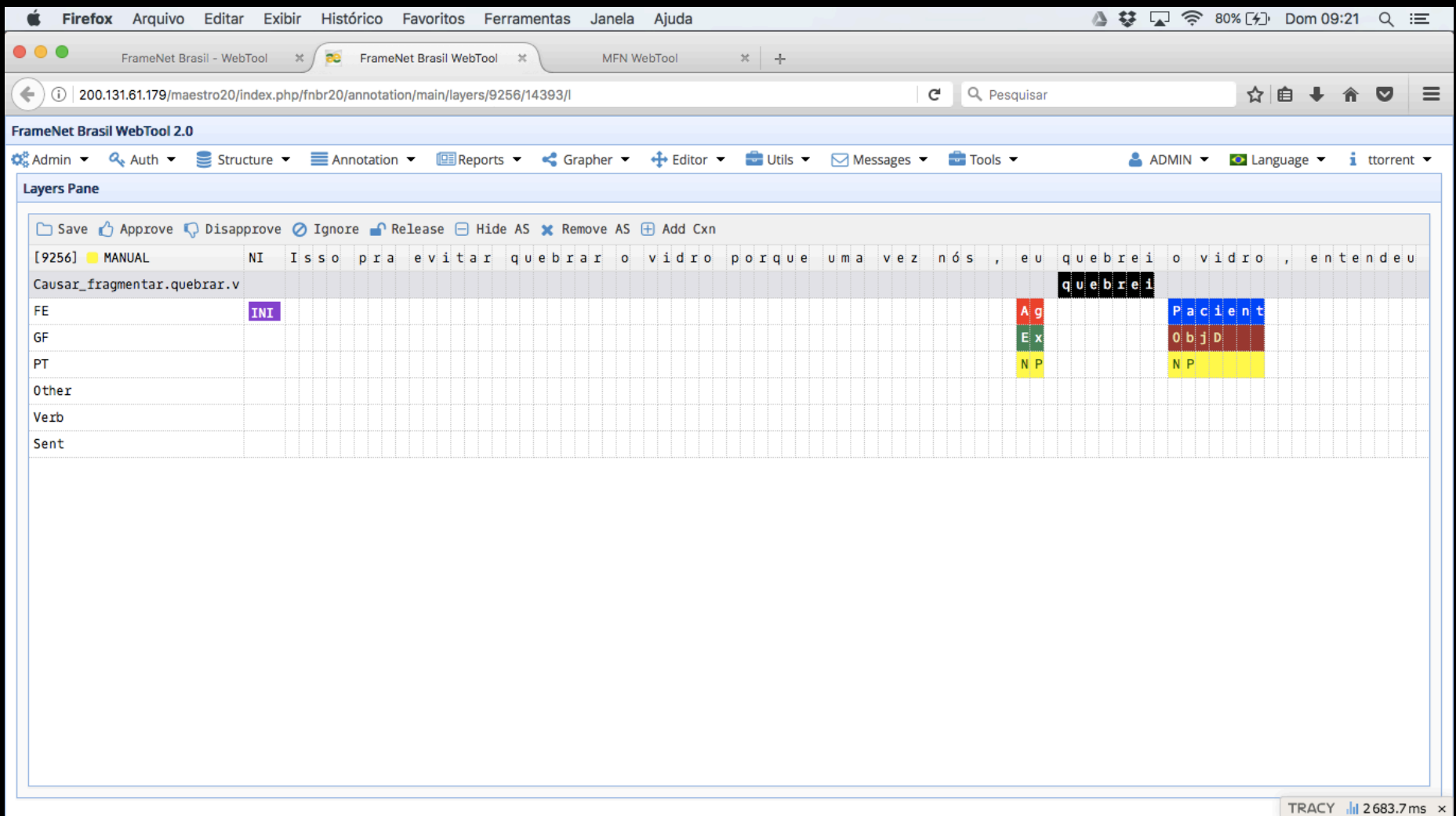
Lexical Annotation

Causar_fragmentar.quebrar.v [quebrar_todas] - Stats: (MANUAL: 23) (AST_MS_APP: 1) (UNANN: 95) (Total: 119) - Status: Incomplete

Refresh Selecteds > IGNORE Selecteds > DOUBT

<input type="checkbox"/>	idSentence	Sentence	Status
<input type="checkbox"/>	9260	E esse último carro agora que eu me , deu outro dia , caiu o , eu sei que o silencioso dele quebrou , não sei bem o que , quer dizer , sei onde fica o silencioso mas , eh , mas eu sa ... o que eu via mesmo era o cano de descarga que consegui perder na rua , sabe	MANUAL
<input type="checkbox"/>	9266	Mas qualquer pedinha do Corcel que quebrava era muito mais cara	MANUAL
<input type="checkbox"/>	9279	Quase o quebrei o pé e nunca mais quis trepar em cima de um cavalo	MANUAL
<input type="checkbox"/>	9280	Nós pegamos um tempo durante quatro dias , ficamos completamente sem saber onde estávamos , nós só podíamos andar , eh , onde deixava o mar , senão o navio quebrava ao meio	MANUAL
<input type="checkbox"/>	9282	Talvez em mil novecentos e cinquenta e três , quando eu fiquei dois meses , em consequência de um acidente , fiquei dois meses na , na cama , de perna e braço quebrado , talvez nessa ocasião eu estivesse ouvindo rádio pra , pra passar o tempo , distrair e tudo , pode ser , né	MANUAL
<input type="checkbox"/>	9288	ah , decepção porque no dia em que nós chegamos começou a chover e todas as casas na , em Petrolina são feitas de telha-vã , essa tipo colo ... colonial em que o urubu , porque ficam muito secas , pisa , dá aquele pulo pra pousar e quebra a telha	MANUAL
<input type="checkbox"/>	9291	Eu nunca fui muito , por motivos muito especiais da , de , da minha vida , eu nunca fui muito de , eh , participar de brincadeiras violentas com os companheiros , não tive a oportunidade de brincar com os companheiros , no sentido de , eh , praticar cousas que os outros garotos da minha idade já praticavam por exemplo , como roubar frutas dos vizinhos , quebrar vidraças , eh , hum , eh , destruir cousas que , eh , para os outros , os adultos , eh , têm valor mais considerável , como gramados , como arrancar árvores , etc.	MANUAL
<input type="checkbox"/>	9297	-R E ninguém nunca quebrou a espinha nessa não	MANUAL
<input type="checkbox"/>	9301	Nunca houve um braço quebrado , não me lembro de um colega ter quebrado um braço ou uma perna e no entanto nós éramos ...	MANUAL
<input type="checkbox"/>	9306	Porque o vidro quebrou e não se encontra hoje vidro direito pra esse caso , então (inint	MANUAL
<input type="checkbox"/>	9309	-R Ele , você disse que ele quebrou o pé	MANUAL
<input type="checkbox"/>	9313	Foi quando , a idade que naquele tempo , a idade que se indicava pra poder começar a usar óculos porque quando criança eu fui muito levada , muito travessa , vivia trepando em árvore , e minha mãe tinha medo que eu quebrasse os óculos , né	MANUAL
<input type="checkbox"/>	9325	Quantas vezes o sujeito quebra a perna , quebra o braço , ou tem um acidente ou , ou muitas vezes tem que ficar meses de cama por causa de uma doença , ou sem poder se movimentar , então dificilmente uma pessoa escapa , em algum momento da vida , de ter algum problema desse tipo	MANUAL
<input type="checkbox"/>	9257	Uma ou ... da ou ... na terceira vez aí eu não esperei mais , eu quebrei o vidro pra poder abrir o carro e entrar	AST_MS_APP

TRACY 265.5 ms x



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FrameNet Brasil - WebTool x FrameNet Brasil WebTool x MFN WebTool x +

200.131.61.179/maestro20/index.php/fnbr20/annotation/main/layers/9256/14393/l Pesquisar

FrameNet Brasil WebTool 2.0

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Layers Pane

Save Approve Disapprove Ignore Release Hide AS Remove AS Add Cxn

[9256] MANUAL NI Isso pra evitar quebrar o vidro porque uma vez nós , eu quebrei o vidro , entendeu

Causar_fragmentar.quebrar.v quebrei

FE	INI	Ag	Pacient
GF		Ex	ObjD
PT		NP	NP
Other			
Verb			
Sent			

Disapprove: Send Feedback

☐ Send

Message (optional):

TRACY 2683.7ms

Future Possibilities

- Expand joint annotation tasks
 - More texts
 - LU-based
- Include alignment links between framenets
 - Either one to one or one to many
- Add Constructicons
- Add Metaphor



Thank you!

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<http://www.framenetbr.ufjf.br>