## **ISST-TANL** dependency tagset

The ISST-TANL tagset is a new release of the ISST-CoNLL dependency tagset which in its turn originated from ISST.

## From ISST to ISST-CoNLL:

ISST-CoNLL was built by combining information from the morpho-syntactic and syntactic dependency annotation levels of ISST through a semi-automatic conversion process in charge of a) combining information coming from different annotation levels, and - most importantly - b) converting the ISST dependency annotation scheme into the CoNLL 2007 tabular format. Concerning b), conversion had to cope with the fact that in ISST dependency relations were expressed in terms of binary relations holding between two lexical heads belonging to major lexical classes only (i.e. non-auxiliary verbs, nouns, adjectives and adverbs): in fact, in ISST information about grammatical words (e.g. determiners, prepositions, auxiliaries) was encoded in terms of features associated with the participants to the relation. This implies that during the conversion process the dependency relations involving grammatical words had to be reconstructed from the ISST original annotation and the already existing dependency relations had to be revised accordingly. Other conversion issues which had to be addressed are concerned with: multi-headed tokens, which caused the dependency structure not to be a tree; empty tokens, representing omitted subjects due to the pro-drop property of Italian; identification of the sentence root; insertion of dependencies involving punctuation.

## From ISST-CoNLL to ISST-TANL:

The ISST-TANL dependency annotated corpus is a revised version of the ISST-CoNLL corpus, where revisions - all performed manually - were mainly concerned with a reshaped dependency tagset and annotation criteria. Here follows the list of the main revisions which have been performed:

- neutralisation of the argument/adjunct distinction (restricted to prepositional complements)
- linguistically-motivated treatment of punctuation
- clitics
- introduction of "semantically-oriented" distinctions
  - locative, temporal and indirect complements
  - locative and temporal modifiers
  - passive subject
  - "collapsed" version of the tagset neutralising such distinctions

Tag	Relation Type	Description	Examples
Arg	argument	Relation between a verbal or nominal head and a non-subject clausal argument.	Il 63% dei francesi ha imposto al presidente di rinunciare alla sua bomba È giunto il momento di creare un'area denuclearizzata  Le autorità hanno annunciato che il blitz è concluso  La decisione di continuare escludendo che il militare volesse veramente mettere in pericolo si sono rifiutati di fornire informazione
Aux	auxiliary	Relation between a verb and its	Il corazziere è stato individuato

Tag	Relation Type	Description	Examples
		auxiliary.	Il corazziere è stato individuato
			Ha dichiarato di aver pagato i terroristi
clit		Relation between a clitic pronoun and a verbal head used in pronominal form.	La sedia si è rotta
	clitic		Non ci rendiamo conto
			Si tratta della scoperta
comp		Relation between a head and a prepositional complement, whether a modifier or a subcategorized argument.	Fu assassinata da un pazzo
			E' più interessante del libro
	11		Oggi come allora
	complement		Più di quattrocento esemplari
			Osteggiata dal governo di Berna
			Grande quanto mezza Italia
	indirect	Denotes the affected participant of an event.	Ho dato il libro a lui
comp_ind	complement/		I carabinieri <b>gli</b> hanno <b>recapitato</b> il
	object		decreto
	locative	Expresses either a location or a	Si trovava in un parco
comp_loc	complement	direction of movement of an action.	Era uscito di casa alle 10
aama tama	temporal	Denotes a temporal relation with a verbal head.	Nel 1985 è stata uccisa un'antropologa
comp_temp	complement		L'allarme è scattato la scorsa settimana
		Relation between a copulative conjunction in coordinate structures and the first conjunct (which becomes the head of the whole coordinate structure).	Una ragazza violentata e sequestrata da due slavi
			Gabriella e Paolo sono partiti
	copulative conjunction		•
con			Hanno <b>riarmato</b> , addestrato e preparato  l'esercito
			Hanno riarmato, addestrato e preparato l'esercito
			Scontri, assalti e centinaia di feriti
			Scontri, assalti e centinaia di feriti
concat	concatenation	Relation between tokens forming complex word forms (e.g. complex proper nouns, multiword expressions and the like).	Il segretario di <b>De Michelis</b>
			L'enciclica "Mulieris dignitatem"
			La International Public Sport
			La International Public Sport
	conjunct	Relation between the conjuncts after the first to the first one, which is the head of the whole coordinate structure. conj is used in association with coordinating copulative conjunctions.	Una ragazza violentata e sequestrata da
coni	linked by a copulative		due slavi
conj	conjunction (con)		Gabriella e Paolo sono partiti
			Hanno riarmato, addestrato e preparato

Tag	Relation Type	Description	Examples
			l'esercito
			Hanno riarmato, addestrato e preparato l'esercito
			Scontri, assalti e centinaia di feriti
			Scontri, assalti e centinaia di feriti
det	determiner	Relation between a nominal head and its determiner.	Una sala ha dovuto essere sgomberata
			Rilevata la presenza di gas
dis	disjunctive	Relation between a disjunctive conjunction in coordinate structures and the first conjunct which is taken to be the head of the whole coordinate structure.	Cassonetti dell'immondizia <b>rovesciati o</b> incendiati
	conjunction		Partecipa a manifestazioni politiche o a dibattiti
	conjunct in a disjunctive compound	Relation between the (second, third,) conjuncts to the first conjunct which is taken as the	Cassonetti dell'immondizia rovesciati o incendiati
disj	linked by a disjunctive conjunction (dis)	head of the whole coordinate structure. disj is used in association with coordinating disjunctive conjunctions.	Partecipa a manifestazioni politiche o a dibattiti
		Relation between a head and its adjectival, adverbial, and clausal modifier. For example, noun+adjective, adverb+verb, and phrasal modifiers. Also noun+noun appositive constituents.	I colori sono sempre gli stessi
	modifier		Colori intensi
			Trionfo di Didoni nei 20 km di marcia
mod			Cesare l'Imperatore
mou			Per arrivare in tempo, sono partito molto presto
			Quando la campanella suona, i bambini escono da scuola
	locative modifier	Relation between a head and its adjectival, adverbial, and clausal modifier that expresses either a static or directional location.	Non so dove
mod_loc			Tutto cominciò proprio lì
			Avrei voluto fermarmi qui più a lungo
	relative modifier	Relation between the verbal head of a relative clause and its	Box che è stato trovato nel pomeriggio
		nominal head in the higher clause.	Quell'ordine che i due Stranamore pentiti
mod_rel		The mod_rel relation is also used in case of free relatives, linking	avevano imposto per cinquant'anni
		the verbal head of the free relative to the chi pronoun (which in turn is directly linked to its governor)	Non è mai stato accertato <b>chi volle</b> la sua morte
	temporal modifier	A temporal relation between a head and its adjectival, adverbial, and clausal modifier.	Ieri hanno dormito all'aperto
mod_temp			Scoperto 75 anni fa
			Non superano mai gli 8 milioni

Tag	Relation Type	Description	Examples
modal	modal verb	Relation between a verbal head and a modal verb.	Una sala ha dovuto essere sgomberata  Avrebbe potuto ripetersi
neg	negative	Negative modifier ("no" or "non")	A volte non dormo
obj	direct object	Relation between a verbal head and its direct object (always non-clausal).	Hanno un modo di ragionare rozzo Centellinando le informazioni È giunto il momento di creare un'area denuclearizzata Rilevata la presenza di gas
pred	predicative complement	Relation between a head and a predicative complement, be it subject or object predicative.	L'incontro è stato fatale  Questo è il messaggio finale
pred_loc	locative predicate	Expresses a spatial property of the subject, after a linking verb.	Il presidente non era in casa
pred_temp	temporal predicate	Expresses a temporal property of the subject, after a linking verb.	La riunione è alle 5
prep	preposition	Relation between a prepositional head and its complement, whether clausal or non-clausal.	Un contributo alla lotta contro la criminalità Un contributo alla lotta contro la criminalità Prima di partire ho telefonato
punc	punctuation	Relation between a word token and a punctuation mark.	Teatro della tragedia,
ROOT	sentence root	Head of sentence.	Desidero dormire  Note that only the dependent is shown, since the head is a fictitious root node
sub	subordinate clause	Relation between a subordinative conjunction and the verbal head of its clausal complement.	Ha detto <b>che</b> non <b>intendeva</b> fare nulla  Le autorità hanno annunciato <b>che</b> il blitz è <b>concluso</b> Venne ucciso <b>mentre cercava</b> di  difendere la ragazza
subj	subject	Relation between an active verb and its subject. It is also used to mark clausal subjects. When the subject is not explicit, as it occurs in pro-drop languages like Italian, the subject relation is not present: the morpho-syntactic features of the subject, can be induced from the inflectional features of the verb.	il <b>testimone</b> ha <b>parlato</b> subito le <b>vittime seguivano</b> gli aiuti
subj_pass	passive subject	Relation between a passive verb and its subject.	I missionari erano stati rapiti la mattina presto Circa 83.000 franchi furono spesi