

ENTITIES

Check and correct (only the entities which are involved in a relation):

- entity boundaries
- entity types
- add entity
(use entity ids as A B C... to distinguish from the original ones)
- correct only where necessary
e.g., ADJ-entities:
CORRECT: Polish --> Second Polish Republic
DO-NOT-CORRECT: reinforcement learning --> reinforcement learning paradigm (the relations hold anyways in this second case)
- DO NOT change the tokenization

RELATIONS

- If it is not explicit, explain your choice with a sub-type in the *Explanation* column
- Specify if you're Not Sure about a relation (check *NS*)
- Specify the presence of Syntax Ambiguity (check *SA*)
- Multiple relation types are allowed: annotate them in multiple relation instances
- Annotate what is made explicit in the text and not what derive from general knowledge
- When a relation would involve a pronoun, do not annotate anything (do not annotate "replacement" relation which you would not annotate if the main entity would be there). If the main entity is not a pronoun and you can add it as an entity, do so.
- Do not annotate nested relations:
if a -> b -> c then leave out the explicit relation a -> c
Give priority to, in order (samples below):
 - (1) the "main" entities, subject of the text

- (2) what is explicit in the text
(e.g. A and B wrote the book C together. Does the text state that A wrote C and that B wrote C or that A and B are co-authors?)
- (3) relation chains

Sample (1)	
On the train trip from {(1)[LOCATION] Washington D.C.} , to {(2)[LOCATION] Gettysburg} on November 18 , {(3)[POLITICIAN] Lincoln} was accompanied by three members of his Cabinet , {(4)[POLITICIAN] William H. Seward} , {(5)[POLITICIAN] John Palmer Usher} and {(6)[POLITICIAN] Montgomery Blair} , several foreign officials , his secretary {(7)[POLITICIAN] John Nicolay} , and his assistant secretary , {(8)[POLITICIAN] John Hay} .	Link the locations and entities 4 5 6 7 8 to entity 3 (the main entity of this sentence): (3 1 physical) (3 2 physical) (4 3 role) (5 3 role) (6 3 role) (7 3 role) (8 3 role) and not (4 1 physical) (5 1 physical) [...] (4 2 physical) (5 2 physical) [...]
Sample (2)	
Former {(1)[ORGANISATION] House} Speaker {(2)[WRITER] Newt Gingrich} and {(3)[WRITER] William R. Forstchen} have written a {(4)[LITERARYGENRE] novel} , {(5)[BOOK] 1945} , in which the {(6)[COUNTRY] US} defeated {(7)[COUNTRY] Empire of Japan} but not {(8)[COUNTRY] Nazi Germany} in {(9)[EVENT] World War II} , resulting in a {(10)[EVENT] Cold War} with {(11)[COUNTRY] Germany} rather than the {(12)[COUNTRY] Soviet Union} .	(5 2 written_by) (5 3 written_by) (2 3 co_authors)
Sample (3)	
In August 1955 , {(1)[PERSON] Grissom} was reassigned to the {(2)[UNIVERSITY] U.S. Air Force Institute of Technology} at {(3)[ORGANISATION] Wright-Patterson Air Force Base} near {(4)[LOCATION] Dayton} , {(5)[LOCATION] Ohio} .	When there is not a clear main entity (2, 3, 4, 5), annotate the chain: 2 is in 3, 3 is in 4, 4 is in 5.

Relation Types	Definition	Direction	Sample	
PART-OF	Something that is part of something else: song_part_of_album, task_part_of_field ...	E1 is part-of E2	Over the past decade , {(1)[MISC] PCNNs} have been used in a variety of {(2)[FIELD] image processing} applications , including : {(3)[TASK] image segmentation} , {(4)[TASK] feature generation} , {(5)[TASK] face extraction} , {(6)[TASK] motion detection} , {(7)[TASK] region growing} , and {(8)[TASK] noise reduction} .	(3 2) (4 2) (5 2) (6 2) (7 2) (8 2)
PHYSICAL	Answer the question <i>where?</i> e.g. location, near, destination, located_in, based_in, residence, released_in, come_from ...	E1 is in E2	By the end of {(1)[EVENT] World War II} , mountaineer string band music known as {(2)[MUSICGENRE] Bluegrass music} had emerged when {(3)[MUSICALARTIST] Bill Monroe} joined with {(4)[MUSICALARTIST] Lester Flatt} and {(5)[MUSICALARTIST] Earl Scruggs} , introduced by {(6)[MUSICALARTIST] Roy Acuff} at the {(7)[LOCATION] Grand Ole Opry} .	(5 7)
USAGE	Something which make use of something else in order to accomplish its scope, includes an agent using an instrument	E1 uses E2	{(1)[MISC] Neuroevolution} is commonly used as part of the {(2)[FIELD] reinforcement learning} paradigm , and it can be contrasted with conventional {(3)[FIELD] deep learning} techniques that use {(4)[ALGORITHM] gradient descent} on a {(5)[ALGORITHM] neural network} with a fixed topology .	(3 4)
ROLE	Two entities which are linked by a <u>business related</u> role: management, founder, affiliate-partner, member-of, citizen-of, participant, nominee-of ...	E1 has role in / for / in respect to E2 (E1 has the active role)	{(1)[PROGRAMLANG] Logo} was created in 1967 at {(2)[ORGANISATION] Bolt , Beranek and Newman} ({(3)[ORGANISATION] BBN}) , a {(4)[UNIVERSITY] Cambridge} , {(5)[UNIVERSITY] Massachusetts} research firm , by {(6)[RESEARCHER] Wally Feurzeig} , {(7)[RESEARCHER] Cynthia Solomon} , and {(8)[RESEARCHER] Seymour Papert} .	(6 2) (7 2) (8 2)

SOCIAL	The role a person has (<u>non-business related</u>): parent, sibling, spouse, friend, acquaintance...	no direction*	Buyers also snapped up 16 other items that were put up for auction by {(1) Hendrix} 's former girlfriend {(2) Kathy Etchingham} , who lived with him from 1966 to 1969 .	(1 2)
GENERAL-AFFILIATION	Religion, ethnicity, genre (book_genre, music_genre ...)	E1 is general-affiliated with E2	To please his wife , {(1)[PERSON] Diederichs} agreed to publish {(2)[WRITER] Hesse} 's collection of {(3)[LITERARYGENRE] prose} entitled {(4)[POEM] One Hour After Midnight} in 1898 (although it is dated 1899) {(5)[BOOK] .Freedman} (1978) pp. 78-80 .	(4 3)
COMPARE	Something that is compared with something else	no direction*	Both {(1)[ASTRONOMICALOBJECT] Jupiter} and {(2)[ASTRONOMICALOBJECT] Saturn} have magnetic fields that are stronger than {(3)[ASTRONOMICALOBJECT] Earth} 's ({(4)[ASTRONOMICALOBJECT] Jupiter} 's equatorial field strength is 4.3 gauss , compared to 0.3 gauss for {(5)[ASTRONOMICALOBJECT] Earth}) , and both have extensive {(6)[MISC] radiation belts} .	(1 3) (2 3) (4 5)
TEMPORAL	Something that happens / exist during an event	E1 happens / exist during E2	By the end of {(1)[EVENT] World War II} , mountaineer string band music known as {(2)[MUSICGENRE] Bluegrass music} had emerged when {(3)[MUSICALARTIST] Bill Monroe} joined with {(4)[MUSICALARTIST] Lester Flatt} and {(5)[MUSICALARTIST] Earl Scruggs} , introduced by {(6)[MUSICALARTIST] Roy Acuff} at the {(7)[LOCATION] Grand Ole Opry} .	(2 1)

ARTIFACT	Something <u>concrete</u> which is the result of the work of someone: written_by, made_by ...	E1 is made by E2	{{(1)[PROGRAMLANG] Logo} was created in 1967 at {{(2)[ORGANISATION] Bolt , Beranek and Newman} ({{(3)[ORGANISATION] BBN}) , a {{(4)[UNIVERSITY] Cambridge} , {{(5)[UNIVERSITY] Massachusetts} research firm , by {{(6)[RESEARCHER] Wally Feurzeig} , {{(7)[RESEARCHER] Cynthia Solomon} , and {{(8)[RESEARCHER] Seymour Papert} .	(1 6) (1 7) (1 8)
ORIGIN	Something <u>abstract</u> which is originated by something else: invented, idea, title_obtained_by...	E1 is originated by E2	The term {{(1)[FIELD] computational linguistics} itself was first coined by {{(2)[RESEARCHER] David Hays} , a founding member of both the {{(3)[CONFERENCE] Association for Computational Linguistics} and the {{(4)[ORGANISATION] International Committee on Computational Linguistics} ({{(5)[ORGANISATION] ICCL}) .	(1 2)
TOPIC	The topic / focus of something	E1 is about E2	In 1995 , {{(1)[ALBUM] Dookie} won the {{(2)[AWARD] Grammy Award} for {{(3)[AWARD] Grammy Award for Best Alternative Music Album} and the band was nominated for nine {{(4)[AWARD] MTV Video Music Award} s including {{(5)[AWARD] Video of the Year} .	(2 3)
OPPOSITE	Something that is physically or idealistically opposite, contrary, against or inverse of something else	no direction*	{{(1)[LOCATION] Syria} accused {{(2)[LOCATION] Israel} on Wednesday of launching a hysterical campaign against it after {{(3)[MISC] Israeli} television reported that {{(4)[LOCATION] Damascus} had recently test fired a missile .	(1 2)

CAUSE-EFFECT	An event or object leads to an effect	E1 is the cause of E2	Former {(1)[ORGANISATION] House} Speaker {(2)[WRITER] Newt Gingrich} and {(3)[WRITER] William R. Forstchen} have written a {(4)[LITERARYGENRE] novel} , {(5)[BOOK] 1945} , in which the {(6)[COUNTRY] US} defeated {(7)[COUNTRY] Empire of Japan} but not {(8)[COUNTRY] Nazi Germany} in {(9)[EVENT] World War II} , resulting in a {(10)[EVENT] Cold War} with {(11)[COUNTRY] Germany} rather than the {(12)[COUNTRY] Soviet Union} .	(6 10)
WIN-DEFEAT	Someone or something who has won / lost a competition, an award, a war ... Default is victory, if defeat specify in the 'Explanation' field. Implies OPPOSITE.	E1 win E2 (if award) no direction* (if the 2 parties are at the same level, e.g. winner and loser of a competition)	In 1995 , {(1)[ALBUM] Dookie} won the {(2)[AWARD] Grammy Award} for {(3)[AWARD] Grammy Award for Best Alternative Music Album} and the band was nominated for nine {(4)[AWARD] MTV Video Music Award} s including {(5)[AWARD] Video of the Year} .	(1 2)
TYPE-OF	The type / property / feature / characteristic of something	E1 has type of E2 (E1 is the specific entity, E2 the general / property)	{(1)[PERSON] Flexner} had studied {(2)[MISC] European schools} such as {(3)[UNIVERSITY] Heidelberg University} , {(4)[UNIVERSITY] All Souls College , Oxford} , and the {(5)[UNIVERSITY] Collège de France} -and he wanted to establish a similar advanced research center in the {(6)[COUNTRY] United States} .	(3 2) (4 2) (5 2)
NAMED	The nickname / acronym / second_name / abbreviation of something / someone. Two spans which refer to the same entity. One-by-one relation.	E1 is the nickname / acronym / second_name / abbreviation of E2 no direction* (if two spans refer to the same entity)	{(1)[PROGRAMLANG] Logo} was created in 1967 at {(2)[ORGANISATION] Bolt , Beranek and Newman} ({(3)[ORGANISATION] BBN}) , a {(4)[UNIVERSITY] Cambridge} , {(5)[UNIVERSITY] Massachusetts} research firm , by {(6)[RESEARCHER] Wally Feurzeig} , {(7)[RESEARCHER] Cynthia Solomon} , and {(8)[RESEARCHER] Seymour Papert} .	(3 2)

RELATED-TO	Entities which are linked to each other with the <i>None-Of-The-Above</i> (NOTA) relation. This relation is exclusive.	no direction*		
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(*) for the relations w/o a direction the rule-of-thumb is: E1 is the first appearing in the text, E2 the second

Special cases:

- actor_portray_character : *named* and *origin*
- player_in_team / artist_in_band : *part-of* and *role*
- politician_in_politicalparty : *role*

(in respect to the sample above: you can swap out all the people, and the political party will still be the same, but if you swap all band members, it's hardly the same band)

- organisation_in_organisation (e.g. politicalparty_in_coalition or sub-organisation_within_main-organisation) : *part-of*
If the text also makes explicit the active role of the parties in respect to the main entity it is ALSO *role*. (e.g. politicalparty FORMED coalition)
- Where nationalities cannot be made into proper entities because they are followed by another entity (we are not handling nested entities), annotate as *general-affiliation* and mark in the Explanation column *nationality*
e.g. the {(4)[MISC] Russian} {(5)[UNIVERSITY] Imperial Academy of Sciences and Arts}