Wikidata ID	Name	Description
P6	head of government	head of the executive power of this town, city, municipality, state, countr
		or other governmental body
P17	country	sovereign state of this item; don't use on humans
P22	father	male parent of the subject. For stepfather, use "stepparent" (P3448)
P27	country of citizenship	the object is a country that recognizes the subject as its citizen
P31	instance of	
P31	instance of	that class of which this subject is a particular example and member. (Subject is a particular example and member.)
		typically an individual member with Proper Name label.) Different fro P279 (subclass of)
P39	position held	subject currently or formerly holds the object position or public office
P57	director	director(s) of this motion picture, TV-series, stageplay, video game or simil
P58	screenwriter	author(s) of the screenplay or script for this work
P84	architect	person or architectural firm that designed this building
P86	composer	person(s) who wrote the music; also use P676 for lyricist
P101	field of work	specialization of a person or organization; see P106 for the occupation
P102	member of political party	the political party of which this politician is or has been a member
P105	taxon rank	level in a taxonomic hierarchy
P106	occupation	occupation of a person; see also "field of work" (Property:P101), "position held" (Property:P39)
P118	league	league in which team or player plays or has played in
P123	publisher	organization or person responsible for publishing books, periodicals, gam
		or software
P127	owned by	owner of the subject
P131	located in the administra-	the item is located on the territory of the following administrative entity. U
	tive territorial entity	P276 (location) for specifying the location of non-administrative places a for items about events
P135	movement	literary, artistic, scientific or philosophical movement associated with the
F133	movement	
D126		person or work
P136	genre	creative work's genre or an artist's field of work (P101). Use main subje
		(P921) to relate creative works to their topic
P137	operator	person or organization that operates the equipment, facility, or service; u
D1.40	1	country for diplomatic missions
P140	religion	religion of a person, organization or religious building, or associated wi
		this subject
P150	contains administrative	(list of) direct subdivisions of an administrative territorial entity
	territorial entity	
P156	followed by	immediately following item in some series of which the subject is part. U P1366 (replaced by) if the item is replaced, e.g. political offices, states
P159	headquarters location	specific location where an organization's headquarters is or has been situation
P175	performer	performer involved in the performance or the recording of a work
P176	manufacturer	manufacturer or producer of this product
P178	developer	organisation or person that developed this item
P241	military branch	branch to which this military unit, award, office, or person belongs, e.
	•	Royal Navy
P264	record label	brand and trademark associated with the marketing of subject music recor
		ings and music videos
P276	location	location of the item, physical object or event is within. In case of an admi
12/0	iocation	
D207		istrative entity use P131. In case of a distinct terrain feature use P706.
P306	operating system	operating system (OS) on which a software works or the OS installed
		hardware
P355	subsidiary	subsidiary of a company or organization, opposite of parent company (P74
P400	platform	platform for which a work has been developed or released / specific platfor
	_	version of a software developed
P403	mouth of the watercourse	the body of water to which the watercourse drains
P407	language of work or	language associated with this work or name (for persons use P103 at
. 107	name	P1412)
D440		
P449	original network	network(s) the radio or television show was originally aired on, including
P460	said to be the same as	this item is said to be the same as that item, but the statement is disputed
P466	occupant	person or organization occupying a building or facility
P495	country of origin	country of origin of the creative work or subject item
P527	has part	part of this subject. Inverse property of "part of" (P361).
P551	residence	the place where the person is, or has been, resident
P674	characters	characters which appear in this item (like plays, operas, operettas, book
	Characters	
D706	located on town: C :	comics, films, TV series, video games)
P706	located on terrain feature	located on the specified landform. Should not be used when the value
		only political/administrative (provinces, states, countries, etc.). Use P13
	İ	for administrative entity.

Wikidata ID	Name	Description
P710	participant	person, group of people or organization (object) that actively takes/took part in the event (subject). Preferably qualify with "object has role" (P3831). Use P1923 for team participants.
P740	location of formation	location where a group or organization was formed
P750	distributor	distributor of a creative work
P800	notable work	notable scientific, artistic or literary work, or other work of significance among subject's works
P931	place served by transport hub	city or region served by this transport hub (airport, train station, etc.)
P937	work location	location where persons were active
P974	tributary	stream or river that flows into this main stem (or parent) river
P991	successful candidate	person(s) elected after the election
P1001	applies to jurisdiction	the item (an institution, law, public office) belongs to or has power over or applies to the value (a territorial jurisdiction: a country, state, municipality,)
P1303	instrument	musical instrument that a person plays
P1344	participant of	event a person or an organization was a participant in, inverse of P710 or P1923
P1346	winner	winner of an event - do not use for wars or battles
P1408	licensed to broadcast to	place that a radio/TV station is licensed/required to broadcast to
P1411	nominated for	award nomination received by a person, organisation or creative work (inspired from "award received" (Property:P166))
P1435	heritage designation	heritage designation of a historical site
P1877	after a work by	artist whose work strongly inspired/ was copied in this item
P1923	participating teams	Like 'Participant' (P710) but for teams. For an event like a cycle race or a football match you can use this property to list the teams and P710 to list the individuals (with 'member of sports team' (P54)' as a qualifier for the individuals)
P3373	sibling	the subject has the object as their sibling (brother, sister, etc.). Use "relative" (P1038) for siblings-in-law (brother-in-law, sister-in-law, etc.) and step-siblings (step-brothers, step-sisters, etc.)
P3450	sports season of	property that shows the competition of which the item is a season
P4552	mountain range	range or subrange to which the geographical item belongs

Table 1: 64 relations in the training set.

Wikidata ID	Name	Description
P25	mother	female parent of the subject. For stepmother, use "stepparent" (P3448)
P26	spouse	the subject has the object as their spouse (husband, wife, partner, etc.). Use "unmarried partner" (P451) for non-married companions
P40	child	subject has the object in their family as their offspring son or daughter (in- dependently of their age)
P59	constellation	the area of the celestial sphere of which the subject is a part (from a scientific standpoint, not an astrological one)
P155	follows	immediately prior item in some series of which the subject is part. Use P1365 (replaces) if the preceding item was replaced, e.g. political offices, states and there is no identity between precedent and following geographic unit
P177	crosses	obstacle (body of water, road,) which this bridge crosses over or this tunnel goes under
P206	located in or next to body of water	sea, lake or river
P361	part of	object of which the subject is a part. Inverse property of "has part" (P527). See also "has parts of the class" (P2670).
P364	original language of work	language in which a film or a performance work was originally created. Deprecated for written works; use P407 ('language of work or name') instead.
P410	military rank	military rank achieved by a person (should usually have a "start date" qualifier), or military rank associated with a position

Wikidata ID	Name	Description
P412	voice type	person's voice type. expected values: soprano, mezzo-soprano, contralto, countertenor, tenor, baritone, bass (and derivatives)
P413	position played on team / speciality	position or specialism of a player on a team, e.g. Small Forward
P463	member of	organization or club to which the subject belongs. Do not use for membership in ethnic or social groups, nor for holding a position such as a member of parliament (use P39 for that).
P641	sport	sport in which the entity participates or belongs to
P921 P2094	main subject competition class	primary topic of a work (see also P180: depicts)
P2094	competition class	official classification by a regulating body under which the subject (events, teams, participants, or equipment) qualifies for inclusion

Table 2: 16 relations in the validation set.

Wikidata ID	Name	Description
P50	author	main creator(s) of a written work (use on works, not humans)
P53	family	family, including dynasty and nobility houses. Not family name (use P734 for family name).
P54	member of sports team	sports teams or clubs that the subject currently represents or formerly represented
P69	educated at	educational institution attended by the subject
P81	connecting line	railway or public transport line(s) subject is directly connected to; use as a qualifier to P197
P108	employer	person or organization for which the subject works or worked
P119	place of burial	location of grave, resting place, place of ash-scattering, etc, (e.g. town/city or cemetery) for a person or animal. There may be several places: e.g. reburials, cenotaphs, parts of body buried separately.
P161	cast member	actor performing live for a camera or audience [use "character role" (P453) and/or "name of the character role" (P4633) as qualifiers] [use "voice actor" (P725) for voice-only role]
P166	award received	award or recognition received by a person, organisation or creative work
P170	creator	maker of a creative work or other object (where no more specific property exists)
P171	parent taxon	closest parent taxon of the taxon in question
P172	ethnic group	subject's ethnicity (consensus is that a VERY high standard of proof is needed for this field to be used. In general this means 1) the subject claims it him/herself, or 2) it is widely agreed on by scholars, or 3) is fictional and portrayed as such).
P179	series	subject is part of a series, whose sum constitutes the object
P272	production company	company that produced this film, audio or performing arts work
P488	chairperson	presiding member of an organization, group or body
P607	conflict	battles, wars or other military engagements in which the person or item par- ticipated
P749	parent organization	parent organization of an organisation, opposite of subsidiaries (P355)
P1269	facet of	topic of which this item is an aspect, item that offers a broader perspective on the same topic
P1441	present in work	work in which this fictional entity (Q14897293) or historical person is present
P2416	sports discipline com- peted in	discipline an athlete competed in within a sport

Table 3: 20 relations in the test set.