

Relations encoded in the MCR 3.0 (release 2016)

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0.1 Relations of MCR 3.0 (release 2016)

This document describes the current lexico-semantic relations encoded in the Multilingual Central Repository (MCR) 3.0 (release 2016) [Atserias et al., 2004, Gonzalez-Agirre et al., 2012]. The initial version of the MCR was one of the main results of the MEANING project ¹ [Rigau et al., 2002]. Since then the MCR have been maintained and improved by the Spanish government KNOW², KNOW2³, SKaTer⁴ and the TUNER ⁵ projects.

The current relationships are mainly derived from those defined in the EuroWordNet project⁶ [Vossen, 1999]. Now, we also include its correspondance to those from the original Princeton WordNet⁷ [Fellbaum, 1998].

These relations are included in table `wei_relations` of the current distribution. Every relation has an identifier, name, properties and a note (optional). Other attributes indicates the inverse of the relation (if any) and to which group the relations does belong. The ID that appears in this table is later used in the `'wei_$LANG-30_relation'` tables to identify each relation.

0.2 MCR 3.0 and WordNet relations

Table 1 shows the set of relations encoded into the MCR 3.0 (release 2016). For each MCR relation we provide its MCR id, its name as defined in EuroWordNet (Left to Right), its symmetric name (Right to Left), its `pointer_symbol` and name in WordNet (Left to Right), its symmetric `pointer_symbol` and name in WordNet (Right to Left) and a left and right example for the relation.

¹<http://nlp.lsi.upc.edu/projectes/meaning>

²<http://ixa.si.ehu.es/know>

³<http://ixa.si.ehu.es/know2>

⁴<http://nlp.lsi.upc.edu/skater>

⁵<http://ixa.si.ehu.es/tuner>

⁶<http://www.illc.uva.nl/EuroWordNet/>

⁷More details of the WordNet relations (`pointer_symbols`) can be found at: <https://wordnet.princeton.edu/wordnet/man/wninput.5WN.html>

MCR Id	MCR Name L->R	MCR Name R->L	WN L->R	WN Name L->R	WN R->L	WN Name R->L	Example L(ef)	Example R(ight)
2	causes	is_caused_by	>	cause			fell (v)	descend (v)
6	has_holo_madeof	has_mero_madeof	#s	substance holonym	%s	substance meronym	nucleoplasm (n)	nucleus (n)
7	has_holo_member	has_mero_member	#m	member holonym	%m	member meronym	cell (n)	political_movement (n)
8	has_holo_part	has_mero_part	#p	part holonym	%p	part meronym	gene (n)	chromosome (n)
12	has_hyponym	has_hyperonym	~	hyponym	@	hypernym	magnitude (n) gene (n)	size (n) sequence (n)
19	has_subevent	is_subevent_of	*	entailment			fell (v)	undercut (v)
21	has_xpos_hyponym	has_xpos_hyperonym	=	Attribute (n→a)	=	Attribute (a→n)	size (a)	small (n)
31	is_derived_from	has_derived	\	derived from adjective participle of verb			markedly (r) beaten (a)	marked (a) beat (v)
33	near_antonym		!	antonym	!	antonym	big (n)	small (n)
34	near_synonym		&	similar	&	similar	big (n)	large (n)
47	pertains_to	has_pertainym	\	Pertainym (pertains to noun)			chromosomal genetical (a)	chromosome (n) gene (n)
49	see_also_wn15		^	also see			descend (v)	collapse (v)
52	verb_group		\$	verb group	\$	verb group	sink (v)	drop (r)
63	category_term	category	-c	member - topic	;c	domain - region	organism (n)	cellular (a)
64	related_to		+	deriv. related form	+	deriv. related form	organism (n)	organic (a)
66	region_term	region	-r	member - region	;r	domain - region	United_Kingdom (n)	pudding (n)
68	usage_term	usage	-u	member - usage	;u	domain - usage	colloquialism (n)	drag (n)

Table 1: MCR3.0 and its correspondance to the WordNet ones

Bibliography

- [Atserias et al., 2004] Atserias, J., Villarejo, L., Rigau, G., Agirre, E., Carroll, J., Magnini, B., and Vossen, P. (2004). The meaning multilingual central repository. In *Proceedings of the International Global WordNet Conference (GWC 2004)*, Brno, Czech Republic.
- [Fellbaum, 1998] Fellbaum, C., editor (1998). *WordNet. An Electronic Lexical Database*. The MIT Press.
- [Gonzalez-Agirre et al., 2012] Gonzalez-Agirre, A., Laparra, E., and Rigau, G. (2012). Multilingual central repository version 3.0. In *8th international conference on Language Resources and Evaluation (LREC 2012)*, pages 2525–2529, Istanbul, Turkey.
- [Rigau et al., 2002] Rigau, G., Magnini, B., Agirre, E., Vossen, P., and Carroll, J. (2002). Meaning: A roadmap to knowledge technologies. In *Proceedings of the 2002 COLING workshop: A roadmap for computational linguistics-Volume 13*, pages 1–7.
- [Vossen, 1999] Vossen, P. (1999). Eurowordnet general document. version 3, final, july 19, 1999.