

**INFORUM 2016: 22nd Annual Conference on
Professional Information Resources, Prague 24–25 May
2016**



University of Belgrade - University Library "Svetozar Markovic"

Multilingual Vocabularies in Open Access: Semantic Network WordNet

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**University of Belgrade, University library "Svetozar
Marković"**



WordNet is lexico-semantic network created on Princeton University in 1985 and constantly developing, well-known like Princeton WordNet (PWN).

PRINCETON WORDNET CONTAINS INFORMATION ABOUT NOUNS, VERBS, ADJECTIVES AND ADVERBS IN ENGLISH. THEY ARE GROUPED INTO SETS OF SYNONYMS – SYNSETS, AND EVERY SYNSET REPRESENTS A PARTICULAR CONCEPT. THE MAIN SEMANTIC RELATION AMONG SYNSETS IS SYNONYMY AND THERE ARE ALSO HYPONYMY, ANTONYMY, MERONYMY ETC.

THE NEXT PHASE WAS MULTILINGUALITY PROJECT EUROWORDNET (EWN)

Princeton WordNet (PWN)



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WordNet Search - 3.1

- [WordNet home page](#) - [Glossary](#) - [Help](#)

Word to search for:

Display Options:

- (Select option to change)
- Hide Example Sentences
- Hide Glosses
- Show Frequency Counts
- Show Database Locations
- Show Lexical File Info
- Show Lexical File Numbers
- Show Sense Keys
- Show Sense Numbers
- Show all
- Hide all

Princeton WordNet (PWN)



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WordNet Search - 3.1

- [WordNet home page](#) - [Glossary](#) - [Help](#)

Word to search for:

Display Options:

Key: "S:" = Show Synset (semantic) relations, "W:" = Show Word (lexical) relations

Display options for sense: (gloss) "an example sentence"

Noun

- **S: (n) cat, true cat** (feline mammal usually having thick soft fur and no ability to roar: domestic cats; wildcats)
- **S: (n) guy, cat, hombre, bozo, sod** (an informal term for a youth or man) "*a nice guy*"; "*the guy's only doing it for some doll*"; "*the poor sod couldn't even buy a drink*"
- **S: (n) cat** (a spiteful woman gossip) "*what a cat she is!*"
- **S: (n) kat, khat, qat, quat, cat, Arabian tea, African tea** (the leaves of the shrub *Catha edulis* which are chewed like tobacco or used to make tea; has the effect of a euphoric stimulant) "*in Yemen kat is used daily by 85% of adults*"
- **S: (n) cat-o'-nine-tails, cat** (a whip with nine knotted cords) "*British sailors feared the cat*"
- **S: (n) Caterpillar, cat** (a large tracked vehicle that is propelled by two endless metal belts; frequently used for moving earth in construction and farm work)
- **S: (n) big cat, cat** (any of several large cats typically able to roar and living in the wild)
- **S: (n) computerized tomography, computed tomography, CT, computerized axial tomography, computed axial tomography, CAT** (a method of examining body



Balkanet - Design and Development of a Multilingual Balkan WordNet

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Wordnets

This is the status of the final version of the monolingual Wordnets produced by the end of the project:

	Bulgarian	Czech	Greek	Romanian	Turkish	Serbian
Synsets	21441	28456	18461	19839	14626	8059
Nouns	14174	21009	14426	13345	11059	5919
Verbs	4169	5155	3402	4808	2725	1803
Adjectives	3088	2128	617	852	802	324
Adverbs	9	164	16	834	40	13
Literals	44956	43918	24366	33690	20310	13295
Literal/Synset	2.1	1.54	1.33	1.7	1.39	1.65
BC1s	1218	1218	1218	1218	1220	1219
BC2s	3471	3471	3462	3471	3479	3469
BC3s	3827	3827	3825	3827	3794	1369
Domain Specific Synsets	2065	304	238	286	300	305
Balkan Specific Synsets	220	257	309	151	103	117
Language Specific Synsets	116	257	52	545	204	206
Language Internal Relations	28599	25683	24368	25885	19834	12787

Serbian Wordnet (SWN)



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Semantički resursi srpskog jezika

WordNet

WordNetXML

Domains

Relations

RetFig

sanjaantonic

Odjava

Pretražite srpski WordNet:

Traži

sadrži

počinje sa

tačna fraza

Literal

Def

Usage

Domain

Serijalizacija

Moji sinsetovi

Sinsetovi korisnika

Ukupno nađeno: **429** sinsetova

Novi sinset

ID: **ENG30-00832092-n** POS: **n** BCS: 0.000 0.000 sanjaantonic

08.08.2015 Approved: **yes**

PWN

XML

Izmeni

sinset

Literals: **kardiografija (1), elektrokardiografija (1), EKG (1)**

Definition: *Dijagnostička procedura koja prati rad srca. Elektrokardiografijom se korišćenjem aparata elektrokardiograma prate električni impulsi srca i dobija crtež elektrokardiograf - EKG.*

SUMO: TherapeuticProcess +

DOMAIN: medicine

ID: **ENG30-00613685-n** POS: **n** BCS: 0.000 0.000 sanjaantonic

08.08.2015 Approved: **yes**

PWN

XML

Izmeni

sinset

Literals: **biljna medicina (1)**

Definition: *Upotreba lekovitih biljaka u sprečavanju, lečenju bolesti ili promovisanju zdravlja*

SUMO: Position +

DOMAIN: pharmacy

ID: **ENG30-00086077-v** POS: **v** BCS: 0.000 0.000 sanjaantonic

29.06.2015 Approved: **yes**

PWN

XML

Izmeni

sinset

832092

Search

Word

Sinset ID

Tree View

Number of Nouns: 1

ID {832092} Sense {{cardiography, electrocardiography}: diagnostic procedure consisting of recording the activity of the heart electronically with a cardiograph (and producing a cardiogram)}

sumo: { TherapeuticProcess + } domain: {medicine} pos: {0}, neg: {0}

SWN [copy to SWN >>](#)

▼ - Relations...

Serbian Wordnet (SWN)



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Semantički resursi srpskog jezika

WordNet

WordNetXML

Domains

Relations

RetFig

sanjaantonio

Odjava

mačka

Traži

sadrži počinje sa tačna fraza

Literal Def Usage Domain

Serijalizacija

Moji sinsetovi Sinsetovi korisnika

Ukupno nađeno: 1 sinset

Novi sinset

ID: ENG30-02120997-n POS: n BCS: 3

0.000

0.000

Mama

28.01.2004 Approved: yes

PWN

XML

Literals: životinja iz roda mačaka (1), mačka (1b)

Definition: *Neka od raznih okretnih? sisara sa okruglom glavom, mnoge imaju uvučene kandže.*

SUMO: Feline =

DOMAIN: zoology

2120997

Search

Word Sinset ID

Tree View

Number of Nouns: 1

ID {2120997} Sense {{feline, felid}: any of various lithe-bodied roundheaded fissiped mammals, many with retractile claws}

sumo: { Feline = } domain: {animals} pos: {0}, neg: {0} SWN

copy to SWN >>

▼ - Relations...

Nedavno prijavljeni korisnici: sanjaantonio; vanjaR;

© Semantički resursi srpskog jezika

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Japanese WordNet



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Japanese WordNet

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→ [日本語 \(Japanese\)](#)

[Francis Bond](#) <bond@ieee.org>

[NTU Computational Linguistics](#)

[Lab](#)

[Linguistics and Multilingual Studies](#)

[Nanyang Technological University](#)

Results for «ネコ» (jpn)

[02121620-n](#) (18) にゃんにゃん, 猫, **ネコ**,
キヤット
cat, true cat

通常、厚く柔らかい毛皮を持ち、吠えることのできないネコ
乳類：家ネコ; ヤマネコ

Search WN

ネコ

Langs:

日本語 ▾

英語 ▾

[More detail about the Japanese Wordnet \(1.1\)](#)

(0.00:

This project is now integrated in the [Extended Open Multilingual Wordnet \(1.1\)](#)

Maintainer: [Francis Bond](#) <bond@ieee.org>

IndoWordNet



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Number of Synset for "বিজ্ঞান" : 1 showing 1 / 1
Synset ID : 29592 POS : NOUN
Synonyms : বিজ্ঞান, বিজ্ঞানিনী,
Gloss : মাদা বিজ্ঞান
Example statement : "বিজ্ঞান নিজের বাচ্চকে ঘুষ খাওয়াচ্ছে"
Gloss in Hindi : मादा बिल्ली
Gloss in English : female cat

Enable Transliteration
বাংলা (Bengali)
বিজ্ঞান

Current language : বাংলা (Bengali)
Change language : বাংলা (Bengali)

- hypernymy •
- hyponymy •
- holonymy •
- meronymy •
- antonymy •
- Onto tree •
- noun relation •
- verb relation •
- derived from •
- modifies •

showing ontology

click onto label to see detail about ontology

	sid	synonymy
11	স্তনপায়ী (Mammal)	MML উদাহরণ:- গায়,ছেল,শেঁর ইত্যাদি
10	জন্তু (Fauna)	FAUNA উদাহরণ:- গায়,মানব,সর্প ইত্যাদি
6	সজীব (Animate)	ANIMT উদাহরণ:- মানব,জানবর,বৃক্ষ ইত্যাদি
2	সঁজা (Noun)	N উদাহরণ :- গায়,দুধ,মিঠাই ইত্যাদি

হিন্দী hindi
English
অসমীয়া (Assamese)
বাংলা (Bengali)
bodo
ગુજરાતી (Gujarati)
ಕನ್ನಡ (Kannada)
كشميرى (Kashmiri)
konkani
മലയാളം (Malayalam)
manipuri
मराठी (Marathi)
नेपाली (Nepali)
संस्कृतम् (Sanskrit)
தமிழ் (Tamil)
తెలుగు (Telugu)
punjabi
urdu

হিন্দী hindi
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Gloss in Hindi : मादा बिल्ली
Gloss in English : female cat

: Enable Transliteration

বাংলা (Bengali) ▾

বিজ্ঞান

Current language : বাংলা (Bengali)

Change language : বাংলা (Bengali) ▾

- hypernymy •
- hyponymy •
- holonymy •
- meronymy •
- antonymy •
- Onto tree •
- noun relation •
- verb relation •
- derived from •
- modifies •

showing ontology

sid synonymy gloss example

click onto label to see detail about ontology

- 11 **স্তনপায়ী (Mammal)** MML উদাহরণ:- গাঘ,ছেল,শের ইত্যাদি
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- হিন্দী hindi
- English
- অসমীয়া (Assame)
- বাংলা (Bengali)
- bodo
- ગુજરાતી (Gujar)
- ಕನ್ನಡ (Kannad)
- ಕശ್ಮೀರಿ (Kashmir)
- konkani
- മലയാളം (Malaya)
- manipuri
- मराठी (Marath)
- नेपाली (Nepal)
- संस्कृतम् (Sansk)
- தமிழ் (Tami)
- తెలుగు (Telug)
- punjabi
- urdu



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Thank You!

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