



Comprehendo®

disambiguate and understand text
in hundreds of languages

Comprehendo® is the core engine of Babelscape's **multilingual text understanding** solutions. It performs large-scale, wide-coverage **disambiguation** and **entity linking**, by associating the **most suitable meanings** with words and phrases occurring within text in **arbitrary languages**.

Comprehendo® works both with **standard text** (sentences, paragraphs, documents, etc.), and **text snippets** (such as tags, word clouds, user queries, etc.) and brings two main advantages:

- It enables the **semantic aggregation** of similar information written using different words, either in the same language, or in different languages (for instance, what is the world talking about today in different language newspapers?)
- It enables **discrimination between meanings** of the same word (for example, users searching for oil might be interested in fuel or in food and the system would be able to separate results, enabling **semantic search**)



MULTILINGUAL COMPREHENSION



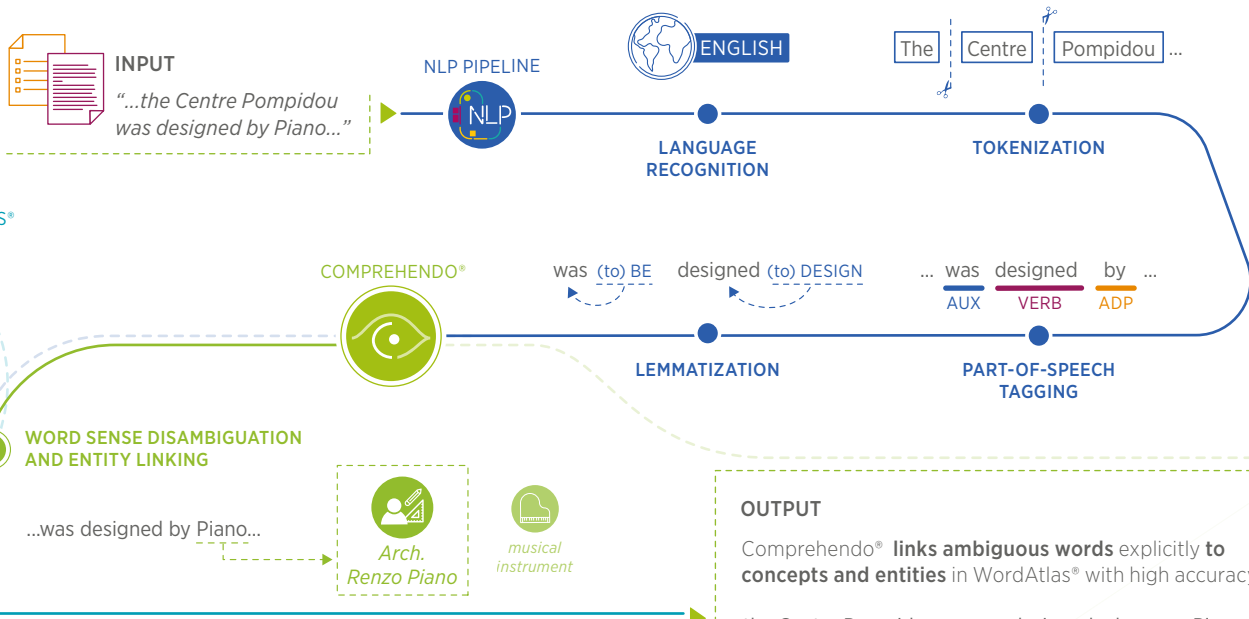
Multilinguality is the key feature of our word sense disambiguation tool:

Comprehendo® understands text in all the languages supported by our **NLP pipeline**

Thanks to its linkage to **WordAtlas®**, our multilingual knowledge graph, the concepts and entities involved are **lexicalized** and **translated** in **hundreds of languages**.

Overview

OF KEY STEPS



How it works

Robert Hooke descubrió que la fuerza que ejerce un resorte es proporcional a su extensión.

Search

TRANSLATE INTO ENGLISH

● Concept ● Named Entity

Robert Hooke



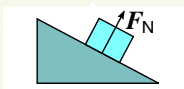
Robert Hooke
Robert Hooke FRS was an English natural philosopher, architect and polymath
Wikipedia

descubrió



detect
Discover or determine the existence, presence, or fact of
OmegaWiki

que la fuerza que ejerce un resorte es



force
A powerful effect or influence
Wikipedia



spring
A metal elastic device that returns to its shape or position when pushed or pulled or pressed
Wikipedia

proporcional a su



proportional
Properly related in size or degree or other measurable characteristics; usually followed by 'to'
WordNet

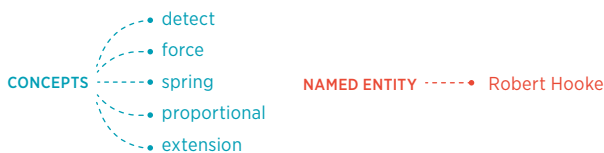
extensión.



extend
A mutually agreed delay in the date set for the completion of a job or payment of a debt
Wikipedia

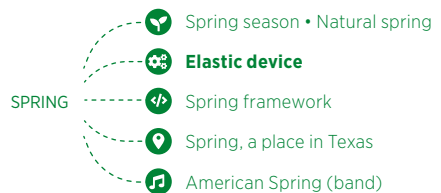
CONCEPT AND ENTITY IDENTIFICATION

Given a text, Comprehendo® links ambiguous words explicitly to **concepts** and **entities** in WordAtlas® with high performance and speed. Concepts and Named Entities are identified explicitly.



WORD SENSE DISAMBIGUATION AND ENTITY LINKING

Comprehendo® selects the **most appropriate sense** (proper meaning) of a word that is involved in a **particular context**. For instance:



MULTILINGUAL SEMANTIC INTEGRATION

Comprehendo® runs **independently of the input language**, enabling semantic indexing and search, and reducing sparsity. For example, consider the following queries in your search engine:



All of the above queries convey the **same meaning**, but they look different to your system. With Comprehendo® you can **aggregate** them and **return semantically relevant results, within and across languages**.

video game addiction
computerspiel abhängigkeit
dépendance au jeu vidéo
电脑游戏 成瘾



COMPUTER GAME



ADDICTION

Related products

Comprehendo® Domain Specific

Comprehendo® DS is the solution to specific-domain businesses. Whereas Comprehendo® works with articles, documents and sentences, Comprehendo® DS works with **word clouds** and selects the **most suitable meaning** (chosen according to the semantic network) **per each lemma**.

Moreover, a novel **language-agnostic setting** is available. In this setting, it is possible to input words in **multiple languages**: Comprehendo® DS will process them without assuming or trying to infer the language of the input word cloud, giving the further possibility of annotating content written in **multiple languages**.

By connecting datasets like term banks, keywords, repositories and dictionaries, companies and research centers use Comprehendo® DS to create their own **knowledge graphs**, so as to enable tasks such **multilingual information extraction** and **semantic search**.

1. INPUT OR CONNECTED DATASET



2. TEXT INDEX



3. KNOWLEDGE GRAPH CREATION

myKnowledgeGraph

A **Knowledge Graph** is a way to model a knowledge domain (e.g., medicine, finance, tourism, etc.). In other words, it organizes knowledge into a **coherent network of meanings** and it enables Artificial Intelligence applications which exploit this knowledge to perform **text understanding**.

myKnowledgeGraph is an innovative service for the creation of **large, multilingual enterprise knowledge graphs** for any need. Thanks to this service, you can organize, structure and maintain the knowledge in your enterprise document and termbases.

Key features include:

- create your **enterprise knowledge graph**
 - from **term banks**
 - from **document bases** containing raw text
- enable **semantic search**
- easily **visualize** and **navigate** your data
- work with **domain-specific** data and **multiple domains**
- start from one or more languages and **scale seamlessly to any number of languages**

Pricing

Comprehendo® will be the heart of your AI systems. Given its high degree of integrability and customizability, Comprehendo® can adapt to all your business requirements.

Contact us at info@babelscape.com to receive a customized plan.

