

TALOS ERA CHAIR IN ARTIFICIAL INTELLIGENCE FOR HUMANITIES AND SOCIAL SCIENCES



ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΡΗΤΗΣ
UNIVERSITY OF CRETE



“TEDI”

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<https://talos-ai4ssh.uoc.gr/>



Funded by the
European Union

Horizon ERA Chair TALOS AI4SSH Project funded by the European Commission
Grant Agreement n° 101087269, <https://cordis.europa.eu/project/id/101087269>

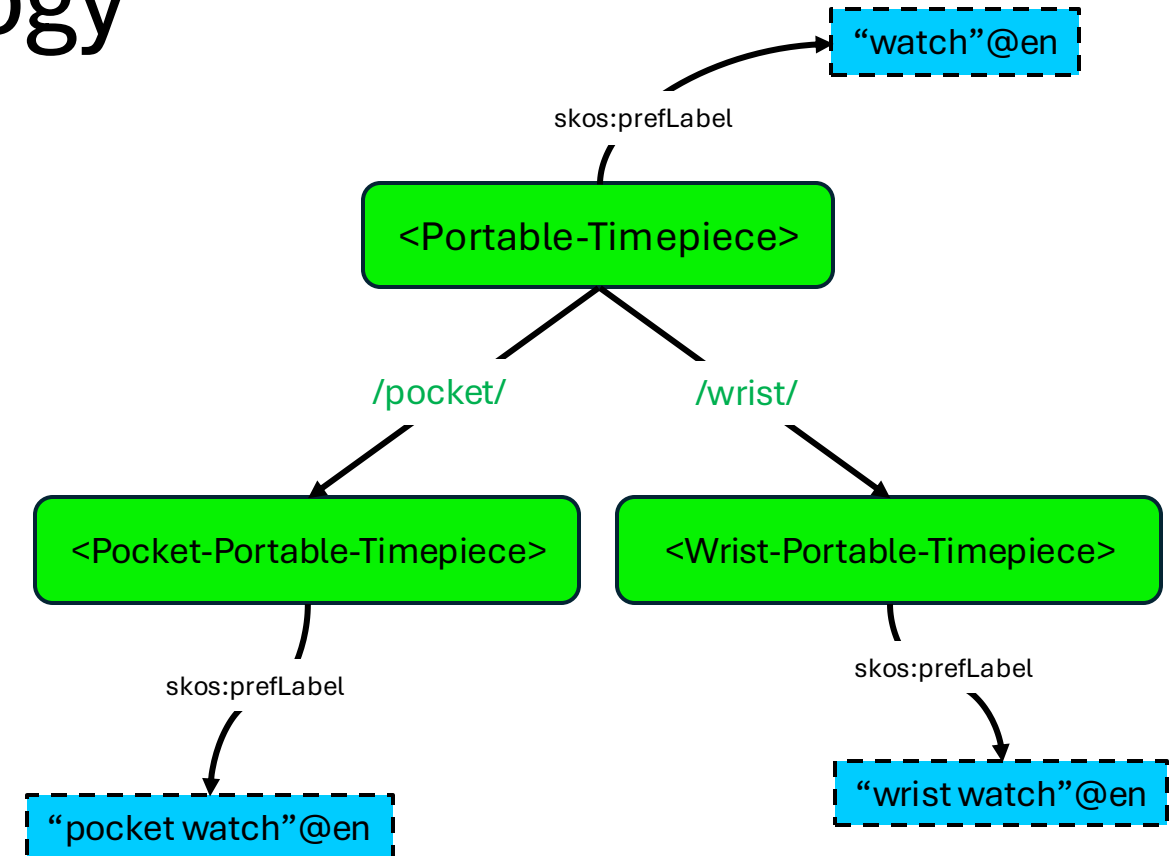
Contents

- Recap of Ontoterminology
- What is TEDI?
 - Introduction
 - Conceptual Dimension
 - Linguistic Dimension
 - Exports
- Conclusion



Recap of Ontoterminology

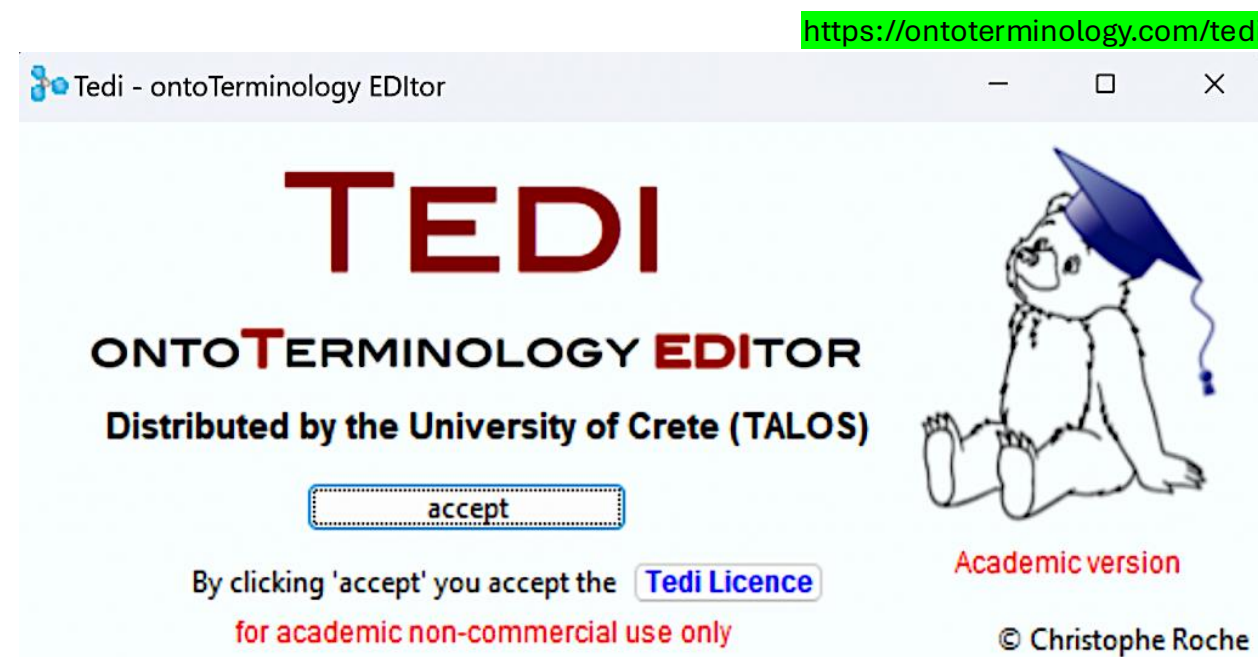
- Ontology + Terminology
- “An Ontoterminology is a terminology whose conceptual system is a formal ontology”. (Roche 2007)
- Double dimension of Terminology.
- Representation and standardization of domain knowledge.





What is TEDI?

- ontoTerminology **ED**itor
- A software environment dedicated to building multilingual ontoterminologies.
- Symbolic Artificial Intelligence
- ISO 1087 and ISO 704





Introduction



Version: 4.1
edit parameters

Multilingual Ontoterminology Editor



www.ontoterminology.com

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user [login](#) [list](#) [edit](#)

Rafail

User_38860677574086

 **Onto Terminology Base**  OTB folder

[new OTB](#) [load OTB](#) [save OT](#)   OTB file not saved [edit](#)

Ontoterminology List 

My-wrist-watch



nb of cpts 0 total nb of terms 0

nb of objs 0 total nb of PNs 0

[new](#) [rename](#) [delete](#)

[upgrade](#) [report](#) [edit ontoterm](#)

[concept search](#)  [term search](#)  

[import](#) [export](#)  

author [list of contributors](#)

creation date updated

domain

sub domain

other domains

[language](#) 3 ops [trace](#)

nb of terms begin period [reset](#)

nb of PNs end period

comment

This is an ontoterminology for Rafail's wrist watch.

[conceptual dimension](#)  [linguistic dimension](#)  [close editors](#)

<https://ontoterminology.com/tedi>



Conceptual dimension

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www.ontoterminology.com

Onto Terminology Base ? OTB folder /Users/rafaigiannadakis/Desktop
new OTB load OTB save OTB OTB file watch.otb not saved edit

Ontoterminology List ?
My-wrist-watch

author Rafail list of contributors
creation date March 22, 2025 updated March 22, 2025
domain
sub domain
other domains

language en default 3 ops trace
nb of terms 0 begin period 0 reset
nb of PNs 0 end period 0

comment
This is an ontoterminology for Rafail's wrist watch.

new rename delete
upgrade report edit ontoterm

concept search term search
import export

conceptual dimension linguistic dimension close editors

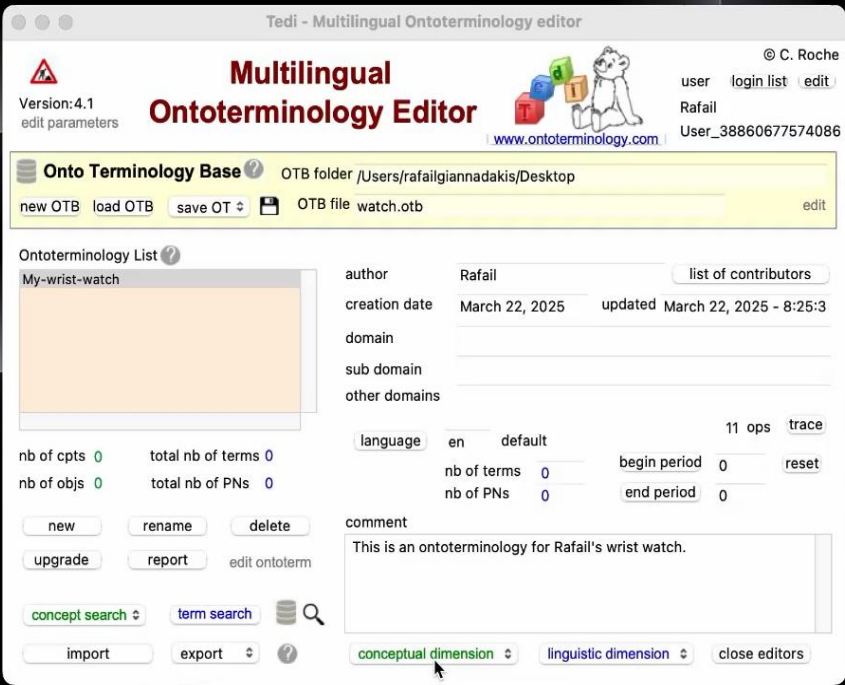
concept editor
object editor
axis editor
relation editor
attribute editor

<https://ontoterminology.com/tedi>

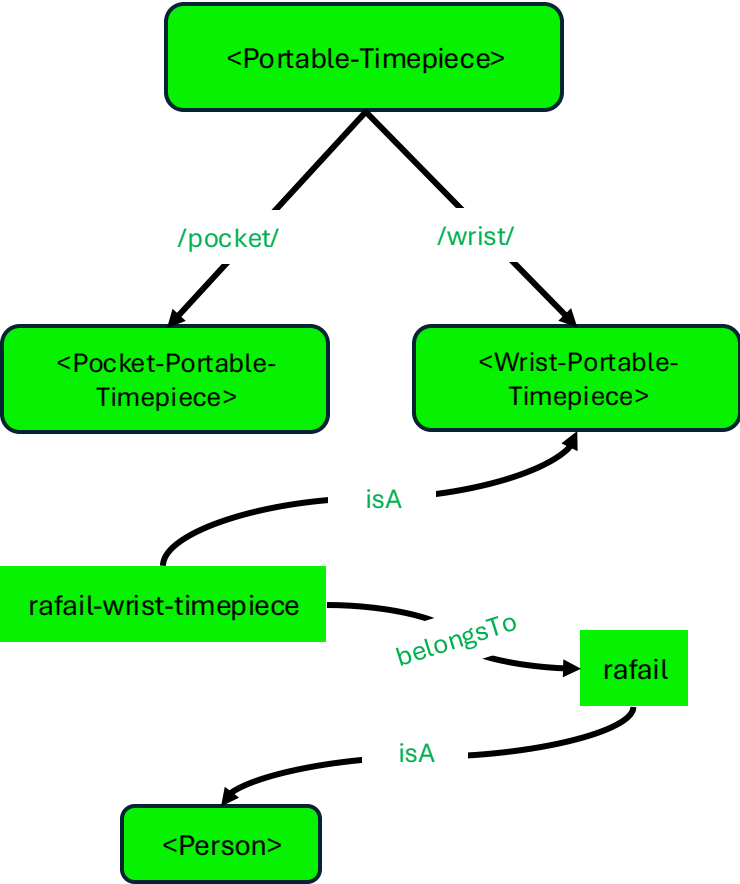
- Aristotelian principles for definitions=> essential and descriptive characteristics (TEDI online).



Conceptual dimension

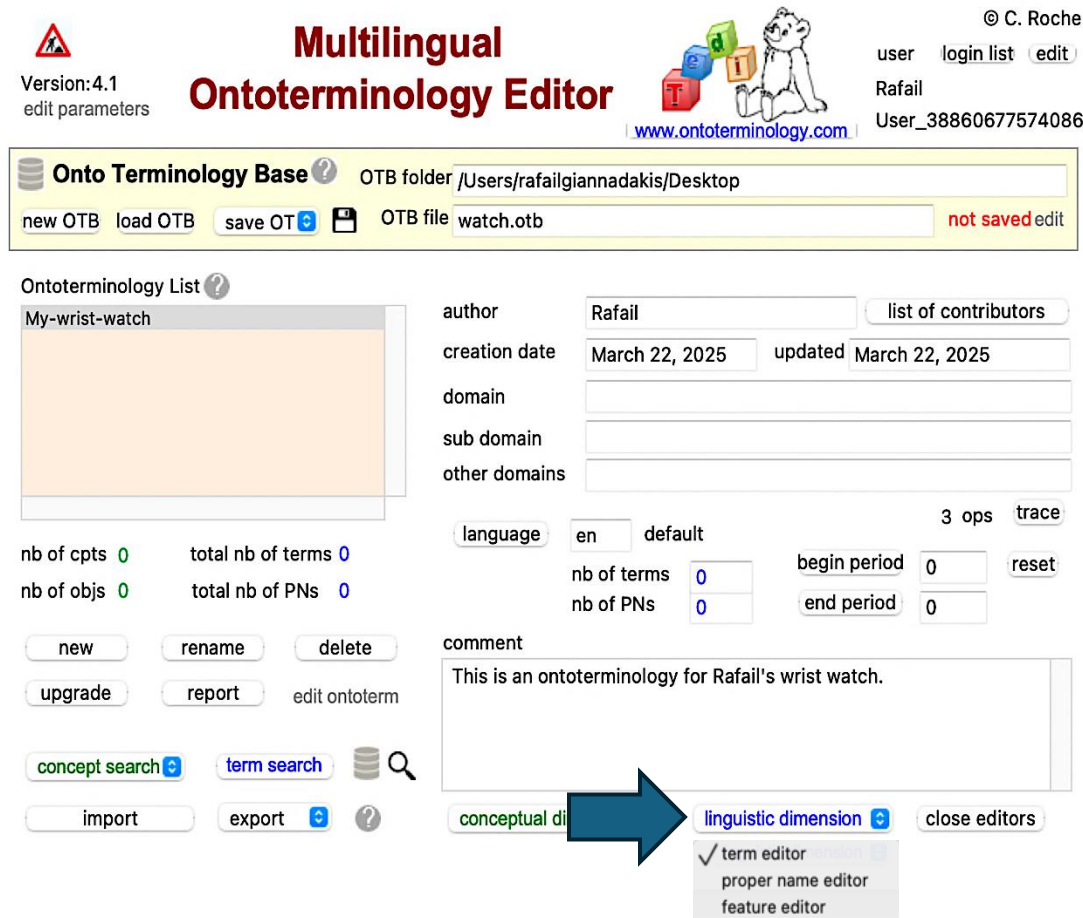


<https://ontoterminology.com/tedi>





Linguistic dimension



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Onto Terminology Base ? OTB folder /Users/rafaigiannadakis/Desktop
new OTB load OTB save OTB OTB file watch.otb not saved edit

Ontoterminology List ?
My-wrist-watch

author Rafail list of contributors
creation date March 22, 2025 updated March 22, 2025
domain
sub domain
other domains

language en default 3 ops trace
nb of terms 0 begin period 0 reset
nb of PNs 0 end period 0

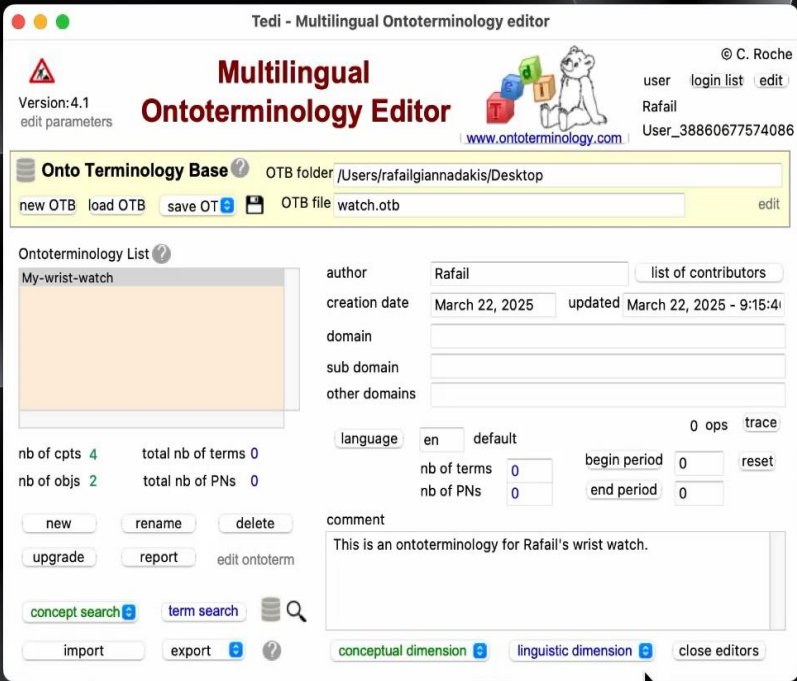
comment
This is an ontoterminology for Rafail's wrist watch.

conceptual dimension linguistic dimension close editors
term editor
proper name editor
feature editor

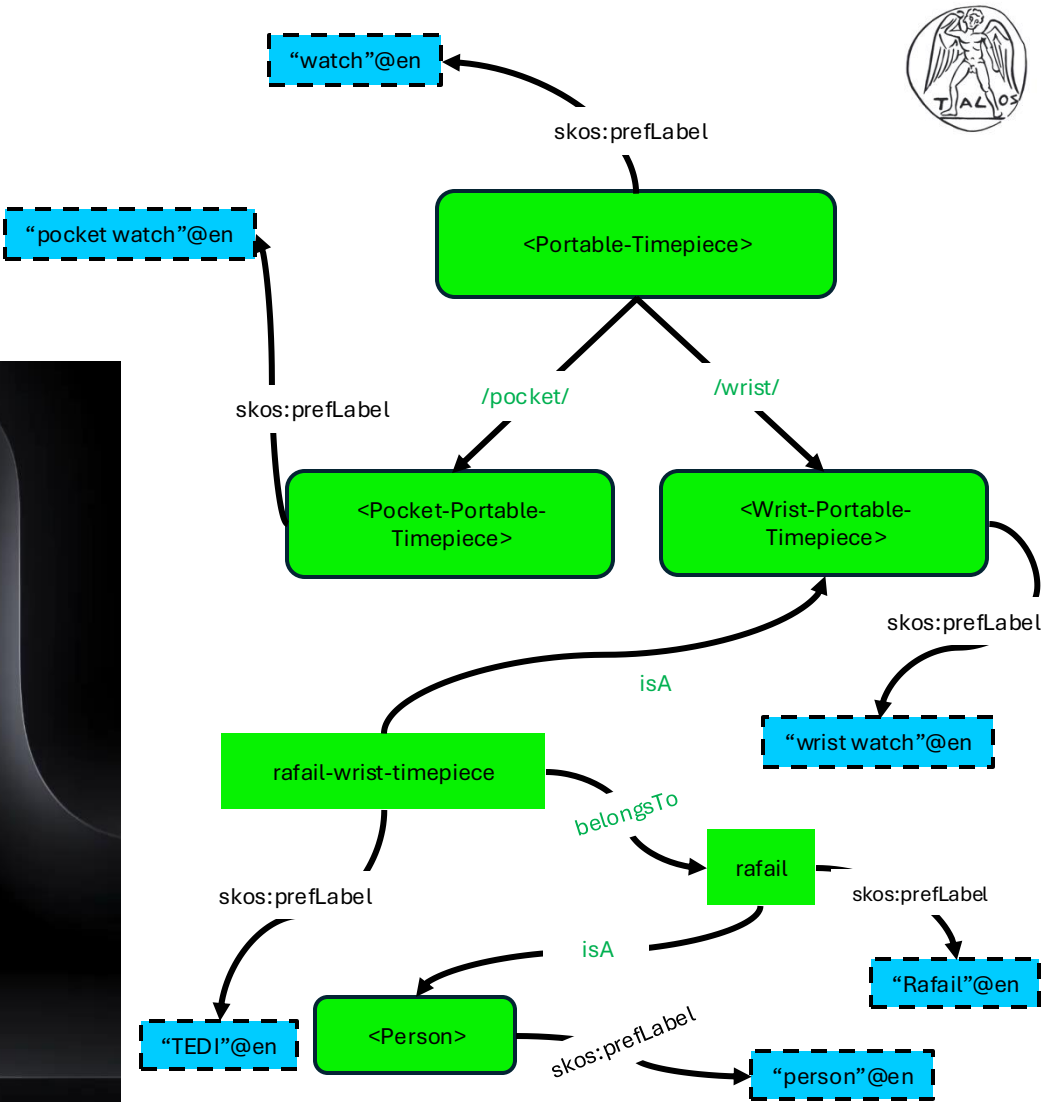
- “*terms* are verbal designations of concepts” (ISO 1087:2019)
- Terms are defined independently of each other in each language.
- The different set of terms are linked through the shared ontology.



Linguistic dimension



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Exports



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 **Onto Terminology Base**  OTB folder

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Ontoterminology List 

My-wrist-watch

author

[list of contributors](#)

creation date

updated

domain

sub domain

other domains

language

default

nb of terms

nb of PNs

3 ops

[trace](#)

begin period

end period

reset

nb of cpts

total nb of terms

nb of objs

total nb of PNs

[new](#)

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[import](#)



[export](#) 



[conceptual dimension](#) 

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comment

<https://ontoterminology.com/tedi>





Exports: HTML

**Multilingual**
Ontoterminology Editor

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Onto Terminology Base ? OTB folder /Users/rafiagiannadakis/Desktop

new OTB load OTB save OTB OTB file watch.otb not saved edit

Ontoterminology List ?
My-wrist-watch

author Rafail list of contributors

creation date March 22, 2025 updated March 22, 2025

domain

sub domain

other domains

language en default 3 ops trace

nb of cpts 0 total nb of terms 0

nb of objs 0 total nb of PNs 0

nb of terms 0 begin period 0 reset

nb of PNs 0 end period 0

comment
This is an ontoterminology for Rafail's wrist watch.

conceptual dimension linguistic dimension close editors

new rename delete

upgrade report edit ontoterm

concept search term search

export ?
HTML
RDF
TBX (ISO 30042)
✓ CSV Cmap

<https://ontoterminology.com/tedi>

Term Dictionary on "My-wrist-watch" (en)
Category: "watch"

TEDI Version: 4.1 - Date: March 22, 2025 - Time: 9:44:04 PM - www.ontoterminology.com/tedi

search:

pocket watch

watch

wrist watch

wrist watch
Definition: Watch for the wrist.
hypernym(s): watch (preferred),
Status: preferred

Concept: <Wrist-Portable-Timepiece>
essential characteristic(s): /portable-timepiece/, /wrist/
a kind of: <Portable-Timepiece>

Illustration: Image credit: Pearson Scott Foresman, Public domain, via Wikimedia Commons



Object Collection of "My-wrist-watch" (en)
TEDI Version: 4.1 - Date: May 25, 2025 - Time: 6:51:46 PM - www.ontoterminology.com/tedi
number of objects (type: watch): 3

Search by label...

**Nasa Watch**
more

**Poljot Aviator**
more

**TEDI**
more

TALOS ERA Chair AI for SSH – Project n° 101087269

“TEDI”—Rafail Giannadakis

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Exports: RDF


Version: 4.1
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OTB folder
new OTB load OTB save OT  OTB file not saved edit

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My-wrist-watch

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creation date updated

domain

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language default 3 ops trace

nb of cpts 0 total nb of terms 0
nb of objs 0 total nb of PNs 0

begin period reset
end period

comment

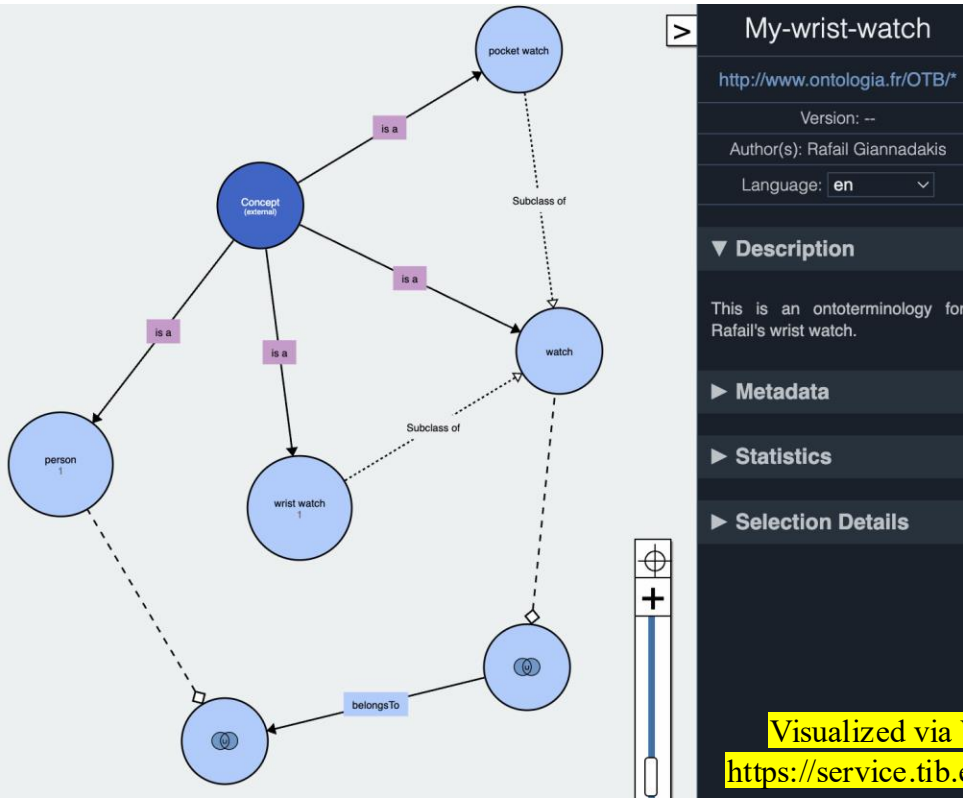
conceptual dimension linguistic dimension close editors

new rename delete
upgrade report edit ontoterm

concept search term search 

in  export 
HTML
RDF
TBX (ISO 30042)
✓ CSV Cmap

<https://ontoterminology.com/tedi>



Visualized via WebVOWL:
<https://service.tib.eu/webvowl/>

```
<?xml version="1.0" encoding="utf-8"?>
<!-- Ontoterminology: My-wrist-watch -->
<!-- Author: Rafail Giannadakis -->
<!-- Creation date: March 22, 2025 -->
<!-- Export date: March 22, 2025 time: 9:46:07 PM -->
<!-- TEDI version: 4.1 -->
<!-- http://ontoterminology.com/tedi -->
<rdf:RDF xmlns="http://www.ontologia.fr/OTB/*"
  xml:base="http://www.ontologia.fr/OTB/*"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:owl="http://www.w3.org/2002/07/owl#"
  xmlns:skos="http://www.w3.org/2004/02/skos/core#"
  xmlns:foaf="http://xmlns.com/foaf/0.1/"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:xml="http://www.w3.org/XML/1998/namespace"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xmlns:otv="http://www.ontologia.fr/OTB/otv#"
  xmlns:vs="http://www.w3.org/2003/06/sw-vocab-status/ns#"
  xmlns:vann="http://purl.org/vocab/vann/"
  xmlns:ontolex="http://www.w3.org/ns/lemon/ontolex#">
```



Exports: TBX

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nb of objs total nb of PNs

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nb of PNs end period

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<https://ontoterminology.com/tedi>

```
<?xml version="1.0" encoding="utf-8"?>
<!-- Export date: March 22, 2025 time: 9:50:47 PM -->
<!-- TEDI version: 4.1 -->
<!-- http://ontoterminology.com/tedi -->
<TBX xmlns="urn:iso:std:iso:30042:ed-2" style="dca">
  <tbx type="TBX-Basic" style="dca">
    <tbxHeader>
      <fileDesc>
        <titleStmt>
          <title>My-wrist-watch</title>
          <author>Rafail Giannadakis</author>
        </titleStmt>
        <publicationStmt>
          <p>Creation date: March 22, 2025</p>
        </publicationStmt>
        <sourceDesc>
          <p>This is an ontoterminology for Rafail's wrist watch.</p>
        </sourceDesc>
        <revisionDesc>
          <change when="OrderedCollection (March 22, 2025 9:41:17
            PM)"</change>
```

(ISO 30041:2019)



Exports: CSV

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Ontoterminology List ?
My-wrist-watch

author [list of contributors](#)
creation date updated
domain
sub domain
other domains

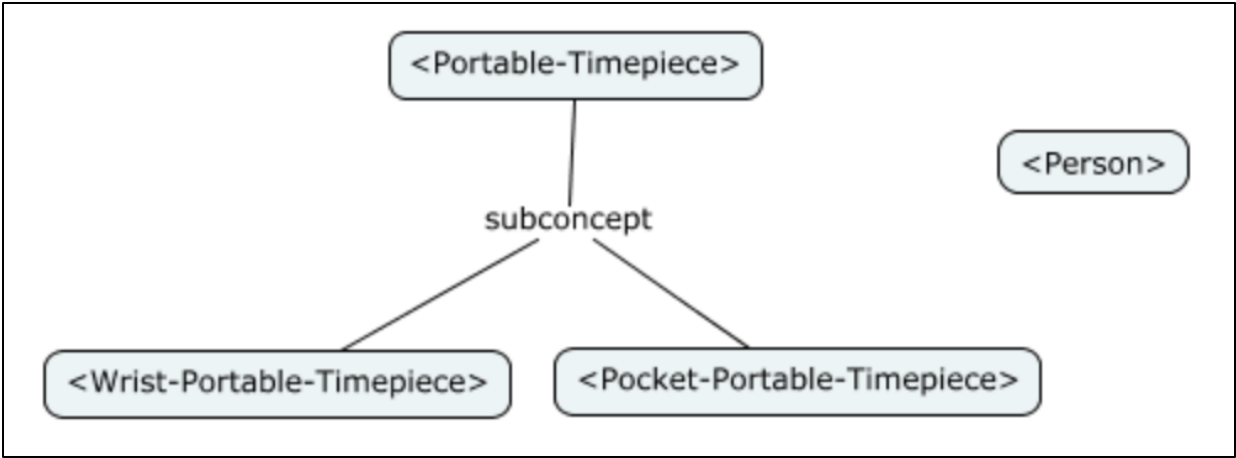
language default 3 ops [trace](#)
nb of terms begin period [reset](#)
nb of PN's end period

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[upgrade](#) [report](#) [edit ontoterm](#)

[concept search](#) [term search](#) 
[in](#) [export](#) ?

[HTML](#)
[RDF](#)
[TBX \(ISO 30042\)](#)
[CSV Cmap](#)



<https://cmap.ihmc.us/>

<https://ontoterminology.com/tedi>



Conclusion

- Free tool (Windows and macOS)
- TEDI is designed for humanities experts (Papadopoulou & Roche 2019).
- Create multilingual terminologies linked with a common ontology.
- Export in standards (OWL, OntoLex, TBX, SKOS) and in visualization (HTML Onto-Dictionaries and Object Collections, CSV).
- Enhancing accessibility for research and education.



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Thank you!

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