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Frame
Semantics for
terminology:
addressing
questions
raised by
specific areas
of knowledge

The context

- Designers of domain-specific (i.e. terminological) resources confronted with different kinds of issues
 - Demands in different domains
 - Variety of domains (environment, adventure tourism)
 - Delimitation of domains (tourism vs. adventure tourism; endangered species vs. environment)
 - Different kinds of users
 - translators, knowledge modelers, future experts, etc.
 - Different methods and various tools for presenting terms and how they are linked

The context

- Designers of domain-specific (i.e. terminological) resources confronted with different kinds of issues
 - Linguistic
 1. What kinds of terms?
 2. Depending on their nature, do terms behave differently?
 3. Which terms are related and how?
 4. Can we connect knowledge and linguistic properties of terms?

The context

- Addressing these questions with Frame Semantics
 - Linguistic
 1. Accounting for a specific category of terms, i.e. predicative
 2. Accounting for the linguistic properties of terms
 3. Finding terms that evoke the same situation
 4. Connecting knowledge structure and linguistic properties of terms
 5. (Taking things a step forward: polysemy and equivalence)

The context

- Two specific examples
 - Adventure tourism and [DiCoAdventure](#) (project in Córdoba)



- Environment, DiCoEnviro and Framed DiCoEnviro (projects in Montreal)



1. What kinds of terms?

- Adventure tourism and DiCoAdventure
 - Numerous activities expressed by verbs:
trek, journey, abseil, glide, dive
 - Need to think “out of the terminological box” to find models that would best account for the linguistic properties of verbs (and related nouns)



1. What kinds of terms?

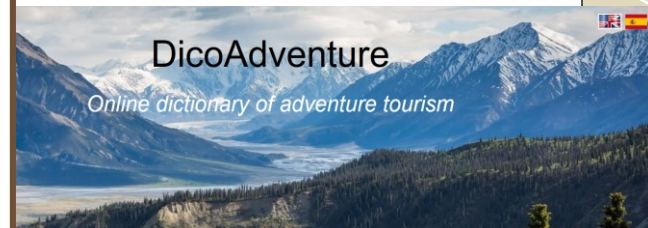
- Adventure tourism and DiCoAdventure
 - Numerous activities expressed by verbs: *trek, journey, abseil, glide, dive*
 - Need to think “out of the terminological

Canyoning Holidays

Canyoning is the act of *getting* from one end of a beautiful canyon or gorge to another – by any means necessary! Expect to be *jumping* off ledges into deep, clear pools, *scrambling* over rocks, *tumbling* into the water, *slithering* and *sliding* down chutes pummelled smooth by water erosion, *wading* through knee-deep water and *swimming* with the current. *Canyoning trips* are one of the most fun, exhilarating ways to spend a day in the mountains.

Advencor

best
parties of verbs



1. What kinds of terms?

- Environment and DiCoEnviro
 - Events expressed by verbs and nouns: *impact* (noun and verb); *reflect*, *biodegrade*, *contaminate*, *desertification*
 - Properties expressed by nouns and adjectives: *biodiversity*, *endangered*, *sustainable*
 - Need to think “out of the terminological box” ...

2. Depending on their nature, do terms behave differently?

- Obvious answer: yes
- But why?
- Predicative terms
 - Verbs:
 - DicoAdventure: *travel*
We TRAVEL *the geological trail through the Brachina Gorge.*
Visiting the most beautiful peaks *many trekkers* TRAVEL *through isolated areas.*



2. Depending on their nature, do terms behave differently?

- Obvious answer: yes
- But why?
- Predicative terms
 - Adjectives
 - DicoEnviro: vulnerable

Polar regions are highly VULNERABLE to climate change.

modern societies are becoming more VULNERABLE to economic damage from weather extremes

3. Which terms are related and how?

- Adventure tourism and DiCoAdventure
 - Same meaning: *to travel, travel*
 - Related meaning: *to travel, adventure, trip, to tour, tour*
 - Predicative units and participants: *travel; traveler, tour; tourist*
 - Etc.

3. Which terms are related and how?

- Environment and DiCoEnviro
 - Same meaning: *vulnerable, vulnerability*
 - Related meaning: *vulnerable, threatened, endangered, vulnerability*
 - Predicative units and “new” kinds of relations; *erode, eroded, eroding; pollute, pollution, polluted, polluting, polluter, depollute*
 - Etc.

4. Can we connect knowledge and linguistic properties of terms?

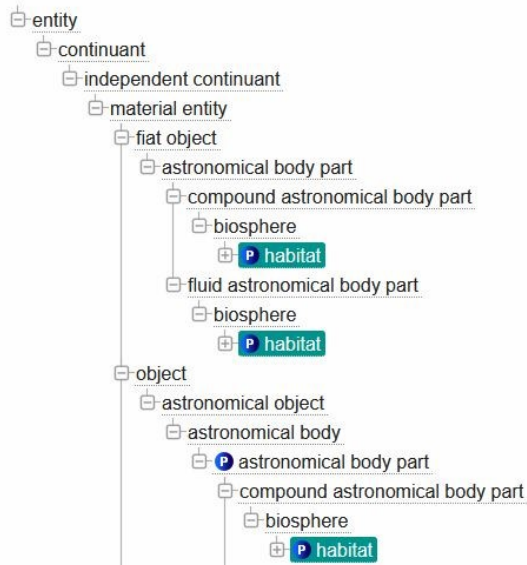
habitat

http://purl.obolibrary.org/obo/ENVO_01000739 Copy

An environmental system which can sustain and allow the growth of an ecological population. [EnvO : EnvO]

Tree view

Term mappings



Graph view

Reset tree

Show all siblings

Term information

database cross reference

- null:<https://en.wikipedia.org/wiki/Habitat>
- LTER:238
- SWEETRealm:Habitat
- EcoLexicon:habitat

comment

- A habitat's specificity to an ecological population differentiates it from other environment classes.

Term relations

Subclass of:

- [ecosystem](#)
- *part of some* [biosphere](#)
- *determined by some* [population of organisms](#)

Related from:

- has part*
- [biome](#)

EnvO Ontology:

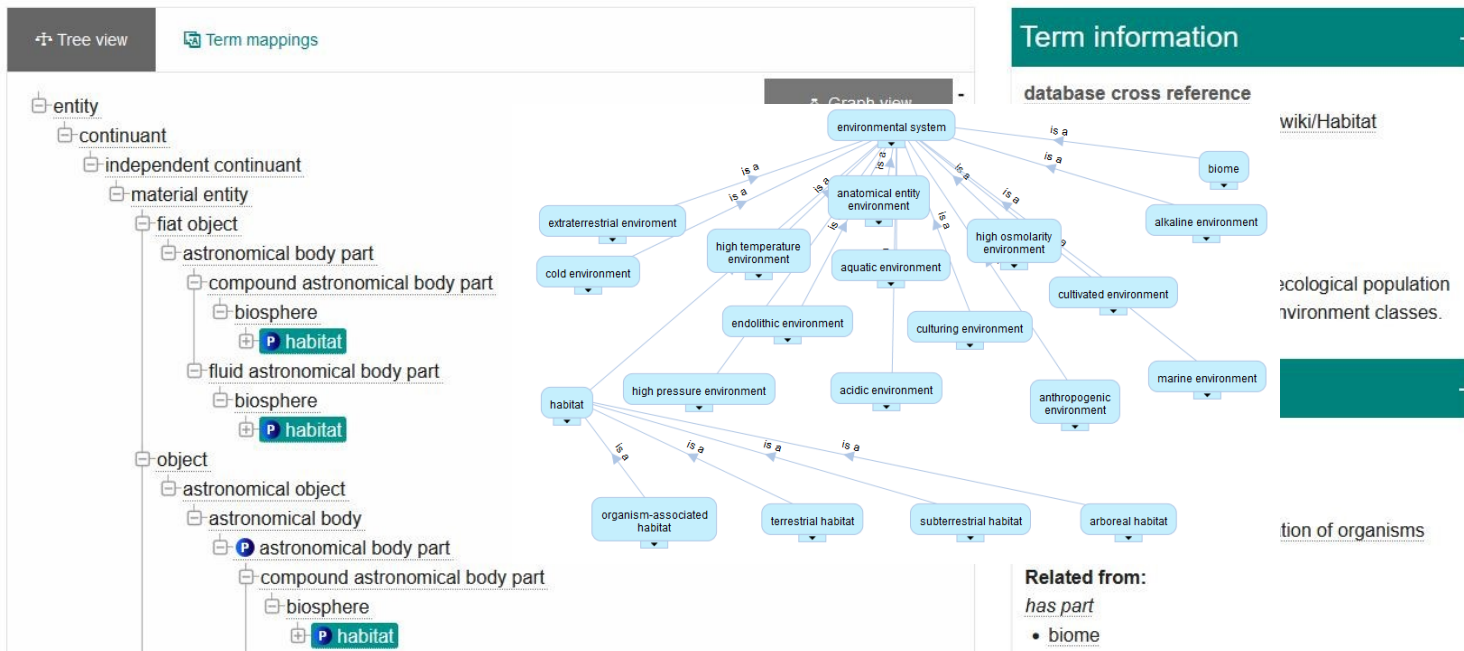
https://www.ebi.ac.uk/ols/ontologies/envo/terms?iri=http%3A%2F%2Fpurl.obolibrary.org%2Fobo%2FENVO_01000739

4. Can we connect knowledge and linguistic properties of terms?

habitat

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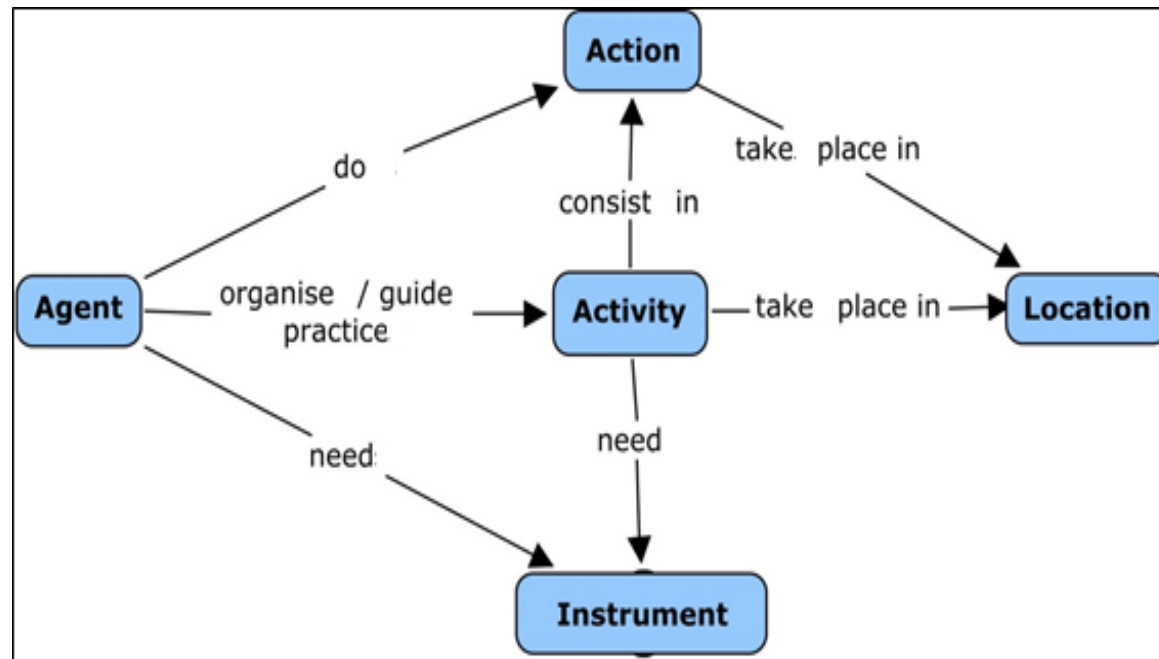
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EnvO Ontology:

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4. Can we connect knowledge and linguistic properties of terms?



Durán Muñoz, Isabel. 2016. "Producing Frame-Based Definitions: A Case Study". *Terminology*, 22 (2): 223-249.

Frame Semantics 101

- Frame Semantics (FS) based on the assumption that the meanings of lexical units (LUs) are constructed in relation to background knowledge (built on previous experience, on beliefs)
- The structure of this background knowledge can be analyzed in terms of semantic frames.
 - A frame models a situation
 - This situation comprises participants

Frame Semantics 101

Example
Travel

Frame Semantics 101

Example

Travel

- Someone doing the traveling (*tourist, traveler, Marie-Claude, etc.*)
- An Area where the traveling takes place (*Spain, Italy, island, etc.*)
- A goal where someone ends up (*Japan, Paris, etc.*)
- A source from which someone departed (*hometown, Montreal*)
- Path, transportation means

FrameNet 101

Travel

[Lexical Unit Index](#)

Definition:

In this frame a **Traveler** goes on a journey, an activity, generally planned in advance, in which the **Traveler** moves from a **Source** location to a **Goal** along a **Path** or within an **Area**. The journey can be accompanied by **Co-participants** and **Baggage**. The **Duration** or **Distance** of the journey, both generally long, may also be described as may be the **Mode of transportation**. Words in this frame emphasize the whole process of getting from one place to another, rather than profiling merely the beginning or the end of the journey.

Ellen **JOURNEYED** **to Europe** with five suitcases.

Samantha **JOURNEYED** **2500 miles** with her family **by sea** to China.

The Osbournes *took* a **TRIP** **from Beverly Hills** to London **on the Concorde**.

FrameNet 101

- Frames comprise frame elements
- Some are compulsory (**core frame elements**)
- TRAVEL
 - **Traveler** The living thing which travels.
 - **Area** The place where the traveling takes place
 - **Goal** The location where the traveler ends up
 - Etc.

FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

- Frames comprise frame elements
- Some are not compulsory (**non-core frame elements**)
- TRAVEL
 - **Distance** The distance traveled
 - **Duration** Duration of time the traveling occurs
 - **Manner** Manner in which the traveling takes place
 - Etc.

FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

- Lexical units “evoke” frames
- TRAVEL
 - *commute.v, excursion.n, expedition.n, getaway.n, jaunt.n, journey.n, journey.v, junket.n, odyssey.n, peregrination.n, pilgrimage.n, safari.n, tour.n, tour.v, travel.n, travel.v, traveler.n, trip.n, voyage.n, voyage.v*

FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

- A lexical entry
- *Journey*, v. (Frame TRAVEL)
- **Definition**
 - “make a journey for pleasure to several locations”FrameNet

FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

- A lexical entry
- *Journey*, v. (Frame
- **Definition**
 “make a journey
 for pleasure to
 several locations”
 FrameNet

Frame Element	Number Annotated	Realization(s)
Area	(11)	INI.-- (1) NP.Obj (3) PP[around].Dep (2) PP[in].Dep (2) PP[on].Dep (1) PP[round].Dep (1) PP[through].Dep (1)
Co-participant	(1)	PP[in].Dep (1)
Direction	(1)	INI.-- (1)
Duration	(2)	PP[for].Dep (2)
Goal	(1)	PP[to].Dep (1)
Source	(1)	PP[from].Dep (1)
Time	(2)	PP[during].Dep (1) AVP.Dep (1)
Traveler	(12)	NP.Ext (10) CNI.-- (2)

FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

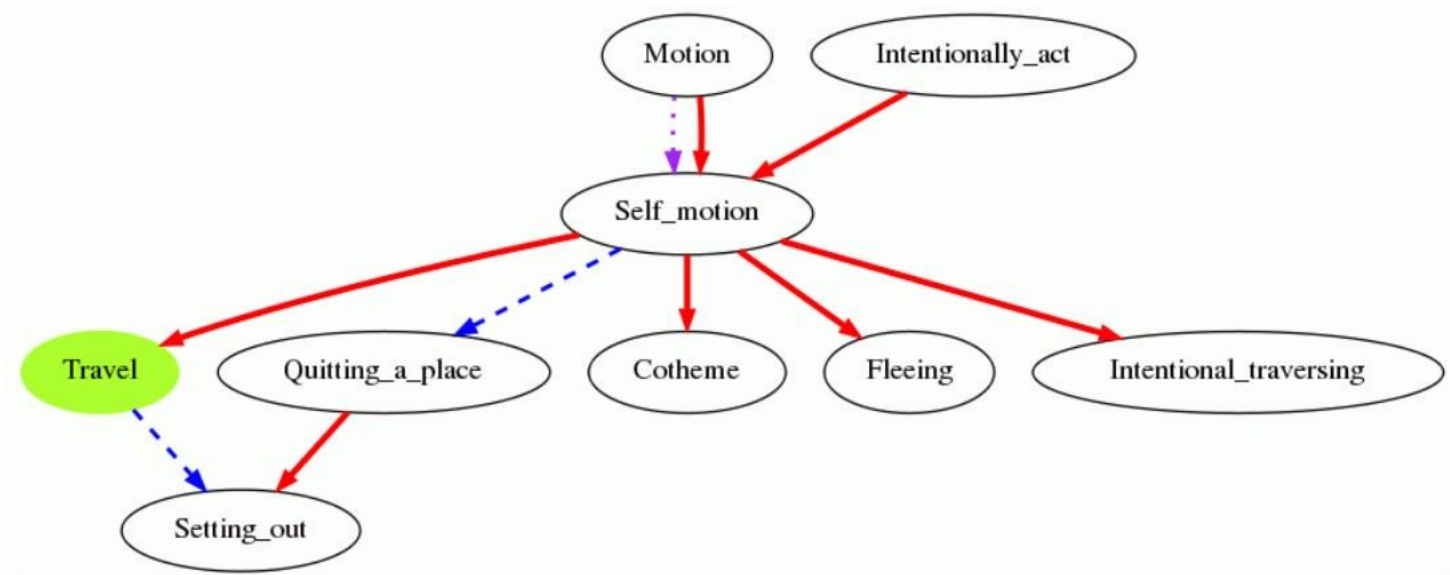
- Contextual annotations for all lexical units
- *Tour, v* (Frame TRAVEL)

- 680-s20-pass
- 730-s20-pparound
 1. **Sally** also takes photographs , especially when **TOURING** **around England** .
 2. **TOURING** **around London** , **she** described Islington council flats as ` a luxury solution " to the housing problem in Chile where more than a million people in a population of 13m are homeless .
- 730-s20-ppfor
 1. Five years ago **i** hired an aircraft to **TOUR** **for two weeks** **in the USA** and was briefed on the possibility of radio thefts and the method used .
 2. **He** **TOURED** **for three years** **from coast** **to coast** .
- 730-s20-ppfrom
- 730-s20-ppin
 1. **Andrew and 49year-old Monica** were **TOURING** **in Canada** when Rachel was knifed to death as she walked with Alex and her dog Molly on the common in South-West London .
- 730-s20-ppon
 1. **TOURING** **on the Riviera** was a must for the well-to-do of the 1920s and '30s . **CNI**

FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

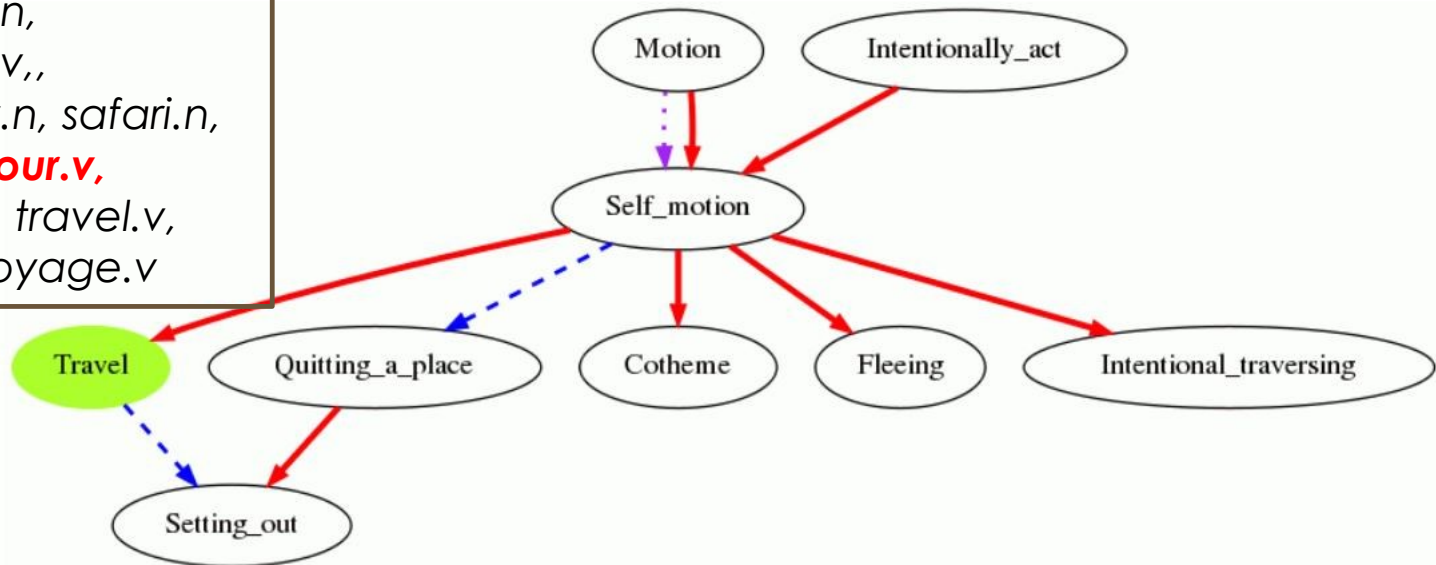


FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

FrameNet 101

commute.v,
excursion.n,
expedition.n,
getaway.n, jaunt.n,
journey.n,
journey.v,,
odyssey.n, safari.n,
*tour.n, **tour.v,***
travel.n, travel.v,
trip.n, voyage.v



FrameNet:

<https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Travel>

1. What kinds of terms? 2. behave differently?

- Environment and DiCoEnviro
 - Events expressed by verbs and nouns: *impact* (noun and verb); *reflect*, *biodegrade*, *contaminate*, *desertification*
 - Properties expressed by nouns and adjectives: *biodiversity*, *endangered*, *sustainable*
 - Need to think “out of the terminological box” ...

1. What kinds of terms? 2. behave differently?

- Environment and DiCoEnviro
 - Using explicit labels in argument structures
 - Annotating contexts (up to 20 in each entry)
 - Linking annotations to argument structures
 - Providing summaries of annotations

1. What kinds of terms? 2. behave differently?

vulnerable ₁, adj

vulnerable: [ecosystem](#) ₁, [population](#) ₂ ⊕ is ~ to [change](#) ⊕

Actants in sentences

Contexts

Lexical relations

Status : 2



Spanish : [vulnerable](#) ₁

French : [vulnérable](#) ₁

Written by : ALS SB MCLH

Last update : 25/11/2011

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Actants in sentences

Contexts

Patient **Patient** **Cause**

Polar 08/07/2011 **Patient** **VULNERABLE to climate change** and have low adaptive capacity. [[2IPCCBIODIVERSITE](#) 0 SB TK MCLH]

Water resources already are stressed in some areas and therefore are *highly* **VULNERABLE**, especially with respect to salinization (parts of Australia) and competition for water supply between agriculture, power generation, urban areas, and environmental flows (high confidence). [[3IPCCCONSEQUENCE](#) 0 SB TK MCLH 08/07/2013]

Without appropriate management, these pressures will cause **some species** currently classified as "critically endangered" to become extinct and **the majority of those** labeled "endangered or **VULNERABLE**" and thereby closer to extinction, in the 21st century (high confidence 6). [[GREENFACTS](#) 0 SB TK 08/07/2013] **Cause**

Low-lying island states and atolls are *especially* **VULNERABLE to climate change and associated sea-level rise** because in many cases (e.g., the Bahamas, Kiribati, the Maldives, the Marshall Islands), much of the land area rarely exceeds 3 - 4 m above present mean sea level. [[7IPCCREGION](#) 0 SB TK MCLH 08/07/2013]

While we can anticipate changes in pest prevalence and severity and changes in agricultural productivity, one has to look at very specific locations and conditions to know which pests are of concern, which **crops and regions** are **VULNERABLE**, and how severe impacts will be. [[RAPPORTPENTAGONE](#) 0 SB TK 08/07/2013]

Status : 2

[nerable](#) ₁
[néritable](#) ₁
0 SB MCLH
/2011

1. What kinds of terms? 2. behave differently?

vulnerable ₁, adj

vulnerable: [ecosystem](#) ₁, [population](#) ₂ ⊕ is ~ to [change](#) ⊕

Actants in sentences

	ACTANTS		With other participants
13	Cause	Patient	Degree (8)
	Complement (13)	Head (13)	Modifier (8)
	PP (13)	NP (12) Pro (1)	AdvP (8)
7		Patient	Degree (3)
		Head (7)	Modifier (3)
		NP (7)	AdvP (3)

Patient

Cause

Status : 2



Spanish : [vulnerable](#) ₁

French : [vulnérable](#) ₁

Written by : ALS SB MCLH
Last update : 25/11/2011

1. What kinds of terms? 2. behave differently?

- Adventure tourism and DiCoAdventure
 - Numerous activities expressed by verbs: *trek, journey, abseil, glide, dive*
 - Need to think “out of the terminological box” to find models that would best account for the linguistic properties of verbs (and related nouns)

travel ₁ vi/vt

[ID MCLH: 2022-05-02]

[Top](#)

Argument structure

travel: **Tourist** ~ from **Source** to **Destination** OR in **Place** along **Path** in **Direction**

Linguistic realizations of arguments and examples

Click on the EX buttons to see examples found for the different arguments

Tourist <input type="button" value="EX"/>	Source <input type="button" value="EX"/>	Destination <input type="button" value="EX"/>	Place <input type="button" value="EX"/>	Path <input type="button" value="EX"/>	Direction <input type="button" value="EX"/>
trekker visitor	city	canyon city river	area gorge outdoors	area bridge trail	south

Contexts

Annotated contexts

Summary

Today you **travel** along the Ring of Kerry through the 'tidy town winners' of Kenmare and Sneem. [ADVENCOR]

With REI Adventures you don't just **travel**, you **travel** deeply. [ADVENCOR]

You'll learn how to get a whole new perspective of the gorgeous Arkansas Ozarks as you **travel** back to terra firma on a very memorable journey. [ADVENCOR]

Consumers absorb the costs initially due to the innate attraction of adventure tourism in Scotland until the essential element of the activities (the risk, the adrenalin or the wilderness aspect) is diminished through regulation that the consumers **travel** elsewhere for the essence of adventure tourism they are looking for. [ADVENCOR]

Travel from San José to La Fortuna, and opt to swim at a local swimming hole at the base of a waterfall during free time in the afternoon. [ADVENCOR]

Related Meanings

Different Parts of Speech and Derivatives

<u>Explanation</u>	<u>Term</u>
	journey 2
	tour 2



travel₁ vi/vt

[ID MCLH: 2022-05-02]


[Top](#)

Argument structure

travel: **Tourist** ~ from **Source** to **Destination** OR in **Place** along **Path** in **Direction**

travel₁ vi/vt

[ID MCLH: 2022-05-02]


[Top](#)
Argument structure
visitor

travel: **Tourist** ~ from **Source** to **Destination** OR in **Place** along **Path** in **Direction**

Linguistic realizations of arguments and examples

Click on the EX buttons to see examples found for the different arguments

Tourist EX	Source EX	Destination close	Place EX	Path EX	Direction EX	
trekker visitor	city	canyon city river	~ to bryce canyon ~ to la fortuna ~ to terra firme ~ whether to the boundary waters canoe area or the upper missouri river	area gorge outdoors	area bridge trail	south

[tour 2](#)


travel ₁ vi/vt

[ID MCLH: 2022-05-02]


[Top](#)

Argument structure

 travel: **Tourist** ~ from **Source** to **Destination** OR in **Place** along **Path** in **Direction**

Contexts



Annotated contexts

Summary

Today **you TRAVEL** along the Ring of Kerry through the 'tidy town winners' of Kenmare and Sneem.

With REI Adventures **you** don't just **TRAVEL**, you travel deeply.

You'll learn how to get a whole new perspective of the gorgeous Arkansas Ozarks as **you TRAVEL back to terra firme** on a very memorable journey.

Consumers absorb the costs initially due to the innate attraction of adventure tourism in Scotland until the essential element of the activities (the risk, the adrenalin or the wilderness aspect) is diminished through regulation that **the consumers TRAVEL elsewhere** for the essence of adventure tourism they are looking for.

TRAVEL from San José to La Fortuna, and opt to swim at a local swimming hole at the base of a waterfall during free time in the afternoon.

TRAVEL through the Clare Valley wine area, making a stop for a wine tasting to learn about the different grape varieties and the development of the vineyards in the area

n or the

Trekkers can also explore the 168-mile Ozark Highlands National Recreation Trail or **TRAVEL the 223-mile Ouachita National Recreation Trail to the south**.

You'll TRAVEL by dogteam each day (with skiing and snowshoeing as optional campsite activities) and enjoy campfire chats with your guides and group each evening.

TRAVELLING over land and sea ice, the monumental dogsled trip took McNair-Landry and Boomer in a circular route around Baffin Island.

[tour 2](#)

DiCoAdventure:

<http://olst.ling.umontreal.ca/dicoadventure/>


3. Which terms are related and how?

- Environment and DiCoEnviro
 - Same meaning: *vulnerable, vulnerability*
 - Related meaning: *vulnerable, threatened, endangered, vulnerability*
 - Predicative units and “new” kinds of relations; *erode, eroded, eroding; pollute, pollution, polluted, polluting, polluter, depollute*
 - Etc.

3. Which terms are related and how?

sensitivity, n

~ of **Patient** to **Cause**

threatened, a

Patient ~ with **Cause**

vulnerability, n

~ of **Patient** to **Cause**

vulnerable, adj

Patient is ~ to **Cause**

sensible, adj.

Patient est ~ à **Cause**

vulnérable, adj.

Patient est ~ à **Cause**

amenazado, adj.

Paciente ~ por **Causa**

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Paciente ~ por **Causa**



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Patient is ~ to **Cause**

sensible, adj.
Patient est ~ à **Cause**
vulnérable, adj.
Patient est ~ à **Cause**

amenazado, adj.
Paciente ~ por **Causa**

À mesure que l'énergie solaire y entre, **elle RÉCHAUFFE la Terre et l'air qui l'entoure** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

Ces endr... À mesure que l'énergie solaire y entre, **elle RÉCHAUFFE la Terre et l'air qui l'entoure** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

Or p... À mesure que l'énergie solaire y entre, **elle RÉCHAUFFE la Terre et l'air qui l'entoure** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

Le v... À mesure que l'énergie solaire y entre, **elle RÉCHAUFFE la Terre et l'air qui l'entoure** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

... u... À mesure que l'énergie solaire y entre, **elle RÉCHAUFFE la Terre et l'air qui l'entoure** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

Ce f... Ces échanges sont par contre très liés à l'existence d'**une circulation océanique globale, qui refroidit des masses d'eau à certains endroits de l'**... [5CANADAICC 0 ALS MCLH 08/05/2008]

Le v... Or plusieurs **l'air situé au** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

... u... Le volume d'**ALS MCLH 2** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

Ce f... un flux de **ALS MCLH 2** ... [5CANADAICC 0 ALS MCLH 08/05/2008]

Ce f... Ce flux infrar... (83 W.m-2) e... [5CANADAICC 0 ALS MCLH 08/05/2008]

▼ **Ceasing_to_be**

Definition:
 A **Patient** ceases to exist.

Example(s):
 [EN] *Half of Europe 's alpine glaciers could **DISAPPEAR** by the end of the 21st century.* (Source : 3IPCCCONSEQUENCE)
 [EN] *While some species may increase in abundance or range, climate change will increase existing risks of **EXTINCTION of some more vulnerable species** and loss of biodiversity.* (Source : 3IPCCCONSEQUENCE)
 [ES] *Si este régimen climático se mantiene, se puede producir la **DESAPARICIÓN de glaciares de montaña** y el descongelamiento profundo de suelos permanentemente congelados (permafrost)* (Watson y Haeblerli, 2004). (Source : AHUMADA_CC_MONATANAS_ARG)
 [FR] *Le **Thon rouge de l'Atlantique S'EST RARÉFIÉ** en raison de la surpêche* (Source : RL UICN)
 [ZH] 在RCP8.5情景中, 预计到21世纪中叶, **北冰洋夏季的海冰可能全部消失**。(Source : 56极端天气)

Notes:
 This frame is based on Ceasing_to_be in FrameNet.
 Click here to see associated FrameNet infos

Participants (1): 1. Patient	Participants (2): 1. Expanse (8) 2. Cause (7) 3. Location (5) 4. Time (5) 5. Duration (3)	6. Manner (2) 7. Descriptor (2) 8. Condition (1) 9. Result (1) 10. Reason (1)
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Frame Relations:

Legend:
 Is subframe of →
 Precedes →
 See also →

English LUs: • disappear_1 • disappearance_1 • extinction_1	French LUs: • disparaître_1 • disparition_1 • éteindre_1 • extinction_1 • raréfaction_1 • raréfier_1	Spanish LUs: • desaparecer_1 • desaparición_1 • extinción_1	Chinese LUs: • 消失_1 • 灭绝_1
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Being_at_risk

Definition: A **Patient** is in a state where it is exposed to or otherwise liable to be affected by a **Threat**.

Examples:

The **VULNERABILITY of human societies and natural systems to climate extremes** is demonstrated by the damage, hardship, and death caused by events such as droughts, floods, heat waves, avalanches, and windstorms. (Source : GREENFACTS)

L'ALENA indique qu'en Amérique du Nord **seulement, 235 espèces sauvages** sont **MENACÉES d'extinction**. (Source : 3CANADAENVIRON)

Notes: This frame is based on Being_at_risk in FrameNet.

Participants (1)

Patient
Threat

Participants (2)

Degree (14)
Descriptor (2)
Cause (1)

English LUs

sensitivity 1
threatened 1
vulnerability 1
vulnerable 1

French LUs

menacé 1
sensible 1
vulnérable 1

Spanish LUs

amenazado 1

3. Which terms are related and how?

- Adventure tourism and DiCoAdventure
 - Same meaning: *to travel, travel*
 - **Related meaning: *to travel, adventure, trip, to tour, tour***
 - Predicative units and participants: *travel; traveler, tour; tourist*
 - Etc.

3. Which terms are related and how?

- Adventure tourism and DiCoAdventure
 - **travel, v.**
Travel **from Las Vegas to Bryce Canyon**
 - **travel, n**
his extensive travels and kayaking adventures **on diverse bodies of water from British Columbia to Norway to the White Salmon River** .
 - **expedition, n**
expeditions **to the world's highest peaks**
 - **tour, v**
Next, on Prijedor, **we tour the mountain "katun"s** .
 - **tour, n.**
Take a 30- minute scenic helicopter tour **over the Great Barrier Reef from Cairns**
 - **journey, v, journey, n, trip, n**



3. Which terms are related and how?

- Adventure tourism and Di
- **travel, v.**
Travel **from Las Vegas to Bryce Co**
- **travel, n**
his extensive travels and kayaking
of water from British Columbia to t
River .
- **expedition, n**
expeditions **to the world's highest**
- **tour, v**
Next, on Prijedor, **we tour the mou**
- **tour, n.**
Take a 30- minute scenic helicopter tour **over the Great Barrier**
Reef from Cairns
- **journey, v, journey, n, trip, n**

Frame elements

Traveler or tourist

Source

Destination

Place

Path

Others

Purpose

Direction

Duration

Means_of_transportation



4. Can we connect knowledge and linguistic properties of terms?

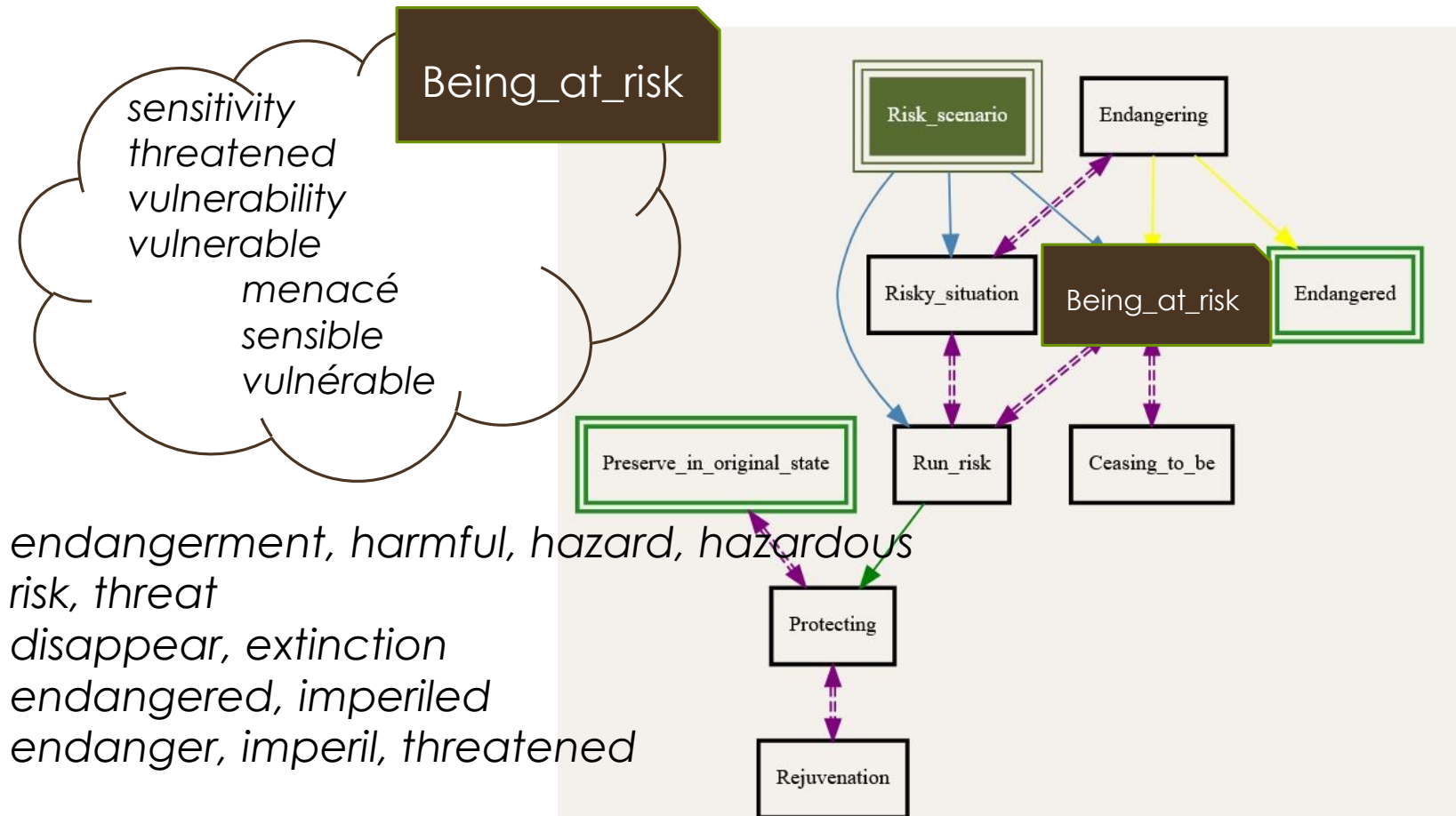


4. Can we connect knowledge and linguistic properties of terms?



*endangerment, harmful, hazard, hazardous
risk, threat
disappear, extinction
endangered, imperiled
endanger, imperil, threatened*

4. Can we connect knowledge and linguistic properties of terms?



An overview of the methodology

- Finding frames among term entries:
 - Definition of relations between frames
 - Encoding of frames
 - Definition of semantic frames
- Compiling terminological entries:
 - Annotation of contexts
 - Definition of the argument structure
 - Selection and extraction of contexts
 - Identification of terms (semi-automated)
 - Compilation of specialized corpora



An overview of the methodology

- Finding frames among term entries:
 - Definition of relations between frames } 4.
 - Encoding of frames } 3.
 - Definition of semantic frames } 3.
- Compiling terminological entries:
 - Annotation of contexts } 2.
 - Definition of the argument structure } 2.
 - Selection and extraction of contexts } 1.
 - Identification of terms (semi-automated) } 1.
 - Compilation of specialized corpora } 1.



Concluding remarks

- Principles of Frame Semantics and FrameNet methodology for:
 - Enhanced descriptions of predicative terms and their participants
 - Annotation of contexts
 - Syntactic information derived from annotations
 - Capturing relations that are seldom accounted for in terminological resources
 - Capture terms that are linked to a conceptual situation (terms that evoke a frame; terms that instantiate frame elements)

Concluding remarks

- Principles of Frame Semantics and FrameNet methodology for:
 - A new kind of knowledge structure: relations between conceptual situations
- Much more
 - Fine-grained polysemy
 - Equivalence
 - Similarities and differences between the general lexicon and the terminology of a domain, across domains
- It this useful?
 - L'Homme, M.C., E. Marshman and A. San Martin. 2022. "Environmental terms and translation students: A reading based on Frame Semantics", *Babel* 68(1), pp. 55-85.

THANK YOU!