The MetaNet Wiki:
A collaborative online resource for metaphor and image schema analysis

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Contents

• Wiki Technology
• Structure of the MetaNet Wiki
• Wiki Demonstration
Wiki Technology

- MediaWiki (Wikipedia)
  - Categories, Templates
- Semantic MediaWiki (Krötzsch et al. 2007)
  - Properties
  - Semantic Forms
  - Query capability (test five)

{{#ask: [[Category:Metaphor]] [[has source schema::Machine]]}}
Theoretical Groundwork

Conceptual Metaphor Theory
(Lakoff & Johnson 1980 and after)

+ Embodied Construction Grammar
(Feldman, Dodge & Bryant 2009)

+ Frame Semantics
(Ruppenhofer et al. 2006)

= MetaNet
Links

Official Project Site

• https://metanet.icsi.berkeley.edu/metanet/

Articles

• http://www.icsi.berkeley.edu/icsi/projects/ai/metanet

• http://www.icsi.berkeley.edu/icsi/gazette/2012/05/metanet-project
The president drove the nation into a ditch.

NATION IS A VEHICLE

We built our nation brick by brick.

NATION IS A BUILDING

The country is grinding to a halt.

NATION IS A MACHINE
List of all Metaphors

Manually Analyzed Metaphors

Create or edit a Metaphor:

Total number of Metaphor pages: 746

A
- ABILITY TO ACCESS EDUCATION IS PERMISSION TO TRAVEL
- ABILITY TO ACT IS ABILITY TO TRAVEL
- ABILITY TO EVALUATE GOVERNMENT IS ABILITY TO

E cont.
- ELECTION.STATUS.SUSPENDED IS WAR.STATUS.SUSPENDED
- ELECTION_STRATEGY IS WAR_STRATEGY
- ELECTION.TIME_UNIT IS BOXING MATCH.ROUND

L cont.
- LIFE IS A COMPLEX STRUCTURE
- LIFE IS A JOURNEY
- LIFE IS A PRECIOUS POSSESSION
- LIFE IS A SEQUENCE OF MOTIONS
- ADDRESSING POVERTY IS TREATING AN ILLNESS
- ADDRESSING SOCIAL PROBLEMS IS TREATING A PHYSICAL AFFLICTION
- ADDRESSING SOCIAL PROBLEMS IS TREATING AN ILLNESS
- ADDRESSING SOCIAL PROBLEMS IS WAGING WAR
- ADMISSIONS DECISIONS IS BASIS FOR PHYSICAL EVALUATION
- AFFECTION IS WARMTH
- AGREEMENT IS PHYSICAL INTEGRITY
- AGREEMENT IS PHYSICAL PROXIMITY
- AID TO KNOWING IS A LIGHT SOURCE
- AID TO UTILIZING EDUCATIONAL OPPORTUNITIES IS CLEAR PATHS TO ACCESSING A LOCATION
- AIDS TO ACTION IS AIDS TO MOTION
- AIDS TO IMPROVING ECONOMIC STATUS IS AID TO UPWARD MOTION
- AIDS TO IMPROVING ECONOMIC STATUS IS CLEAR PATHS TO MOVING OUT OF A LOCATION
- AIDS TO WORSENING OF ECONOMIC CONDITION IS AIDS TO DOWNWARD MOTION
- ALLIANCES ARE FRIENDSHIPS
- ALTERNATIVE LEGISLATION IS ALTERNATIVE PATH
- ALTERNATIVES ARE DIFFERENT AVAILABLE PATHS
- AMOUNT OF LEARNED CONTENT IS QUANTITY OF RESOURCE
- EVALUATION OF GOVERNMENT IS SENSORY EVALUATION
- EVENTS ARE OBJECTS
- EVIL IS DARK
- EXCESS WEALTH IS DISGUSTING
- EXCESS WEALTH IS EXCESS BODY WEIGHT
- EXCESS WEALTH IS INDECENT SITUATION
- EXCESS WEALTH IS LARGE GEOGRAPHIC FEATURES
- EXCESSIVE GOVERNMENT SPENDING IS LIVING BEYOND HOUSEHOLD MEANS
- EXISTENCE IS VERTICAL POSITION
- EXPERIENCE OF A STATE IS SPATIAL RELATION WITH AN ENTITY
- EXPERIENCED STATE IS A PROXIMATE OBJECT
- EXPERIENCING A NEGATIVE STATE IS PERSONAL HARM
- EXPERIENCING A STATE IS BEING AT A LOCATION
- EXPERIENCING A STATE IS POSSESSING AN OBJECT
- EXPLOITATION IS A PARASITIC INFECTION
- EXTENT OF SOCIAL PROBLEMS IS EXTENT OF AFFLICTION
- EXTREME FACTIONALIZATION IS BEING THE BALKAN GEOPOLITICAL AREA
- FACTIONS ARE PARTS
- MIND IS A CONTAINER
- MIND IS A MACHINE
- MIND IS A PHYSICAL STRUCTURE
- MONEY IS A LIQUID
- MONEY IS A RESOURCE
- MONEY IS MASS
- MONEY IS WATER
- MORAL ACTION IS A FINANCIAL TRANSACTION
- MORAL ACTION IS NURTURANCE
- MORAL AGENTS ARE NURTURING PARENTS
- MORAL AUTHORITY IS PARENTAL AUTHORITY
- MORAL CORRUPTION IS A DESTRUCTIVE FORCE
- MORAL GROWTH IS PHYSICAL GROWTH
- MORAL IS STRAIGHT
- MORALITY IS A STRAIGHT PATH
- MORALITY IS PURITY
- MORALITY IS STRAIGHTNESS
- MORALITY IS STRENGTH
- MORALITY IS UPRIGHTNESS
- MORALITY IS WHoleness
- MORE AND LESS FAVORABLE CONDITIONS FOR LEARNING IS HANDICAPS IN HORSE RACE
- MORE IS BIG
- MORE IS UP
- MULTIPLE EXTREME MINOR FACTIONS ARE BALKAN STATES

Snapshot of metaphor list page in MetaNet Wiki, continued
List of all Schemas

Contents

1 Manually Analyzed Schemas
2 Automatically Extracted Schemas

Total number of Schema pages: 544

Manually Analyzed Schemas

Create or edit a Schema:

Total number of Schema pages: 544

A
- Ability to access education
- Ability to act
- Ability to improve economic status

E cont.
- Eating to excess
- Economic difficulty
- Economic resource
- Economic status

M cont.
- Moving Upwards
- Moving forward and upward along a path
- Moving object
- Moving out of an undesirable location
Sample metaphor: NATION IS A VEHICLE, with target and source schemas, and role mappings
Sample metaphor: NATION IS A VEHICLE, with related metaphors and entailments (entailed metaphors).
Sample metaphor: NATION IS A VEHICLE, with example sentences and local metaphor map of related metaphors.
Sample metaphor: NATION IS A VEHICLE, with entailed metaphor LEADING A NATION IS DRIVING A VEHICLE
Sample schema page: Vehicle, with schema roles
Sample schema: Vehicle, with related schemas

<table>
<thead>
<tr>
<th>Current Schema:</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation Type:</td>
<td>is subcase of</td>
</tr>
<tr>
<td>Related Schema:</td>
<td>Physical structure</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Schema:</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation Type:</td>
<td>makes use of</td>
</tr>
<tr>
<td>Related Schema:</td>
<td>Containing</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Schema:</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation Type:</td>
<td>makes use of</td>
</tr>
<tr>
<td>Related Schema:</td>
<td>Controlled vehicular motion</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Schema:</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation Type:</td>
<td>is subcase of</td>
</tr>
<tr>
<td>Related Schema:</td>
<td>Mode_of_transportation</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
</tbody>
</table>
Sample schema: Vehicle, with bindings and inferences
Sample schema: Vehicle, with lexical units (MetaNet assigned) and FrameNet lexical units from closest FrameNet frame (Vehicle).
Sample schema: Vehicle, with metaphors in which it is found as a source schema, and local map of related schemas
Sample metaphor: NATION IS A COMPLEX STRUCTURE, with mappings and source and target schemas.
Sample editing page: entering and editing metaphor information, e.g., other ways of referring to this metaphor (aliases), metaphor family, metaphor type.
Sample editing page: entering source and target schemas and mappings. Schema roles from the respective schemas appear to make role mapping entry easier.
Sample editing page: entering example sentences with provenance and field for annotation.

Closest metaphors in Spanish, Persian and Russian can also be entered.
Sample metaphor family: Governance metaphors.
Metaphor families such as Event Structure metaphors, Emotion metaphors, etc. also exist. New families can be created and existing families are easily edited.
Snapshot of governance-related metaphors in a graphic map visually representing metaphor relationships
Snapshot of target domain schema family map
Summary

• Tool for capturing theory-informed generalizations
• Flexible, adaptable, user friendly
• Visualization enhancement
• Comparability across languages; ability to add new languages
• Integration with metaphor corpora
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References

