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

Demo

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

Snapshot of metaphor list page on MetaNet Wiki

- 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

- EVALUTION 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

F

- 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

Snapshot of schema and frame page in MetaNet Wiki

- Aids to improving economic status
- Aids to motion
- Aids to worsening of economic condition
- Amount of learned content
- Amount of resource
- Analysis
- Analysis of social problems
- Anger
- Animal
- Animate entity
- Antagonistic force
- Argument
- Arriving
- Artifact
- Assessment
- Attacking other classes
- Attacking the poor
- Attacking the rich
- Attribute
- Augmenting economic assets
- Authority
- Awake
- Awakening
- Axis

B

- Equalizing quantities
- Erosion
- Evaluation
- Evaluation of education
- Event
- Evil creature
- Excess body weight
- Excess wealth
- Existence
- Experience harm
- Experiencing a negative state
- Experiencing a physical affliction
- Experiencing a state
- Extent of affliction
- Extent of social problems

F

- Factory
- Fairness
- Family
- Finance
- Financial attributes
- Financial resource
- Financial transaction
- Fire
- Fixing

- Object transfer
- Obstacles to accessing a location
- Occurence of negative event
- Occurence of sudden destructive natural force
- One-on-one physical fight
- Operating a machine
- Opportunities
- Opportunity
- Organization
- Out
- Overeating

P

- Parasite
- Parent
- Part whole
- Pathways
- Perception
- Permission to travel
- Person
- Personal harm
- Physical Burden
- Physical afflication
- Physical affliction
- Physical attributes
- Physical burden

Snapshot of schema and frame page in MetaNet Wiki, continued

Metaphor:NATION IS A VEHICLE

Aliases	NATION IS A CAR
Comments	
Tags	
Family	Governance metaphors
Metaphor Level	Specific
Metaphor Type	Composed/complex
Experiential Basis	

Source Schema	Vehicle
Target Schema	Nation

Mappings:

nation_whole	<=	vehicle	
nation_citizens	<=	vehicle_passengers	
nation_leaders	<=	vehicle_driver	
state_of_nation	<=	vehicle_location	[Expand]

Sample metaphor: NATION IS A VEHICLE, with target and source schemas, and role mappings

Related Metaphors:

Current Metaphor	NATION IS A VEHICLE
Relation Type	is a source subcase of
Related Metaphor	NATION IS A COMPLEX STRUCTURE
Description	

Current Metaphor	NATION IS A VEHICLE
Relation Type	makes use of
Related Metaphor	STATE OF NATION IS LOCATION ALONG PATH
Description	

Entailments:

Target Entailment	Leading a nation
Source Inference	Driving a vehicle
Type of Inferential Structure	
Entailed Metaphor(s)	LEADING A NATION IS DRIVING A VEHICLE

Target Entailment	Future states of the nation
Source Inference	Future locations of vehicle on path
Type of Inferential Structure	
Entailed Metaphor(s)	

Sample metaphor: NATION IS A VEHICLE, with related metaphors and entailments (entailed metaphors).
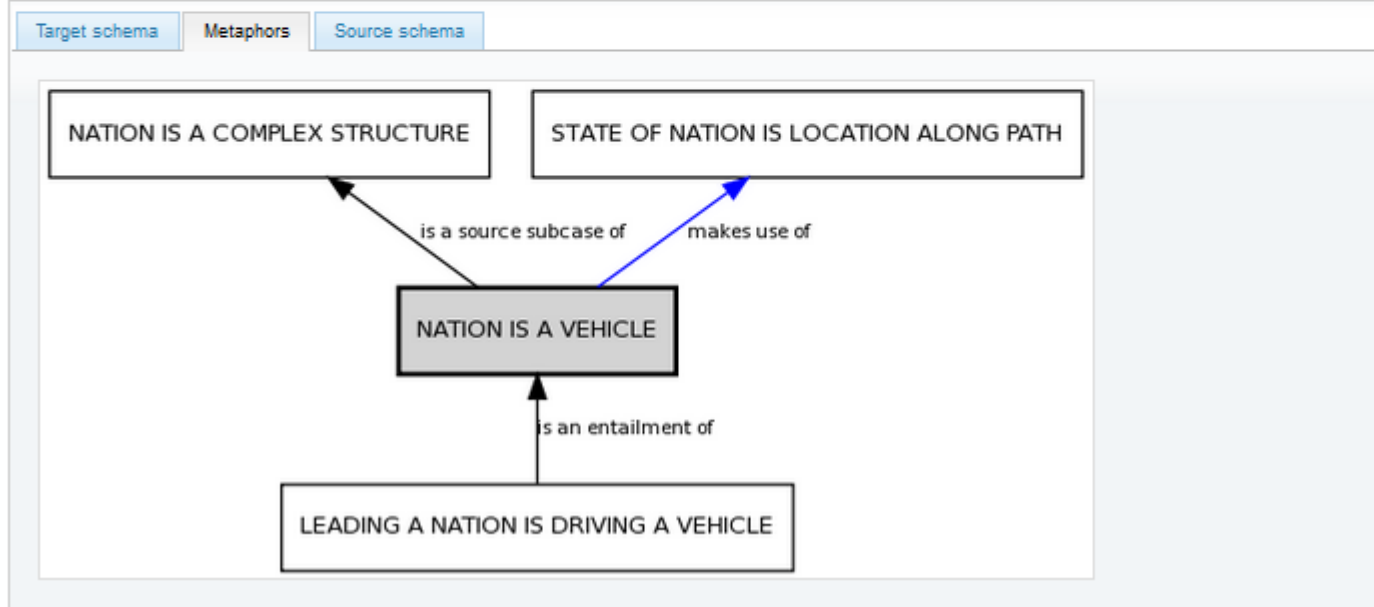
Examples:

Example Text:	Saltykov explored the psychological problems resulting from the shifting of a nation's gears, of creating a new way of life.
Provenance:	Techniques of Satire: The Case of Saltykov-Ščedrin By Emil Draitser

Examples from linked Linguistic metaphors:

Entered by	Oana
Last reviewed by	
Status	in development

Graph of related metaphors:

Target schema	Metaphors	Source schema

NATION IS A COMPLEX STRUCTURE   STATE OF NATION IS LOCATION ALONG PATH

is a source subcase of   makes use of

NATION IS A VEHICLE

is an entailment of

LEADING A NATION IS DRIVING A VEHICLE

Sample metaphor: NATION IS A VEHICLE, with example sentences and local metaphor map of related metaphors.

Metaphor:LEADING A NATION IS DRIVING A VEHICLE

Aliases	LEADING A NATION IS DRIVING A VEHICLE
Comments	
Tags	
Family	Governance metaphors
Metaphor Level	Specific
Metaphor Type	Composed/complex
Experiential Basis	

Source Schema	Driving a vehicle ⓘ
Target Schema	Nation ⓘ

Mappings:

nation_whole	<=	vehicle
nation_citizens	<=	vehicle_passengers
nation_leaders	<=	vehicle_drivers

Related Metaphors:

Current Metaphor	LEADING A NATION IS DRIVING A VEHICLE
Relation Type	is an entailment of
Related Metaphor	NATION IS A VEHICLE
Description	

Sample metaphor: NATION IS A VEHICLE, with entailed metaphor
LEADING A NATION IS DRIVING A VEHICLE

Schema:Vehicle

Closest FrameNet Frame(s)	Vehicle 🔒
Other aliases	
Comments	
Family	Entity schemas
Tags	
Type	Frame, Composed
Cultural Information	

Roles:

Role Name:	vehicle
Role Type:	physical_object
Definition/Comments:	

Role Name:	vehicle_passengers
Role Type:	person
Definition/Comments:	

Role Name:	vehicle_freight
Role Type:	physical_object
Definition/Comments:	optional role

Role Name:	vehicle_driver
Role Type:	person
Definition/Comments:	

Role Name:	vehicle_location
Role Type:	location

Sample schema page: Vehicle, with schema roles

Related Schemas:

Current Schema:	Vehicle
Relation Type:	is subcase of
Related Schema:	Physical structure ⓘ
Comments:	

Current Schema:	Vehicle
Relation Type:	makes use of
Related Schema:	Containing ⓘ
Comments:	

Current Schema:	Vehicle
Relation Type:	makes use of
Related Schema:	Controlled vehicular motion ⓘ
Comments:	

Current Schema:	Vehicle
Relation Type:	is subcase of
Related Schema:	Mode_of_transportation ⓘ
Comments:	

Sample schema: Vehicle, with related schemas

Bindings:

vehicle=Controlled vehicular motion.vehicle
vehicle=Containing.container
vehicle_passengers=Containing.contents
freight=Containing.contents
driver=Containing.contents
driver=Controlled vehicular motion.motion_controller
vehicle=Mode_of_transportation.transportation_vehicle
vehicle_location=Physical structure.structure_location

Inferences

Description	A vehicle is a means for reaching destinations.
Type	
Description	A vehicle is solid and can last a long time.
Type	
Description	A multi-person vehicle is a means for reaching common destinations.
Type	
Description	In a two-person vehicle, the travellers are close.
Type	
Description	When a vehicle is moving, its contents (driver, passengers,and/or freight) are also moving at the same speed and in the same direction.
Type	
Description	The driver controls the speed and direction of the vehicle's motion in order to get the vehicle to the intended destination. If the driver doesn't know which direction to steer, the vehicle is unlikely to reach its destination.
Type	

Sample schema: Vehicle, with bindings and inferences

Relevant Lexical Units:

Lemma	vehicle.n

Lemma	car.n

Lemma	train.n

Lemma	transportation.n

Lemma	drive.v

Lemma	transport.v

Lemma	boat.n

Lemma	driver.n

Lexical Units in Related Frames:

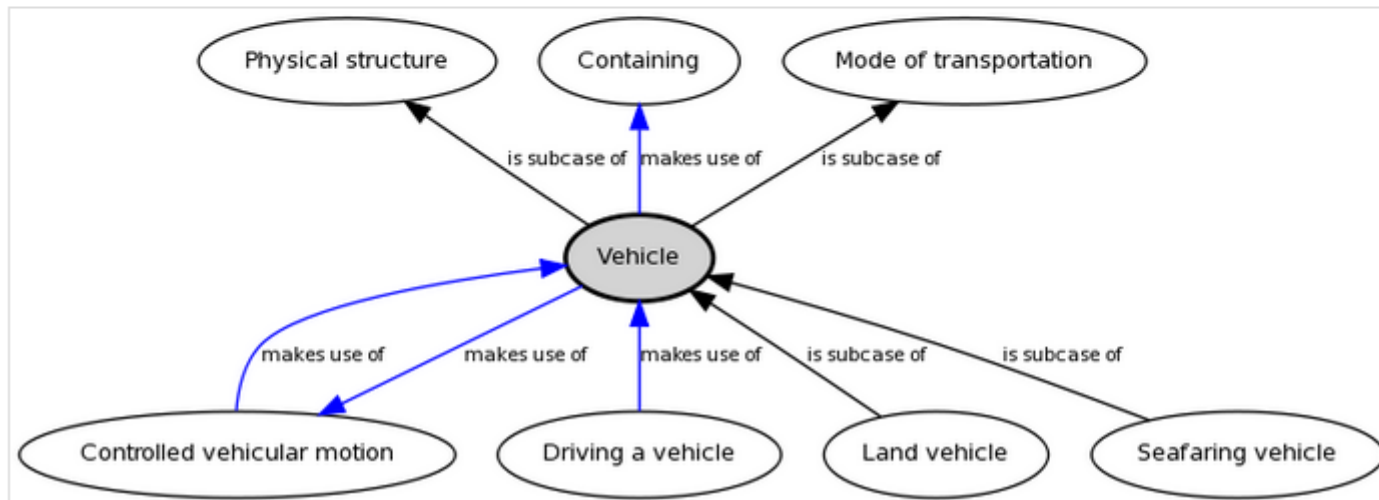| Vehicle	car.n, bus.n, truck.n, bike.n, taxi.n, plane.n, ferry.n, boat.n, bicycle.n, ship.n, tram.n, automobile.n, tricycle.n, airplane.n, scooter.n, schooner.n, train.n, carriage.n, cab.n, coach.n, vehicle.n, lorry.n, submarine.n, tank.n, cart.n, toboggan.n, pick-up.n, van.n, limousine.n, convertible.n, helicopter.n, canoe.n, kayak.n, buggy.n, liner.n, sedan.n, vessel.n, tank car.n, warplane.n, yacht.n, chopper.n, helo.n, bird.n, minivan.n, ambulance.n,

Sample schema: Vehicle, with lexical units (MetaNet assigned) and FrameNet lexical units from closest FrameNet frame (Vehicle).

Metaphors that use this schema:

as Target schema	as Source schema
	• INSTITUTION IS A VEHICLE • NATION IS A VEHICLE • POLITICAL REGION IS A VEHICLE • ROMANTIC RELATIONSHIPS ARE VEHICLES

Graph of schema relations:

Sample schema: Vehicle, with metaphors in which it is found as a source schema, and local map of related schemas

Metaphor:NATION IS A COMPLEX STRUCTURE

Aliases	NATION IS A COMPLEX PHYSICAL OBJECT
Comments	
Tags	
Family	Governance metaphors
Metaphor Level	General
Metaphor Type	Composed/complex
Experiential Basis	

Source Schema	Complex physical object ⓘ
Target Schema	Nation ⓘ

Mappings:

nation_whole	<=	object_whole

nation_traits	<=	object_parts

nation_geographic_area	<=	object_location

Sample metaphor: NATION IS A COMPLEX STRUCTURE, with mappings and source and target schemas

Edit Metaphor: Metaphor:NATION IS A COMPLEX STRUCTURE

Aliases: ⓘ

> **Aliases**
>
> **Alias:** NATION IS A COMPLEX PHYSICAL OE
> **Provenance:**
> **Page number:**
>
> [Remove]
>
> [Add another]

Comments:

Tags:

Family(s): Governance metaphors,

Metaphor Level: General ▾

Metaphor Type: ☐ Primary ☑ Composed/complex ☐ Entailed

Experiential Basis:

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.

Text:
No one built this country on their own. This nation is great because we built it together.

Provenance: http://barackobama.tumblr.com/post/16

Annotation:

Remove

Comments:

Add another

Entered by: Oana,

Last reviewed by:

Status: ☑ in development ☐ proposed ☐ reviewed ☐ experimentally validated ☐ contested analysis ☐ auto imported ☐ auto proposed

Closest Spanish Metaphor: NACIÓN ES UNA ESTRUCTURA FÍS

Closest Persian Metaphor:

Closest Russian Metaphor:

Sample editing page: entering example sentences with provenance and field for annotation.

Closest metaphors in Spanish, Persian and Russian can also be entered.

Governance metaphors

This is a top-level metaphor family.

Metaphors in this family:

Number of Metaphors: 290

- ABILITY TO EVALUATE GOVERNMENT IS ABILITY TO SEE
- ABUSIVE POLITICAL LEADERS ARE PHYSICAL BULLIES
- ACHIEVING POWER IS MOVING UPWARDS
- ADDRESSING CRIME IS CONTROLLING AN ANIMAL
- ADDRESSING SOCIAL PROBLEMS IS TREATING AN ILLNESS
- AGREEMENT IS PHYSICAL INTEGRITY
- ALLIANCES ARE FRIENDSHIPS
- ALTERNATIVE LEGISLATION IS ALTERNATIVE PATH
- AMOUNT OF PROGRESS TOWARD ENACTING LEGISLATION IS DISTANCE MOVED ALONG A PATH
- ATTAINING CONTROL IS GAINING A POSSESSION
- ATTRIBUTES OF GOVERNMENT ARE ENTITIES
- ATTRIBUTES OF GOVERNMENT ARE POSSESSIONS
- BUREACRACY IS A MAZE
- BUREACRACY IS AN OCTOPUS
- BUREAUCRACY IS A MACHINE
- BUREAUCRATS ARE FACTORY WORKERS
- BUREAUCRATS ARE GUIDES
- BUREAUCRATS ARE MACHINE PARTS

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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Markus Krötzsch, Denny Vrandecic, Max Völkel, Heiko Haller, Rudi Studer (2007). Semantic Wikipedia. Journal of Web Semantics 5 (4), pp. 251–261.