ESO Classes: Definitions, Class mappings, Role Mappings, Assertions and Examples of the Instantiation of the Assertions.

This file provides a human readable version of the Event and Situation Ontology Version 2, developed for the NewsReader project (www.newsreader-project.eu).

All classes are in alphabetical order. For each class we provide:

- -the subclass relation
- -the class definition

-the mappings from ESO classes to FrameNet and SUMO (as available online at June 20, 2015) -the mappings from ESO roles to FrameNet Frame Elements

-the assertions for each class defining the situation that holds before, after and/or during the event (in a non-formal transcription).

-examples that show what the ESO class assertions can infer from a sentence annotated with FrameNet-based SRL.

Date: June 24th 2015

For questions and remarks, please contact: r.h.segers@vu.nl

ESO CLASSES IN ALPHABETICAL ORDER:

-Arriving subclassOf:Translocation

"The subclass of Translocation where someone or something arrives at a location."

<u>Class mappings:</u> closeMatch: fn:Arriving closeMatch: fn:Vehicle_landing closeMatch: sumo:Arriving

For the roles and assertions and, see: Translocation.

EXAMPLES:

"Mary approached the White House with a grim face."

pre situation	Mary	notAtPlace	the White House
post situation	Mary	atPlace	the White House

"Mary arrived in Washington from Dulles National Airport."

pre situation	Mary	atPlace	Dulles National Airport
	Mary	notAtPlace	Washington
post situation	Mary	atPlace	Washington
	Mary	notAtPlace	Dulles National Airport

-Attacking subclassOf: IntentionalEvent

"The subclass of IntentionalEvent where someone or something is assaulted with the intention to cause some harm."

Class mappings: closeMatch: fn:Attack closeMatch: sumo:ViolentContest

Role mappings:

damaging-undergoer: fn: Object, fn:Victim, fn: Experiencer, fn:Body_part,

fn: Patient, fn: Artifact	
damaging-state-1: - (blank node)	
damaging-state-2: - (blank node)	
damaging-damage: -	
activity: -	
Assertions:	

pre situation:	damaging-undergoer	inState	damaging-state_1
	damaging-state-1	hasRelativeValue	"+"
post situation:	damaging-undergoer	inState	damaging-state_2
	damaging-state-2	hasRelativeValue	"-"
	damaging-undergoer	isDamaged	true
	damaging-undergoer	hasDamage	damaging-damage
	damaging-damage	hasNegativeEffect	On activity

Note that the last two assertions will not be instantiated as no FrameNet roles exist for the ESO roles damaging-damage and activity. Note that damaging-state-1 and damaging-state-2 are modeled with an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

"Marie attacked John with a knife."

pre situation	John	inState	:xyz123
	:xyz123	hasRelativeValue	+
post situation	John	inState	:xyz124
	:xyz124	hasRelativeValue	-
	John	isDamaged	true

"The army bombed the power plant."

the power plant	inState	:xyz125
xyz125	hasRelativeValue	+
the power plant	inState	:xyz126
:xyz126	hasRelativeValue	-
the power plant	isDamaged	true
	xyz125 the power plant :xyz126	xyz125 hasRelativeValue the power plant inState :xyz126 hasRelativeValue

"The hurricane struck West-Virginia."

pre situation	West-Virginina	inState	:abc123
	:abc123	hasRelativeValue	+
post situation	West-Virginia	inState	:abc124
	:abc124	hasRelativeValue	-
	West-Virginia	isDamaged	true

-BeginningARelationship subclassOf: IntentionalEvent

"The subclass of IntentionalEvent were people start or form a personal relationship with each other".

<u>Class mappings:</u> broadMatch: fn:Forming_relationships

<u>Role mappings:</u> relationship-partner-1: fn:Partner_1 relationship-partner-2: fn:Partner_2 relationship-partners: fn:Partner_1, fn:Partner_2, fn:Partners

Assertions:

pre situation	relationship-partner-1 relationship-partners	notInRelationshipWith inRelationship	relationship-partner_2 false
post situation	relationship-partner-1	inRelationshipWith	relationship-partner_2
	relationship-partners	inRelationship	true

EXAMPLES:

"John married Mary in 2011."

pre situation	John	notInRelationshipWith	Mary
	John, Mary	inRelationship	false
post situation	John	inRelationshipWith	Mary
	John, Mary	inRelationship	true

"The secret wedding of John and Mary!"

pre situation	John and Mary	inRelationship	false
post situation	John and Mary	inRelationship	true

"John married again in 2014."

pre situation	John	inRelationship	false
post situation	John	inRelationship	true

-BeingAtAPlace subclassOf: StaticEvent

"Static event where some entity is at a location."

<u>Class mappings:</u> closeMatch: fn:Residence closeMatch: fn:Presence closeMatch: fn:Temporary_stay closeMatch: fn:Being_located

<u>Role mappings:</u> atPlace-theme: fn:Theme, fn:Resident, fn:Entity, fn:Guest. atPlace-location: fn:Location

Assertions:

during situation: atPlace-theme atPlace atPlace-location

EXAMPLES:

"Marie stayed at the Hilton Hotel."

during situation Marie atPlace Hilton Hotel

"Oil reservoirs are present in Rotterdam."

during situation oil reservoirs atPlace Rotterdam

"John lives in Amsterdam."

during situation John atPlace Amsterdam

"John is the first resident at King's Landing."

-BeingDamaged subclassOf: StaticEvent "Static event where some entity is in a damaged state." <u>Class mappings:</u> broadMatch: fn:Being_operational <u>Role mappings:</u> damaging_undergoer: fn:Object, fn:Victim, fn: Experiencer, fn:Body_part, fn: Patient, fn: Artifact.

atPlace

damaging-damage: activity: -

during situation

John

Assertions:

during-situation:	damaging-undergoer	isDamaged	true
	damaging-undergoer	hasDamage	damaging-damage
	damaging-damage	hasNegativeEffectOn	activity

King's Landing

Note that the last two assertions will not be instantiated as no FrameNet roles exist for the ESO roles damaging-damage and activity.

EXAMPLE:

"The suspension of this car is broken."

during-situation

the suspension of this car (this car (broken suspension isDamaged hasDamage hasNegativeEffectOn true broken suspension) operating)

-BeingEmployed subclassOf: StaticEvent

"Static event where someone is working in a position and is compensated for her work by some form of payment."

<u>Class mappings:</u> closeMatch: fn:Being_employed closeMatch: fn:Employing

Role mappings: employment-employee: fn:Employee employment-employer: fn:Employer employment-function: fn:Position employment-value: fn:Compensation employment-task: fn:Task employment-attribute: -

Assertions:

during situation	employment-employee	employedAt	employment-employer
	employment-employee	hasFunction	employment-function
	employment-employee	hasTask	employment-task
	employment-employee	hasAttribute	employment-attribute
	employment-attribute	hasValue	employment-value
	employment-employee	isEmployed	true
	employment-employee	isempioyeu	liue

Note that employment-attribute is modeled with an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

"Ford employed Marie as CFO."

during situation	Marie	employedAt	Ford
Ū	Marie	hasFunction	CFO
	Marie	isEmployed	true

"Marie works as CFO for 2000 dollar a month."

during situation	Marie Marie	hasFunction hasAttribute hasValue	CFO :xyz667 2000 dollar
	:xyz667	hasValue	2000 dollar
	Marie	isEmployed	true

"Marie is employed at Ford to handle the severe financial issues."

during situation	Marie Marie Marie	employedAt hasTask isEmployed	Ford to handle the severe financial issues
	Marie	isEmployed	true

-BeingInAPersonalRelationship subclassOf:StaticEvent

"The subclass of StaticEvent where persons are in some personal relationship."

<u>Class mappings:</u> closeMatch: fn:Personal_relationship

<u>Role mappings:</u> relationship-partner-1: fn:partner_1 relationship-partner-2: fn:partner_2 relationship-partners: fn:partners, fn: partner_1, fn: partner_2

Assertions:

during situation	relationship-partner-1	inRelationshipWith	relationship-partner_2
during situation	relationship-partners	inRelationship	true

EXAMPLES:

"John dates Marie."

during-situation	John	inRelationshipWith	Marie
-	John, Marie	inRelationship	true

"John is married to Marie."

during situation	John	inRelationshipWith	Marie
	John, Marie	inRelationship	true

-BeingInExistence subclassOf: StaticEvent "Static event where some entity exists."

<u>Class mappings:</u> closeMatch: fn:Existence

Role mappings: exist-theme: fn:Entity

Assertions:			
during situation	exist-theme	exist	true

EXAMPLES:

"Cars with a Wankel engine still exist."

during situation cars with a Wankel engine exist true

"There were human settlements near the volcano."

during situation human settlements near the volcano exist true

-BeingInUse subclassOf StaticEvent

"The static event class where something is in use by an agent (in some particular role or for some purpose)."

<u>Class mappings:</u> closeMatch: fn:Using closeMatch: fn:UsingResource broadMatch: fn:BeingOperational

<u>Role mappings:</u> inuse-entity-1: fn:Agent inuse-entity-2 fn:Instrument, fn:Resource, fn:Object inuse-function: fn:Role inuse-purpose: fn:Purpose

Assertions:

during situation inuseinuseinuse-

inuse-entity_1	uses	inuse-entity_2
inuse-entity_2	hasFunction	inuse-function
inuse-entity_2	hasPurpose	inuse-purpose
inuse-entity_2	inFunction	true

"Ford uses codename X for operations in India."

during situation	Ford	uses	codename X
-	codename X	hasPurpose	operations in India
	codename X	inFunction	true

"Ford used codename X name as cover."

during situation	Ford	uses	operational name
	codename X	hasFunction	cover
	codename X	inFunction	true

"Mary used her Peugeot 205 to drive to work."

during situation	Mary	uses	her Peugeot 205
-	her Peugeot 205	hasPurpose	drive to work
	her Peugeot 205	inFunction	true

"The system works."

during situation the system inFunction true

-BeingLeader subclassOf: StaticEvent

"StaticEvent where someone is leader of some group of persons or organization."

<u>Class mappings:</u> closeMatch: fn:Leadership

Role mappings: leader-entity: fn:Leader leader-governed-entity: fn:Governed leader-function: fn:Role

Assertions:

during situation:	leader-entity	isLeader	true
	leader-entity	isLeaderOf	leader-governed_entity
	leader-entity	hasFunction	leader-function
	leader-entity	nastunction	leader-function

EXAMPLES:

"John chairs the committee"

during situation	John	isLeader	true
	John	isLeaderOf	the committee

"John ruled over Apple as a king"

during situation	John	isLeader	true
-	John	isLeaderOf	Apple
	John	hasFunction	king

"Ford is setting up an operation which is headed by Mary as general manager"

during situation	Mary	isLeader	true
	Mary	hasFunction	general manager

"John is chairman of the committee."

during situation	John	isLeader	true
-	John	isLeaderOf	the committee

-BeingOperational subclassOf: StaticEvent Static event where some device is in function.

Class mappings:

closeMatch: fn:Being-operational

Role mappings: operational-theme: fn:Object

Assertions: during situation operational-theme inFunction true

EXAMPLES:

"The new welding power supply works."

during situation the new welding power supply inFunction true

"The new welding power supply is functional."

during situation the new welding power supply inFunction true

-Borrowing subclassOf: Getting

"The subclass of Getting where a person gets something in possession for some period of time after which the item should be given back."

<u>Class mappings:</u> closeMatch: fn:Borrowing closeMatch: fn:Borrowing

For the roles and assertions, see: ChangeOfPossession.

EXAMPLE:

"Mary borrowed the car from John"

pre situation	John	hasInPossession	the car
	Marie	notHasInPossession	the car
post situation	John	notHasInPossession	the car
	Marie	hasInPossession	the car

-Buying subclassOf: FinancialTransaction

The subclass of FinancialTransaction where some entity changes of ownership in exchange for money. Note that the buyer is not necessarily the new owner of the entity.

<u>Class mappings:</u> closeMatch: fn:Commerce_buy closeMatch: sumo:Buying

For the roles and assertions, see: ChangeOfPossession.

EXAMPLES:

"John bought the flowers for 10 dollar."

pre situation	John	hasInPossession	10 dollar
	John	notHasPossession	the flowers
post situation	John	hasInPossession	the flowers
	John	notHasInPossession	10 dollar
during situation	the flowers	hasValue	10 dollar

"John bought the flowers from Mary."

pre situation	John	notHasInPossession	the flowers
	Mary	hasInPossession	the flowers
post situation	John	hasInPossession	the flowers
	Mary	notHasInPossession	the flowers

"John bought the flowers for Mary."

pre situation	John	notHasInPossession	flowers
	Mary	notHasInPossession	flowers
post situation	John	hasInPossession	flowers
	Mary	hasInPossession	flowers*

*Note that Mary is the 'Recipient' in FrameNet. While this FrameNet role is important for some subclasses of eso: ChangeOfPossession, for eso:Buying, this role is less prominent. However, the roles and assertions for this sub hierarchy are modeled at the highest possible level in the ontology (ChangeOfPossession) and are inherited by e.g. Buying. As a result, in some cases the assertions of the post situation of Buying can generate a questionable statement.

-ChangeOfPossession subclassOf: DynamicEvent

"The subclass of DynamicEvent where some entity changes possession. Note that this often but not necessarily implies a change of location of the entity."

<u>Class mappings:</u> relatedMatch: fn:Transfer closeMatch: sumo: ChangeOfPossession

Role mappings: possession-owner_1: fn:Supplier, fn:Exporter, fn:Donor, fn:Victim, fn:Source, fn:Lender, fn:Exporting_area, fn:Sender, fn:Seller possession-owner_2: fn:Perpetrator, fn:Importing_area, fn:Importer, fn:Lessee, fn:Buyer, fn:Recipient, fn:Borrower, fn:Agent possession-theme: fn:Theme, fn:Goods, fn:Possession

Assertions:

pre situation	possession-owner_1	hasInPossession	possession-theme
	possession-owner_2	notHasInPossession	possession-theme
post situation	possession-owner_1	notHasInPossession	possession-theme
	possession-owner_2	hasInPossession	possession-theme

EXAMPLES:

"Marie stole the car keys from John"

pre situation	John	hasInPossession	car keys
	Marie	notHasInPossession	car keys
post situation	John	notHasInPossession	car keys
	Marie	hasInPossession	car keys

"Ford exported 3000 cars to India last month"

pre situation	Ford	hasInPossession	3000 cars
	India	notHasInPossession	3000 cars
post situation	Ford India	notHasInPossession hasInPossession	3000 cars 3000 cars

-ChangingShape subclassOf:InternalChange

"The subclass of InternalChange where the shape of an entity is changed."

<u>Class mappings:</u> closeMatch: fn:Manipulate_into_shape closeMatch: fn:Reshaping closeMatch: sumo:ShapeChange

<u>Role mappings:</u> changingshape-entity: fn:Undergoer, fn:Theme changingshape-initialshape: changingshape-finalshape: fn:Configuration, fn:Resultant_configuration, fn:Result

Assertions:	changingshape-entity	inState	changingshape-initialshape
pre situation	changingshape-entity	notInState	changingshape-finalshape
post situation	changingshape-entity changingshape-entity	inState notInState	changingshape-finalshape changingshape-initialshape

Note that changingshape-initialshape and changingshape-finalshape are modeled with an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

	"John moulded the	e paste into a	ball."			
	pre situation	the paste the paste	inState notInState		:xyz130 ball	
	post situation	the paste the paste	inState notInState		ball :xyz130	
	"John folded the p	aper."				
	pre situation	the paper the paper	inState notInState		:xyz134 :abc123	
	post situation	the paper the paper	inState notInState		:abx123 :xyz134	
-Coll	aboration subcl "Static event wher	assOf: Static e people wor		or some	e period of tin	ne."
	Class mappings: closeMatch: fn:Co closeMatch: sumo		I			
	Role mappings: collaboration-partr collaboration-partr collaboration-partr collaboration-proje	her-2: fn:Parti hers: fn:Partn	ner_2 er_1, fn:Part	ner_2,	fn:Partners	
	Assertions: during situation	collaboratio collaboratio collaboratio		inCol	ooratesWith laboration roject	collaboration-partner_2 true collaboration-project
	EXAMPLES:					
	"John collaborates	s with Mary o	n a book."			
	during situation		collaborates hasProject inCollabora		Mary a book true	
	"The left wing part	ties are consp	piring to impe	each th	e president."	
	during situation	the left wing the left wing		hasP inCol	roject laboration	to impeach the president true
-Crea	ting subclassOf "The subclass of I build, constructed			nething	is made, cre	eated,
	Class mappings: closeMatch: fn:Bu closeMatch: fn:Inte closeMatch: fn:Cre closeMatch: sumo closeMatch: sumo closeMatch: sumo closeMatch: sumo closeMatch: sumo closeMatch: sumo closeMatch: sumo	entionally_cre eating anufacturing o:Constructing o:Creation o:Manufacture o:Making	9	ity		

Assertions:

	pre situation post situation	creating-theme creating-theme	exist exist		false true				
	EXAMPLES:	-							
	"The company wa	s founded in 1981.'	,						
	pre situation post situation	the company the company	exist exist		false true				
	"Rover assembled	d 22.000 Morris Min	is from	1986 d	onwards."	ı			
	pre situation post situation	22.000 Morris Min 22.000 Morris Min		exist exist	fal tru	se Ie			
	"Mary builds a new	w house on the hill.	•						
	pre situation post situation	a new house on th a new house on th	-	exist exist	fal tru	se Ie			
-Dan	Class mappings:	: InternalChange nternalChange whe ender_nonfunctional		Ū		jed."			
	closeMatch: sumo			_					
	damaging-underg damaging-state-1 damaging-state-2 damaging-damag activity: -	: -			eriencer, f	n:Bod	y_part,		
	Assertions: pre situation:	damaging-underg damaging-state_1		inStat hasRe	e elativeVal		amaging-s "	state_1	
	post situation:	damaging-underg damaging-state_2 damaging-underg damaging-underg damaging-damag	e oer oer	isDam hasDa	elativeVal	ue "-' tru da	ue amaging-c	lamage	
		two assertions will r maging-damage' ar			ated as n	o Frar	neNet role	es exist for	-

the ESO roles 'damaging-damage' and 'activity'. Note that damaging-state1 and damaging-state-2 have an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

"Marie dented the car"

pre situation	car	inState	:abc123
	:abc123	hasRelativeValue	+
post situation	car	inState	:xyz556
	:xyz556	hasRelativeValue	-
	car	isDamaged	true

"John incapacitated the aircraft."

pre situation	the aircraft	inState	:efg123
	:efg123	hasRelativeValue	+
post situation	the aircraft	inState	:efg345
	:efg345	hasRelativeValue	-
	the aircraft	isDamaged	true

-Decreasing subclassOf: QuantityChange

"The subclass of QuantityChange where some physical quantity or value is decreased."

<u>Class mappings:</u> broadMatch: fn:Change_of_quantity_of_possession broadMatch: fn:Cause_change_of_position_on_a_scale broadMatch: fn:Change_position_on_a_scale broadMatch: fn:Proliferating_in_number broadMatch: fn: Expansion broadMatch: fn: Cause_expansion closeMatch: sumo:Decreasing

Role mappings: quantity-item: fn:Item, fn:Possession, fn:Set quantity-attribute: fn:Attribute, fn:Dimension quantity-ratio: fn:Size_change, fn:Difference quantity-value_1: fn:Initial_value, fn:Initial_number, fn:Initial_size, fn:Value_1 quantity-value_2: fn:Final_value, fn:Final_number, fn:Value_2, fn:Result_size

Assertions:

pre situation	quantity-item	hasAttribute	quantity-attribute
	quantity-attribute	hasRelativeValue	+
	quantity-attribute	hasValue	quantity-value_1
post situation	quantity-item	hasAttribute	quantity-attribute
	quantity-attribute	hasRelativeValue	-
	quantity-attribute	hasValue	quantity-value_2
	quantity-item	hasRelativeDecrease	quantity-ratio

Note that quantity-attribute is modeled with an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

"Ford decreased the production with 2%."

pre situation		hasAttribute hasRelativeValue	:qwe123 +
post situation	:qwe123	hasAttribute hasRelativeValue hasRelativeDecrease	:qwe123 - 2%

"Apple lowered the price of the Iphone from 600 to 500 dollar."

pre situation	lphone	hasAttribute	price
	price	hasRelativeValue	+
	price	hasValue	600
post situation	lphone	hasAttribute	price
	price	hasRelativeValue	-
	price	hasValue	500

"The profit shrunk dramatically."

pre situation	profit	hasAttribute	:bnm234
	bnm234	hasRelativeValue	+

post situation	profit	hasAttribute	:bnm234
	bnm234	hasRelativeValue	-

-Destroying subclassOf: InternalChange

"The subclass of InternalChange where something gets destroyed."

<u>Class mappings</u>: closeMatch: fn:Cause_to_fragment closeMatch: fn:Destroying closeMatch: sumo:Destruction

<u>Role mappings:</u> destroying-theme: fn:Whole_patient, fn:Executed, fn:Undergoer, fn:Victim

Assertions	

pre situation:	destroying-theme	exist	true
post situation:	destroying-theme	exist	false

EXAMPLES:

"They demolished the Vauxhall factory."

pre situation	the Vauxhall factory the Vauxhall factory	exist	true
post situation		exist	false
"Mary tore up the	license agreement."		
pre situation	the license agreement the license agreement	exist	true
post situation		exist	false

-Distribution

subclassOf: Translocation

"The subclass of Translocation where someone or something translocates a physical object from one location to a bigger area."

<u>Class mappings:</u> closeMatch: fn:Dispersal

For the assertions and role mappings, see: Translocation.

EXAMPLES

"Bats spread the disease across Sudan."

pre situation	the disease	notAtPlace	Sudan
post situation	the disease	atPlace	Sudan

"The engines were mainly distributed in Korea."

pre situation	the engines	notAtPlace	Korea
post situation	the engines	atPlace	Korea

-DynamicEvent This class is the root of the dynamic event class hierarchy. (no mappings, no assertions)

-EndingARelationship subclassOf: IntentionalEvent

"The subclass of IntentionalEvent were people end a relationship with each other."

Class mappings:

broadMatch: fn:Forming_relationships

<u>Role mappings:</u> relationship-partner-1: fn:Partner_1 relationship-partner-2: fn:Partner_2 relationship-partners: fn:Partner_1, fn:Partner_2, fn:Partners

pre situation	relationship-partner_1	inRelationshipWith	relationship-partner_2
	relationship-partners	inRelationship	true
post situation	relationship-partner_1 relationship-partners	notInRelationshipWith inRelationship	relationship-partner_2 false

EXAMPLES

"Mary split up with John."

pre situation	John	inRelationshipWith	Mary
	John, Mary	inRelationship	true
post situation	John	notInRelationshipWith	Mary
	John, Mary	inRelationship	false

"John divorced in 2013."

pre situation	John	inRelationship	true
post situation	John	inRelationship	false

"The divorce of John and Mary is on the front page of all tabloids!"

pre situation	John and Mary	inRelationship	false
post situation	John and Mary	inRelationship	true

-Escaping subclassOf: Leaving

"The subclass of Leaving where a person leaves an unwanted location."

<u>Class mappings</u> closeMatch: fn:Escaping closeMatch: fn:Fleeing closeMatch: sumo:Escaping

For the assertions and role mappings, see: Translocation.

EXAMPLES:

"John escaped from Alcatraz."

pre situation	John	atPlace	Alcatraz
post situation	John	notAtPlace	Alcatraz

"John fled to the United States."

pre situation	John	notAtPlace	the United States
post situation	John	atPlace	the United States

-Exporting subclassOf: Selling

"The subclass of Selling where goods are exported to another nation in exchange for money."

Class mappings:

closeMatch: fn:Exporting closeMatch: sumo:Exporting

For the assertions and role mappings, see: FinancialTransaction

EXAMPLES:

"Ford exported 10.000 cars to India."

pre situation post situation	Ford India Ford India	hasInPossession notHasInPossession notHasInPossession hasInPossession	10.000 cars 10.000 cars 10.000 cars 10.000 cars
"Car exportation to	o India."		
pre situation post situation	India India	notHasInPossession hasInPossession	car car

-FinancialTransaction: subclassOf: ChangeOfPossession

"The subclass of Change Of Possession where some item changes of ownership in exchange for money."

<u>Class mappings:</u> closeMatch: fn:CommercialTransaction closeMatch: sumo:FinancialTransaction

Role mappings: possession-financial-asset: fn:Money

Inherited role mappings:

possession-owner_1: fn:Supplier, fn:Exporter, fn:Donor, fn:Victim, fn:Source, fn:Lender, fn:Exporting_area, fn:Sender, fn:Seller possession-owner_2: fn:Perpetrator, fn:Importing_area, fn:Importer, fn:Lessee, fn:Buyer, fn:Recipient, fn:Borrower, fn:Agent possession-theme: fn:Theme, fn:Goods, fn:Possession possession-financial-asset: fn:Money

Assertions:

ASSCILIONS.			
pre situation	possession-owner_1	notHasInPossession	possfinancial-asset
	possession-owner_2	hasInPossession	possfinancial-asset
post situation	possession-owner_1	hasInPossession	possfinancial-asset
	possession-owner_2	notHasInPossession	possfinancial-asset
during situation	possession-theme	hasValue	possession-value

Inherited assertions from ChangeOfPossession:

pre situation	possession-owner_1	hasInPossession	possession-theme
	possession-owner_2	notHasInPossession	possession-theme
post situation	possession-owner_1	notHasInPossession	possession-theme
	possession-owner_2	hasInPossession	possession-theme

EXAMPLES:

"Marie bought the car from John for 600 dollars"

pre situation	Marie	hasInPossession	600 dollar
	Marie	notHasInPossession	the car
	John	hasInPossession	the car
	John	notHasInPossession	600 dollar

post situation	Marie	hasInPossession	the car
	Marie	notHasInPossession	600 dollar
	John	hasInPossession	600 dollar
	John	notHasInPossession	the car
during situation	the car	hasValue	600 dollar

"Mary paid 600 dollar for the car."

pre situation	Mary	notHasInPossession	the car
	Mary	hasInPossession	600 dollar
post situation	Mary	hasInPossession	the car
	Mary	notHasInPossession	600 dollar
during situation	the car	hasValue	600 dollar

-Getting subclassOf: ChangeOfPossession

"The subclass of ChangeOfPossession where a person gets or receives some item."

<u>Class mappings:</u> closeMatch: fn:Receiving closeMatch: fn:Getting closeMatch: sumo:Getting

For the assertions and role mappings, see: ChangeOfPossession.

EXAMPLES:

"Mary received the strategic report from John."

pre situation	John	hasInPossession	the strategic report
	Mary	notHasInPossession	the strategic report
post situation	John	notHasInPossession	the strategic report
	Mary	hasInPossession	the strategic report

"Mary gained the respect of her staff."

pre situation	Mary	notHasInPossession	the respect of her staff
post situation	Mary	hasInPossession	the respect of her staff

"Ford secured the European market."

pre situation	Ford	notHasInPossession	the European market
post situation	Ford	hasInPossession	the European market

-Giving subclassOf: ChangeOfPossession

The subclass of ChangeOfPossession where a person gives something to someone else.

<u>Class mappings:</u> closeMatch: fn:Sending closeMatch: fn:Giving closeMatch: fn:Supply closeMatch: sumo:Giving

For the assertions and role mappings, see: ChangeOfPossession.

EXAMPLES:

"Mary gave John a nice bouquet."

pre situation	Mary	hasInPossession	a nice bouquet
	John	notHasInPossession	a nice bouquet
post situation	Mary	notHasInPossession	a nice bouquet
	John	hasInPossession	a nice bouquet

"The US shipped tents and food to Indonesia after the tsunami."

pre situation	the US	hasInPossession	tents and food
	Indonesia	notHasInPossession	tents and food
post situation	the US	notHasInPossession	tents and food
	Indonesia	hasInPossession	tents and food

-HavingAValue subclassOf: StaticEvent

"The subclass of StaticEvent where something is having some value."

<u>Class mappings:</u> closeMatch: fn:Amounting_to.

Role mappings: value-attribute: fn:Attribute value: fn:Value

Assertions: during situation value-attribute hasValue value

EXAMPLE:

"Maries income amounted to 100.000 euro a year."

during situation Maries income hasValue 100.000 euro

-HavingInPossession subclassOf: StaticEvent

"Static event where someone has something in possession."

<u>Class mappings:</u> closeMatch: fn:Possession closeMatch: fn:Retaining

<u>Role mappings:</u> possession-owner: fn:Agent, fn:Owner possession-theme: fn:Theme, fn:Goods, fn:Possession

<u>Assertions:</u> during situation possession-owner hasInPossession possession-theme

EXAMPLES:

"Tata Steel has 10.000 employees."

during situation Tata Steel hasInPossession 10.000 employees

"Mary owns a house in Spain."

during situation	Mary	hasInPossession	a house in Spain
------------------	------	-----------------	------------------

"The US retains political support from Europe."

during situation	The US	hasInPossession	political	support from	Europe
------------------	--------	-----------------	-----------	--------------	--------

"Mary kept her old wedding gown."

during situation Mary hasInPossession her old wedding gown

-Importing: subclassOf: Buying

"The subclass of Buying where goods are imported from some country in exchange for money."

<u>Class mappings:</u> closeMatch: fn:Importing relatedMatch: sumo:Exporting

For assertions and role mappings, see: FinancialTransaction.

EXAMPLES:

"Canada imported 45.000 cars from Europe last year."

pre situation	Europe	hasInPossession	45.000 cars
	Canada	notHasInPossession	45.000 cars
post situation	Europe	notHasInPossession	45.000 cars
	Canada	hasInPossession	45.000 cars

"Iran's import of nuclear material was monitored."

pre situation	Iran	notHasInPossession	nuclear material
post situation	Iran	hasInPossession	nuclear material

-Increasing subclassOf: QuantityChange

"The subclass of InternalChange where some physical quantity or value is increased."

Class mappings: broadMatch: fn:Change_of_quantity_of_possession broadMatch: fn:Cause_change_of_position_on_a_scale broadMatch: fn:Change_position_on_a_scale broadMatch: fn:Proliferating_in_number broadMatch: fn: Expansion broadMatch: fn: Cause_expansion closeMatch: fn:Cause_proliferation_in_number closeMatch: sumo:Increasing

Role mappings: quantity-item: fn: Item, fn:Possession, fn:Set quantity-attribute: fn:Attribute, fn:Dimension quantity-ratio: fn:Size_change, fn:Difference quantity-value_1: fn:Initial_value, fn:Initial_number, fn:Initial_size, fn:Value_1 quantity-value_2: fn:Final_value, fn:Final_number, fn:Value_2, fn:Result_size

Assertions: pre situation	quantity-item quantity-attribute quantity-attribute	hasAttribute hasRelativeValue hasValue	quantity-attribute - quantity-value_1
post situation	quantity-item	hasAttribute	quantity-attribute

quantity-attribute	hasRelativeValue	+
quantity-attribute	hasValue	quantity-value_2
quantity-item	hasRelativeIncrease	quantity-ratio

Note that quantity-attribute is modeled with an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

"Apple raised the price of the Iphone from 500 to 600 dollar."

pre situation	lphone	hasAttribute	price
	price	hasRelativeValue	-
	price	hasValue	500
post situation	lphone	hasAttribute	price
	price	hasRelativeValue	+
	price	hasValue	600

"Ford increased the production with 2%."

pre situation	production	hasAttribute	:asd123
	:asd123	hasRelativeValue	-
post situation	production	hasAttribute	:asd123
	asd123	hasRelativeValue	+
	production	hasRelativeIncrease	2%

"Their debt tripled in nine years."

pre situation	their debt	hasRelativeValue	-
post situation	their debt	hasRelativeValue	+

"He widened his eyes."

pre situation	his eyes	hasAttribute	:zxc234
	:zxc234	hasRelativeValue	-
post situation	his eyes	hasAttribute	:zxc234
	:zxc234	hasRelativeValue	+

"The balloon expanded with 2 centimetres".

pre situation	the balloon	hasAttribute	:abc123
	:abc123	hasRelativeValue	-
post situation	the balloon	hasAttribute	:abc123
	:abc123	hasRelativeValue	+
	the balloon	hasRelativeIncrease	2 centimetres

-Injuring subclassOf: Damaging

"The subclass of Damaging where someone gets injured (mentally and/or physically)."

<u>Class mappings:</u> closeMatch: fn:Cause_harm closeMatch: fn:Experience_bodily_harm closeMatch: sumo:Injuring

For the assertions and role mappings, see: Damaging.

EXAMPLES:

"Marie wounded John."

pre situation	John	inState	:qwe556
	qwe556	hasRelativeValue	+
post situation	John	inState	:zxc678
	:zxc678	hasRelativeValue	-
post situation:	John	isDamaged	true

"John broke his leg after falling off the stage"

pre situation	John, his leg	inState	:abc123
	:abc123	hasRelativeValue	+
post situation	John, his leg	inState	:abc124
post situation:	:abc124	hasRelativeValue	-
	John, his leg	isDamaged	true

"Mary broke his leg with her bare hands!"

pre situation	his leg	inState	:jkl234
	:jkl234	hasRelativeValue	+
post situation	his leg	inState	:asd345
	:asd345	hasRelativeValue	-
post situation:	his leg	isDamaged	true

-Installing subclassOf: Placing

"The subclass of Placing where some entity is put in a new and fixed location, e.g. the installation of fixtures."

<u>Class mappings:</u> closeMatch: fn:Installing closeMatch: sumo:Installing

For the assertions and role mappings, see: Translocation.

EXAMPLES:

"Mary installed a new engine in her Land Rover Defender."

pre situation	a new engine	notAtPlace	Land Rover Defender
post situation	a new engine	atPlace	Land Rover Defender

"John confirmed the installation of cameras in the offices."

pre situation	cameras	notAtPlace	in the offices
post situation	cameras	atPlace	in the offices

-IntentionalEvent subclassOf:DynamicEvent

"The subclass of Dynamic Event where some event is carried out by some cognitive agent(s) and with some specific purpose."

<u>Class mappings:</u> closeMatch: fn:Intentionally_act sumo: IntentionalProcess

No assertions are defined for this class.

-InternalChange subclassOf: DynamicEvent

"The subclass of DynamicEvent where some internal quality of an item changes."

<u>Class mappings:</u> closeMatch: sumo:InternalChange

No assertions are defined for this class.

-Investing subclassOf: FinancialTransaction

The subclass of Financial Transaction where a person or company invests some asset in either another or its own company with the prospect of some future profit.

Class mappings: closeMatch: sumo:Investing

For the assertions, see: FinancialTransaction.

-JoiningAnOrganization subclassOf: IntentionalEvent

"The subclass of IntentionalEvent where someone starts working as an employee for some organization."

<u>Class mappings:</u> closeMatch: fn:Hiring, closeMatch: fn:Get_a_job broadMatch: sumo:JoiningAnOrganization

Role mappings:

employment-employee: fn:Employee employment-employer: fn:Employer employment-function: fn:Position employment-value: fn:Compensation employment-task: fn:Task employment-attribute: -

Assertions:

pre situation	employment-employee	notEmployedAt	employment-employer
post situation	employment-employee	employedAt	employment-employer
	employment-employee	isEmployed	true
	employment-employee	hasFunction	employment-function
	employment-employee	hasTask	employment-task
	employment-employee	hasAttribute	employment-attribute
	employment-attribute	hasValue	employment-value

Note that employment-attribute is modeled with an existential restriction that allows to create a blank node in the named graph.

EXAMPLES:

"Ford hired Mary as their new CEO for 100.000 euro."

pre situation	Mary	notEmployedAt	Ford
post situation	Mary	isEmployed	true
	Mary	employedAt	Ford
	Mary	hasFunction	new CEO
	Mary	hasAttribute	:abc124
	:abc124	hasValue	100.000 euro

"John was hired to clean the house."

pre situation post situation John isEmployed true John hasTask

to clean the house

"John signed on with Marie to clean her house."

pre situation	John	notEmployedAt	Marie
post situation	John	isEmployed	true
	John	employedAt	Marie
	John	hasTask	to clean her house

-Killing subclassOf: Destroying

"The subclass of Destroying where animate beings are killed."

<u>Class mappings:</u> closeMatch: fn:Execution closeMatch: fn:Killing closeMatch: sumo:Killing

For assertions and role mappings, see: Destroying.

EXAMPLES:

"Mary was executed by three men in black ties."

pre situation	Mary	exist	true
post situation	Mary	exist	false

"Low levels of oxygen asphyxiated the fish in John's pond."

pre situation	the fish in John's pond	exist	true
post situation	the fish in John's pond	exist	false

-Leaving subclassOf:Translocation

"The subclass of Translocation where someone or something leaves a location."

<u>Class mappings:</u> closeMatch: fn:Vehicle_departure_initial_state closeMatch: fn:Departing closeMatch: fn:Setting_out closeMatch: fn:Quitting_a_place closeMatch: sumo:Leaving.

For the assertions and role mappings, see: Translocation.

EXAMPLES:

"John set out from Lake Louise in a canoe."

pre situation	John	atPlace	Lake Louise
post situation	John	notAtPlace	Lake Louise

"John left for Lake Michigan."

pre situation	John	notAtPlace	Lake Michigan
post situation	John	atPlace	Lake Michigan*

*Note that Johns arrival at Lake Michigan is not certain.

-LeavingAnOrganization subclassOf: IntentionalEvent

"The subclass of IntentionalEvent where a person stops working as an employee for an organization."

<u>Class mappings:</u> closeMatch: fn:Quitting, closeMatch: fn:Firing closeMatch: sumo:TerminatingEmployment

<u>Role mappings:</u> employment-employee: fn:Employee employment-employer: fn:Employer employment-function: fn:Position employment-task: fn:Task

Assertions:

pre situation	employment-employee	employedAt	employment-employer
	employment-employee	isEmployed	true
	employment-employee	hasFunction	employment-function
	employment-employee	hasTask	employment-task
post situation	employment-employee	notEmployedAt	employment-employer

EXAMPLES:

"Ford fired Mary as their CEO."

pre situation	Mary	employedAt	Ford
	Mary	isEmployed	true
	Mary	hasFunction	CEO
post situation	Mary	notEmployedAt	Ford

"John was fired from cleaning the house."

pre situation	John	isEmployed	true
	John	hasTask	cleaning the house
post situation	-		

"John left Ford."

pre situation	John	employedAt	Ford
post situation	John	notEmployedAt	Ford

-Lending subclassOf:Giving

"The subclass of Giving where a person gives something in possession for some period of time after which the item should be given back."

<u>Class mappings:</u> closeMatch: fn:Lending closeMatch: sumo:Lending

For the assertions and role mappings, see: ChangeOfPossession.

EXAMPLE:

"Mary loaned her car to John."

pre situation	Mary	hasInPossession	her car
	John	notHasInPossession	her car

	post situation	Mary John		asInPossessi Possession	on	her car her car		
-Meet	-Meeting subclassOf: StaticEvent "The static event class where people meet each other, usually intentional and for some purpose."							
	<u>Class mappings:</u> closeMatch: fn:Come_together closeMatch: fn:Assemble closeMatch: fn:Social_event closeMatch: sumo:Meeting							
	Role mappings: meeting-participat meeting-place: fn:	fn:Group, f			, fn:Hc	ost, fn:Individuals,		
	Assertions: during situation	meeting-par meeting-par			meet true	ing-place		
	EXAMPLES:							
	"The Republicans	convened in	New Y	ork to discus	s the p	program."		
	during situation	the Republic the Republic		atPlace inMeeting	New true	York		
	"John meets Mari	e in New York	"					
	during situation	John Marie John, Marie		atPlace atPlace inMeeting	New New true			
	"The whole group	attended the	party"					
	during situation	the whole gr	oup	inMeeting	true			
-Merç		: InternalChar nternalChang		re two entitie	s are r	merged into a whole."		
	<u>Class mappings:</u> closeMatch: fn:An closeMatch: fn:Ca closeMatch: sumo	ause_to_amal	gamate	e				
	<u>Role mappings:</u> merging-theme_1: fn:Part_1, fn:Parts merging-theme_2: fn:Part_2 merging-theme_3: fn:Whole							
	Assertions: pre situation	merging-the merging-the merging-the	me_2	exist exist exist		true true false		
	post situation:	merging-the merging-the merging-the	me_2	exist exist exist		false false true		

EXAMPLES:

"In 1980, EBC merged with KPN into KPN-BC."

pre situation	EBC	exist	true
	KPN	exist	true
	KPN-BC	exist	false
post situation	EBC	exist	false
	KPN	exist	false
	KPN-BC	exist	true

"John blended the herbs and the eggs."

pre situation	the herbs and the eggs	exist	true
post situation	the herbs and the eggs	exist	false

-Motion subclassOf: DynamicEvent

"The subclass of DynamicEvent where some entity moves."

<u>Class mappings:</u> closeMatch: fn:Motion closeMatch: sumo:Motion

No assertions are defined for this class.

-Paying subclassOf: FinancialTransaction

"The subclass of FinancialTransaction where some financial asset is given in exchange for some item or in discharge of a debt."

<u>Class mappings:</u> closeMatch: fn:Commerce_pay

For the assertions and role mappings, see: FinancialTransaction.

EXAMPLES:

"Ford paid Chrysler 40.000 dollar for John's idea."

pre situation	Ford	notHasInPossession	John's idea		
	Chrysler	hasInPossession	John's idea		
	Ford	hasInPossession	40.000 dollar		
	Chrysler	notHasInPossession	40.000 dollar		
post situation	Ford	hasInPossession	John's idea		
	Chrysler	notHasInPossession	John's idea		
	Ford	notHasInPossession	40.000 dollar		
	Chrysler	hasInPossession	40.000 dollar		
during situation	John's idea	hasValue	40.000 dollar		
"Mary paid the bill."					

pre situationMaryhasInPossessionthe billpost situationMarynotHasInPossessionthe bill

-Placing subclassOf:Translocation

"The subclass of Translocation where some entity is put in a new location."

<u>Class mappings:</u> closeMatch: fn:Placing closeMatch: sumo:Putting

For the assertions and role mappings, see: Translocation.

EXAMPLES:

"While thinking of Mary, John put the flowers in a vase."

pre situation flowers notAtPlace in a vase post situation flowers atPlace in a vase

"Mary loaded all her belongings in the car."

pre situation	her belongings	notAtPlace	in the car
post situation	her belongings	atPlace	in the car

"The sea deposited dead fish on the beach."

pre situation	dead fish	notAtPlace	on the beach
post situation	dead fish	atPlace	on the beach

-QuantityChange subclassOf: InternalChange

"The subclass of InternalChange where some quantity is altered."

<u>Class mappings:</u> closeMatch: sumo: QuantityChange

No assertions are defined for this class.

-Removing subclassOf: Translocation

"The subclass of Translocation where some entity is taken away from its location."

<u>Class mappings:</u> closeMatch: fn:Removing closeMatch: sumo:Removing

For the assertions and role mappings, see: Translocation.

EXAMPLES:

"John removed all the evidence from the archive."

pre situation	the evidence	atPlace	the archive
post situation	the evidence	notAtPlace	the archive

"Mary evacuated the employees from the burning factory."

pre situation	the employees	atPlace	the burning factory
post situation	the employees	notAtPlace	the burning factory

"The Maserati was unloaded from the Boeing 747."

pre situation	the Maserati	atPlace	the Boeing 747
post situation	the Maserati	notAtPlace	the Boeing 747

"John removed all his books."

-

pre situation post situation

-Renting subclassOf: Getting

"The subclass of Getting where a person gets something in possession from someone else for some period in exchange for money."

<u>Class mappings:</u> closeMatch: fn:Renting closeMatch: sumo:Renting

For the assertions and role mappings, see: ChangeOfPossession.

EXAMPLES:

"John leased his Peugeot from ELB."

pre situation	John	notHasInPossession	his Peugeot
	ELB	hasInPossession	his Peugeot
post situation	John	hasInPossession	his Peugeot
	ELB	notHasInPossession	his Peugeot

"Mary rented a room from an old lady."

pre situation	Mary	notHasInPossession	a room
	an old lady	hasInPossession	a room
post situation	Mary	hasInPossession	a room
	an old lady	notHasInPossession	a room

-RentingOut subclassOf: Giving

"The subclass of Giving where a person gives something in possession for some period in exchange for money."

<u>Class mappings:</u> closeMatch: fn:Renting_out

For the assertions and role mappings, see: ChangeOfPossession.

EXAMPLES:

"The old lady rented a room to Mary."

pre situation	Mary	notHasInPossession	a room		
post situation	an old lady Mary	hasInPossession hasInPossession	a room a room		
post situation	an old ladv	notHasInPossession	a room		
	,				
"Mary rented the garage out."					
pre situation post situation	Mary Mary	hasInPossession notHasInPossession	the garage the garage		

-Replacing subclassOf: IntentionalEvent

"The subclass of IntentionalEvent were someone or something is replaced with someone or something else in a specific role or function." Class mappings: closeMatch: fn:Replacing closeMatch: fn: Take_place_of closeMatch: fn:Change_of_leadership closeMatch: sumo:Substituting

Role mappings: replacing-entity_1: fn:Old, fn:Old_order, fn:Old_leader replacing-entity_2: fn:New, fn:New_leader replacing-entity_3: fn:Agent replacing-function: fn:Role, fn:Function

Assertions:

pre situation	replacing-entity_1	hasFunction	replacing-function
	replacing-entity_2	notHasFunction	replacing-function
	replacing-entity_1	inFunctionFor	replacing-entity_3
	replacing-entity_1	inFunction	true
	replacing-entity_2	inFunction	false
post situation	replacing-entity_1	notHasFunction	replacing-function
	replacing-entity_2	hasFunction	replacing-function
	replacing-entity_2	inFunctionFor	replacing-entity_3
	replacing-entity_1	inFunction	false
	replacing-entity_2	inFunction	true

EXAMPLES:

"Peter replaced Mary by John as CEO of Apple."

pre situation	Mary	hasFunction	CEO of Apple
	John	notHasFunction	CEO of Apple
	Mary	inFunctionFor	Peter
	Mary	inFunction	true
	John	inFunction	false
post situation	Mary	notHasFunction	CEO of Apple
	John	hasFunction	CEO of Apple
	John	inFunctionFor	Peter
	Mary	inFunction	false
	John	inFunction	true

"Mary replaced her Ford Taunus for a Peugeot 205."

pre situation	Ford Taunus	inFunctionFor	Mary
	Ford Taunus	inFunction	true
	Renault 205	inFunction	false
post situation	Peugeot 205	inFunctionFor	Mary
	Ford Taunus	inFunction	false
	Peugeot 205	inFunction	true

"Vinyl was replaced by the compact disc in the early eighties."

pre situation	vinyl	inFunction	true
post situation	compact disc	inFunction	false
	compact disc	inFunction	true
	vinyl	inFunction	false

"Amsterdam installed Mary as the new mayor."

pre situation	Mary	notHasFunction	mayor
	Mary	inFunction	false
post situation	Mary	hasFunction	mayor
	Mary	inFunctionFor	Amsterdam
	Mary	inFunction	true

"The rebellion against the Lannisters."

pre situation	Lannisters	inFunction	true
post situation	Lannisters	inFunction	false*

*Note that, due to the lexical units associated to a FrameNet frame, the triggered assertions can be too strong.

-Selling subclassOf: FinancialTransaction

'The subclass of FinancialTransaction where some entity changes of ownership in exchange for money."

Class mappings: closeMatch: fn:Commerce_sell closeMatch: sumo:Selling

For the assertions and role mappings, see: FinancialTransaction.

EXAMPLES:

"In 2013, Ford sold 10.000 cars."

pre situation	Ford	hasInPossession	10.000 cars
post situation	Ford	notHasInPossession	10.000 cars

"The Catholic church auctioned off 20 churches to project developers."

pre situation	Catholic church	hasInPossession	20 churches
	project developers	notHasInPossession	20 churches
post situation	Catholic church project developers	notHasInPossession hasInPossession	20 churches 20 churches

"Mary sold the plot of land to John for 10.000 dollar."

pre situation	Mary	hasInPossession	the plot of land
	John	notHasInPossession	the plot of land
	Mary	notHasInPossession	10.000 dollar
	John	hasInPossession	10.000 dollar
post situation	Mary	notHasInPossession	the plot of land
	John	hasInPossession	the plot of land
	Mary	hasInPossession	10.000 dollar
	John	notHasInPossession	10.000 dollar
during situation	the plot of la	nd hasValue	10.000 dollar

during situation

-Separating subclassOf: InternalChange

"The subclass of InternalChange where some whole is split into parts."

Class mappings: closeMatch: fn:Becoming separated closeMatch: fn:Separating closeMatch: sumo:Separating

Role mappings:

separating-theme_1: fn:Part_1, fn:Parts
separating-theme_2: fn:Part_2 separating-theme_3: fn:Whole

Assertions:

pre situation	separating-theme_1	exist	false
	separating-theme_2	exist	false
	separating-theme_3	exist	true
post situation	separating-theme_1	exist	true
	separating-theme_2	exist	true
	separating-theme_3	exist	false

EXAMPLES:

"The machine split the water into hydrogen and oxygen."

pre situation	hydrogen and oxygen	exist	false
	water	exist	true
post situation	hydrogen and oxygen	exist	true
	water	exist	false

"Mary divided the pile of cutlery into groups of six."

pre situation	groups of six	exist	false
	pile of cutlery	exist	true
post situation	groups of six	exist	true
	pile of cutlery	exist	false

"The auctioneer separated the hatchbacks from the saloons.*"

pre situation	the hatchbacks	exist	false
	the saloons	exist	false
post situation	the hatchbacks	exist	true
	the hatchbacks	exist	true

*Note that separating-theme_3 (the whole collection of cars) remains implicit in this example.

"The partition of Germany in 1945."

pre situation	Germany	exist	true
post situation	Germany	exist	false

subclassOf: IntentionalEvent -StartingAnActivity

"The subclass of IntentionalProcess where someone intentionally starts an activity."

Class mappings: closeMatch: fn:Activity_start

Role mappings: activity: fn:Activity activity-agent: fn:Agent

Assertions:			
pre situation	activity	exist	false
post situation	activity	exist	true
	activity-agent	involvedIn	activity

"Ford started the production of the Taunus in 1979."

pre situation	production of the Taunus	exist	false
post situation	production of the Taunus	exist	true
	Ford	involvedIn	production of the Taunus

"The government began protecting the peat bogs in Ost-Friesland."

pre situation	protecting the peat	bogs in Ost-	Friesland	exist	false
post situation	protecting the peat	bogs in Ost-	Friesland	exist	true
	the government	involvedIn	protecting th	ne peat	bogs in Ost-Friesland.

-StaticEvent StaticEvent is the top node of the static event class hierarchy. "A StaticEvent is an entity which is associated with a period of time where a set of propositions is true."

<u>Class mappings:</u> closeMatch: fn:State

No assertions are defined for this class.

-Stealing subclassOf: Taking

"The subclass of Taking where a person takes something without permission of the owner."

<u>Class mappings:</u> closeMatch: fn:Theft closeMatch: sumo:Stealing

For the assertions and class mappings, see: ChangeOfPossession.

EXAMPLES:

"John shoplifted a sweater from the department store."

pre situation	department store	hasInPossession	sweater
	John	notHasInPossession	sweater
post situation	department store	notHasInPossession	sweater
	John	hasInPossession	sweater

"Marie stole a sweater from John."

pre situation	John	hasInPossession	a sweater
	Marie	notHasInPossession	a sweater
post situation	John	notHasInPossession	a sweater
	Marie	hasInPossession	a sweater

"Massive theft of documents from the Stasi archives."

pre situation	Stasi archives	hasInPossession	documents
post situation	Stasi archives	notHasInPossession	documents

-StoppingAnActivity subclassOf:IntentionalEvent

"The subclass of IntentionalProcess where some agent intentionally stops an activity."

<u>Class mappings:</u> closeMatch: fn:Activity_stop

<u>Role mappings:</u> activity: fn:Activity activity-agent: fn:Agent

Assertions:

pre situation	activity	exist	true
	activity-agent	involvedIn	activity
post-situation	activity	exist	false
	activity-agent	notInvolvedIn	activity

"Ford terminated the negotiations with Peugeot."

pre situation	negotiations with Peugeol	t exist	true
	Ford	involvedIn	negotiations with Peugeot
post situation	negotiations with Peugeol	t exist	false
	Ford no	otInvolvedIn	negotiations with Peugeot

"John's treatment was discontinued."

pre situation	John's treatment	exist	true
post situation	John's treatment	exist	false

-Taking subclassOf: Getting

"The subclass of Getting where a person takes something without giving something in return."

<u>Class mappings</u>: closeMatch: fn:Taking closeMatch: sumo:UnilateralGetting

For the assertions and role mappings, see: ChangeOfPossession

EXAMPLES:

"The police seized financial documents from the private equity fund."

pre situation	the police	notHasInPossession	financial documents
	private equity fund	hasInPossession	financial documents
post situation	the police	hasInPossession	financial documents
	private equity fund	notHAsInPossession	financial documents

"Mary took a beer from the refrigerator."

pre situation	Mary	notHasInPossession	a beer
	the refrigerator	hasInPossession	a beer
post situation	Mary	hasInPossession	a beer
	the refrigerator	notHasInPossession	a beer

-Translocation subclassOf:Motion

"The subclass of Motion where physical objects or animate beings change from location."

Class mappings: closeMatch: fn:Self_motion closeMatch: fn:Cotheme closeMatch: fn:Traversing closeMatch: fn:Use_vehicle closeMatch: fn:Intentional_traversing closeMatch: fn:Ride_vehicle closeMatch: fn:Travel closeMatch: fn:Operate_vehicle closeMatch: fn:Cause_motion closeMatch: sumo:Translocation

<u>Role mappings:</u> translocation-theme: fn:Self_mover, fn: Theme, fn:Driver, fn:Traveler, fn:Vehicle, fn:Escapee, fn:Cotheme, fn:Component, fn:Individuals. translocation-source: fn:Source, fn: Undesirable_location translocation-goal: fn:Goal, fn: Intended_goal, fn: Goal_area

Assertions:

pre situation:	translocation-theme	atPlace	translocation-source
	translocation-theme	notAtPlace	translocation-goal
post situation:	translocation-theme	atPlace	translocation-goal
	translocation-theme	notAtPlace	translocation-source

EXAMPLE:

"John drove from New York to Atlanta."

pre situation	John	atPlace	New York
	John	notAtPlace	Atlanta
post situation	John	atPlace	Atlanta
	John	notAtPlace	New York

-Transportation subclassOf:Transportation

"The subclass of Translocation where physical objects and animate beings together change from location and the physical object is not the means of translocation."

Class mappings: closeMatch: fn:Bringing closeMatch: fn:Delivery closeMatch: sumo:Transportation

For the assertions and role mappings, see: Translocation

EXAMPLES:

"Mary brought her classic car from the US to England."

pre situation	her classic car	atPlace	US
	her classic car	notAtPlace	England
post situation	her classic car	atPlace	England
	her classic car	notAtPlace	US

"John flew Mary to the nearest hospital."

pre situation	Mary	notAtPlace	hospital
post situation	Mary	atPlace	hospital

"Russian gas deliveries to Europe."

pre situation	gas	atPlace	Russia
post situation	gas qas	botAtPlace notAtPlace	Russia Russia
poor ondedion	gas	atPlace	Europe

"The postman delivered a letter to Mary's mailbox."

pre situation	a letter	notAtPlace	Mary's mailbox
post situation	a letter	atPlace	Mary's mailbox

"The postman delivered a letter to Mary.*"

-

pre situation post situation

*Note that 'Mary' is a 'Beneficiary' according to FrameNet. The fn:Beneficiary is not mapped to ESO translocation-goal.

-Working subclassOf: StaticEvent "Static event where someone is doing work."

<u>Class mappings:</u> closeMatch: fn:Working_a_post closeMatch: fn:Work

Role mappings: working-entity: fn:Agent

Assertions: during situation	working-entity	works	true	
EXAMPLES:				
"John works hard on a n	ew book."			
during situation	John	works	true	
"John and Mary manned the front desk."				
during situation	John and Mary	works	true	