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Obstacles and Regions

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Manner and Path

- Following Talmy (1985)

- Examples:

- ◆ John crossed the river

FIGURE MOTION+PATH GROUND

- ◆ Mary ambled the streets

FIGURE MOTION+MANNER GROUND

Obstacle-Taking Verbs

■ Examples (from the web):

- ◆ Solo balloonist *clears* Andes
Millionaire US adventurer Steve Fossett safely *hurdled* the snow
- ◆ Striving to *breach* the gap
- ◆ A dump truck *jumped* the median
- ◆ Grant's forces *bridged* the river at three locations
- ◆ since athletes routinely *hopped* the fence

Unbounded Areas = Regions

■ Examples:

- ◆ #The fighter planes *crossed* the air
- ◆ #Grant's forces *bridged* the countryside
- ◆ #The giant *hurdled* the landscape

- Note: many nouns are compatible with both Obstacle and Region readings.

Regions

- Examples (from the web):
 - ◆ Bonnard *ambled* the streets of Paris for his images
 - ◆ No matter how often we have walked along the banks of the Seine, *sauntered* the Champs Elysees
 - ◆ As models *sashayed* the catwalk, the electricity cut off
 - ◆ Between meals, people played cards, read, *strolled* the decks and talked

Obstacles and Regions: Polysemy

■ Examples:

- ◆ Bonnard *ambled* the streets (Region)
- ◆ As models *sashayed* the catwalk (Region)
- ◆ We *traversed* the streets/catwalk (Obstacle)

■ Coercion

- ◆ *street* (Obstacle) -> *streets* (Region)
- ◆ *Gap, median, fence* can't be (zero)-coerced from Obstacles into Regions
 - ◆ *He walked the median (Region interpretation)
 - ◆ He walked *along* the median

Measure Phrases

- Regions but not Obstacles can be partitioned
- Examples:
 - ◆ *John crossed/forded/bridged/traversed for 200 yds
 - ◆ *John crossed/forded/bridged/traversed the river for 200 yds
 - ◆ Mary ambled/sauntered/moseyed (for) 3 miles
 - ◆ Mary ambled/sauntered/moseyed the street for 3 miles

Syntactic Differences

■ Passivization

■ Examples:

- ◆ The river was crossed/jumped/forded/bridged
- ◆ *The streets were ambled/sauntered/sashayed

Syntactic Differences

■ Middle Formation

■ Examples:

- ◆ This river fords/bridges/crosses easily
- ◆ *The new boardwalk ambles/saunters/sashays easily

Syntactic Differences

■ *-ing* Nominalization

with unexpressed agent/actor, cf. *their*

■ Examples:

- ◆ The crossing/fording/bridging of the river was difficult
- ◆ *?The ambling/sauntering/sashaying of the streets was ostentatious

Manner of Motion Verbs

■ Examples:

- ◆ The ambling/sauntering caused major gridlock
- ◆ The ambling/sauntering **of the models** caused major gridlock
- ◆ The ambling/sauntering **in the streets** caused major gridlock
- ◆ The ambling/sauntering **of the models in the streets** caused major gridlock
- ◆ cf. *?The ambling/sauntering **of the streets** caused major gridlock

Note

- TALK ABOUT FLOP, SLOUCH, SLUMPED
- Some manner of motion verbs, but not *amble* etc., with a strong manner component do not take a direct object.
- Examples:
 - ◆ The goblin limped/slithered/hobbled
 - ◆ *The goblin limped/slithered/hobbled the streets

Aspectual Differences

■ Accomplishments vs. activities

■ Examples:

- ◆ The soldiers crossed/forded/bridged the river **in an hour**
- ◆ *Tourists ambled/sauntered/moseyed the streets **in an hour**

- ◆ *The soldiers crossed/forded/bridged the river **for an hour**
- ◆ Tourists ambled/sauntered/moseyed the streets **for an hour**

Three Classes of Motion Verbs

1. Obstacle-Taking Verbs
2. Region-Taking Verbs
3. Obstacle/Region-Taking Verbs

Class 1: Obstacle Verbs

- Obstacle-taking verbs express the traversal of an obstacle in a motion event, but do not specify the manner of motion.
- Examples:
 - ◆ traverse, breach, gap, span, ford, vault, overleap, leapfrog, hurdle, scale

Class 1: Obstacle-Taking Verbs

- Subclasses of Obstacle-taking verbs derived from spatially bounded nominals.
 - ◆ Class 1a: Connecting entity
 - ◆ Examples: ford, bridge, span
 - ◆ Class 1b: Physical opening/raised formation
 - ◆ Examples: gap, hurdle, breach
 - ◆ Class 1c: instrument/vehicle
 - ◆ Peter *pole-vaulted* the Berlin Wall
 - ◆ Mary *ferried* the river

Class 2: Region-Taking Verbs

- Region verbs express not the manner of motion (wrt gait, posture or speed), but motion that is random and unstructured.
- Examples:
 - ◆ The clerks *roam* the aisles of the supermarket
 - ◆ The terrorist *roves* the mountains of Afghanistan
 - ◆ The deranged mathematician *wanders* the streets of Princeton
 - ◆ The criminal *prowls* the shopping malls
- (Activities, not accomplishments.)

Class 3: Obstacle/Region-Taking Verbs

- Select for objects that exhibit genuine ambiguity wrt the Obstacle/Region interpretation.

- Example (swim):

- ◆ She swam the river

She swam the river **for hours**

REGION

She swam the river **in an hour**

OBSTACLE

Class 3: Obstacle/Region-Taking Verbs

■ Example (walk):

- ◆ The tourists walked the streets/Golden Mile
- ◆ The tourists walked the boardwalk **in 1 hour**
OBSTACLE
- ◆ The lost tourists walked the boardwalk **for hours**
REGION

Class 3: Obstacle/Region-Taking Verbs

■ Example:

- ◆ The hikers scrambled the rocky slopes
- ◆ The hikers scrambled **the rocky slope** in vain all afternoon
REGION
- ◆ The hikers scrambled **the rocky slope** in just ten minutes
OBSTACLE

Representation Issues

- Semantic feature: [+/-telic]
 - ◆ Obstacle verbs denote bounded events: [+telic]
 - ◆ Region verbs are unbounded: [-telic]

- Spatial prepositions
 - ◆ [+telic]
 - ◆ Examples: *across, over, through*
 - ◆ [-telic]
 - ◆ Examples: *along, in, on*

Representation Issues

■ Examples:

- ◆ She crossed[+telic] the Alps in[+telic] one week
- ◆ *She crossed[+telic] the Alps for[-telic] hours

- ◆ She hiked[-telic] the Alps for[-telic] 3 days
- ◆ She hiked[-telic] the Alps in[+telic] 3 weeks

Representation Issues

■ Filter:

- ◆ *V[+telic] P[-telic]
- ◆ Expresses idea that once an event is bounded, it cannot be unbounded

WordNet

- WordNet distinguishes discrete senses of Obstacle/Region-taking verbs. Contrast *walk* with *hike*.

