# Dynamic Frames in Event Structure

#### Sean McLennan

Conferència Científica Internacional Lingüística Havana Cuba, Nov. 24, 2003



#### **Frames**

#### Consider:



Gwenn is climbing the ladder.



Gwenn is climbing the CN Tower.

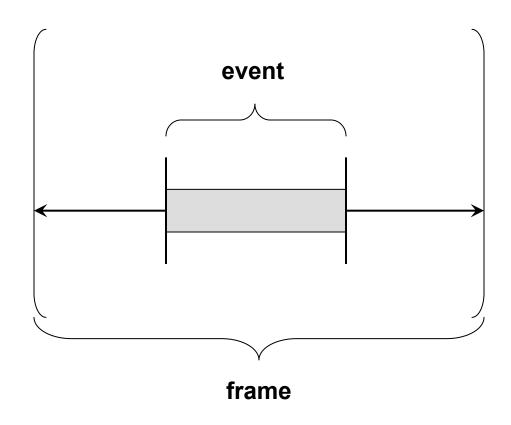


Gwenn is climbing Everest.



#### **Frames**

A "frame" is the temporal context
 the psychological "zoom lens"
 through which an event is
 understood to occur



#### **Frames**

- indicated by various factors pragmatics, adverbials, verbal arguments
- utterances with conflicting information are anomalous:
  - "Gwenn is climbing Everest on Tuesday."
- can be *manipulated* for the same event; ex. "slow motion"



# **Human Perception**

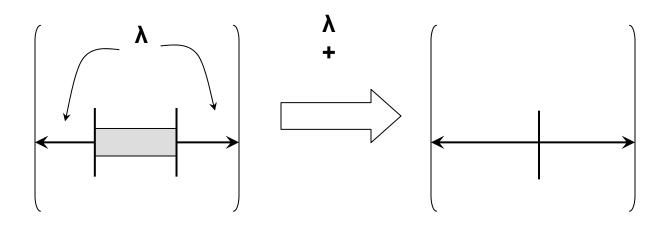
• We cannot resolve perceptual stimuli to an arbitrary degree of precision



- Visual, auditory, and haptic sensations converge as they become spatially or temporally closer
- Reasonable to believe
  the same is true of the
  perception of time and
  events particularly
  with regards to
  duration and
  punctuality

### **Dynamic Frames**

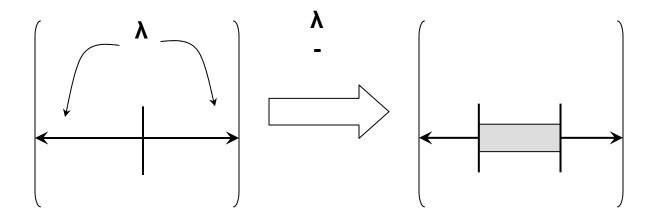
 Thus, the relationship between frame and event impact how the event is perceived



**Dilation:** As the frame expands, λ increases, the duration of the perceived event decreases – a durative event becomes punctual



### **Dynamic Frames**



**Contraction:** As the frame contracts, λ decreases, the duration of the perceived event increases – a punctual event becomes durative



# Application: Semelfactives

Vendler's Classification of Verbs:

State: Gwenn lives in Nepal.

Activity: Gwenn is running.

Accomplishment: Gwenn ate an apple.

**Achievement: Gwenn reached the** 

summit.

fails to characterize the difference between two types of punctual verbs: achievements (The train is arriving) and semelfactives (Gwenn is knocking on the door).



# Application: Semelfactives

- Slow motion "knock"
  - indistinguishable from an accomplishment
  - difference is in relationship of the event to the frame
- Habits: "I'm eating apples everyday."
  - dilates frame until "eat an apple" is punctual
  - *be-ing* inherently requires *duration* unmarked solution in combination with punctuals is iterativity.

Thus semelfactives are nonprototypical accomplishments; Vendler's system is sufficient.

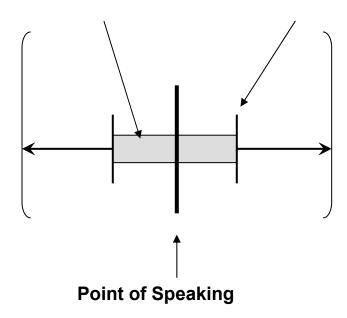


"The plane is landing."



durative interval required by be-ing

Event of "landing" (punctual achievement)

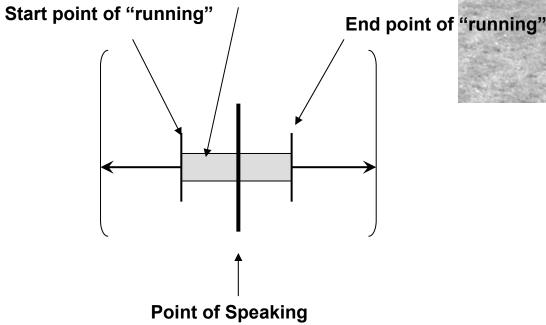


Prototypical case of achievement + be-ing



"Gwenn is running (right now)"

durative interval required by be-ing





Prototypical case of activity/accomplishment + be-ing

**Dynamic Frames in Event Structure** 

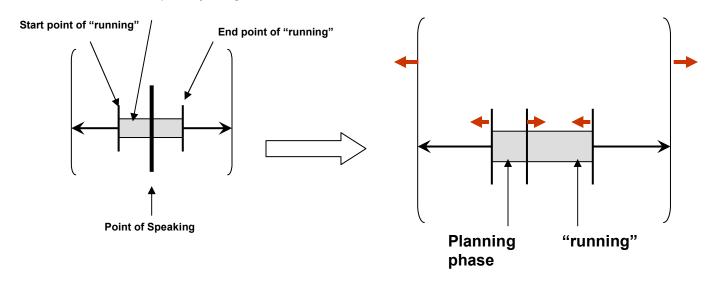
INDIANA UNIVERSITY

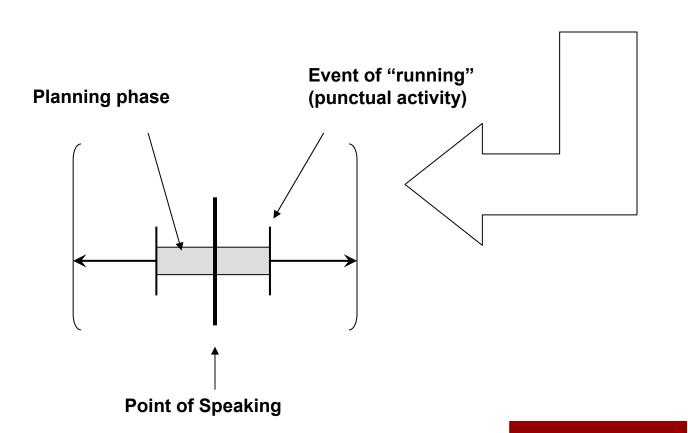
"Gwenn is running tomorrow"

- addition of a "planning phase"
- dilates the frame
- "running" becomes punctual
- new construction looks like achievement + be-ing



durative interval required by be-ing





INDIANA UNIVERSITY

#### **Conclusion**

Drawing on facts of human perception we can introduce the concept of a "dynamic frame" in analyzing event structure.

Doing so allows us to simply characterize at least two non-transparent phenomena in English: semelfactives and the futurate interpretation of *be-ing*.

