

## Between states and events

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A view from Romance

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# This talk

- ① **Aspectually hybrid predicates** at the lexical level
  - Hybrid states: some (but not other) stative properties
  - Hybrid events: some (but not other) eventive properties
  - Eventivity/stativity as multidimensional concepts
- ② **Deriving events from states** at the sentence/discourse level
  - Perfective states (with or without adverbials)
- ③ **Against inceptive states** as a basic eventuality type

based on [Gehrke and Martin](#) (in preparation)

# Aspectually hybrid predicates

Stativity/eventivity as a multidimensional concept  
(also: agentivity)

## Received view: Properties of states (vs. events)

(e.g. diagnostics in Vendler, 1957; Dowty, 1979; Rothstein, 2004; Maienborn, 2005)

- **Lack dynamicity:** Incompatibility with progressive aspect (1-a) [V]
  - **Lack control / agentivity / intentionality**
    - Incompatibility with *deliberately, carefully* (1-b) [V]
    - Cannot occur as complements of *force, persuade* (1-c) [R]
    - Cannot occur in imperatives (1-d) [R]
    - Cannot occur in pseudo-cleft *do*-constructions (1-e) [D]
  - **Cannot be perceived:** No embedding in perception reports (1-f) [M]
- (1)
- a. #I am knowing/loving Czech.
  - b. #I know/love Czech deliberately.
  - c. #Mila persuaded Shakuntala to know/love Czech.
  - d. #Know/love Czech!
  - e. #What Mila did was know/love Czech.
  - f. #I saw her knowing/loving Czech.

## Diagnostics via readings in specific contexts

- With states (unlike with events), the **simple present** does not (have to have) a habitual reading. [V]
  - **Epistemic readings of 'must'**:
    - Only with embedded states (2-a) (vs. (2-b)) (cf. Condoravdi, 2002)
    - Or with events in the progressive → DERIVED STATES (3)
- (2) a. Mila must know/love Czech.  
b. Mila must eat (garlic soup).
- (3) Mila must be eating (garlic soup).

# Problems with the diagnostics

- 1 Most of these tests are “non-stative tests”.
- 2 Not all events pass these tests, e.g. **achievements**: (cf. Vendler, 1957)
  - Incompatible with (or dispreferred in) the progressive
  - Some do not require a habitual reading in the simple present.
- 3 **Non-uniformity**:  
Not all states behave alike with respect to these diagnostics.  
NB also not if we divide them further into Davidsonian vs. Kimian states (cf. Maienborn, 2005), a distinction we set aside in this talk

# State and event as multidimensional concepts

- Precedent: Martin (2022); Joo et al. (2022) on **agentivity as a multidimensional concept** (in the sense of Sassoon, 2013)
    - Different agentivity tests pick up different agentive dimensions (effectivity, control, foreknowledge, volition).
    - Agentivity is scalar: The more agentive dimensions an event satisfies, the closer it is to the prototype of an action.
  - **This talk:** **Extension to eventivity/stativity**
    - Dimensions: transience, extendedness, change, energy (input)
    - The more eventive dimensions an eventuality satisfies, the closer it is to the prototype of an event.
- ⇒ **Heterogeneity in “hybrid” or “atypical” statives:**  
Satisfy different eventive dimension(s)

## Dimension #1: Transience

Typical events are transient/episodic, “prototypical states” are not.

- Transient states: **Stage-level predicates** [SLPs] (*be hungry*) (vs. individual-level predicates [ILPs]; *love Czech/be intelligent*)  
(e.g. Condoravdi, 1992; Kratzer, 1995)
- Transience alone does not suffice to license the **English progressive**:  
(4) #Marta is being hungry.



## Dimension #2: Extendedness

Events typically last more than one instant (truth with respect to intervals), “prototypical states” are true at any instant.

→ **Achievements** as atypical events (“event boundaries” in Piñón, 1997)

- Extended states: **Interval states** (e.g. *sit, stand, lie*) (Dowty, 1979) (Taylor 1977; Bach 1981, 1986: Static vs. dynamic states)
  - Only true at an interval, not at an instant
  - Allow for the English progressive (5-a)
  - Preferably receive a habitual reading in the simple present (5-b)
- (5)
  - a. Miranda is sitting/standing/lying on the couch (right now).
  - b. Miranda sits/stands/lies on the couch (#right now).
- Warglien et al. (2012):
  - Pure states denote degenerate vectors (identity vectors).
  - Predicates like *sit/stand/lie* have a “balancing” force vector.
- Treatments of such predicates as events (e.g. Copley and Harley, 2015)

# Interval states + progressive: Cross-linguistic variation

- **Extendedness does not suffice** for these predicates to license the progressive **in French** (6)  
(also not in Mandarin with e.g. *zuò* 'sit'; Paul and Yan 2024, 31, ex. (6b))

(6) #Le verre est en train de reposer sur la table.  
the glass is in TRAIN of rest.INF on the table  
Intended: 'The glass is resting on the table.'

## → Cross-linguistic variation

- In the tests: Different semantics of the progressive?
- In the semantics of the verbal predicates: no "real" posture verbs in French? (cf. Talmy, 2000)

## Dimension #3(a/b): Dynamicity (change / energy input)

Prototypical events are dynamic.

- Different definitions of dynamicity (cf. Copley, 2019)

e.g. via the notion of **change**

*The most basic aspectual distinction is whether or not an event[uality] in the denotation of the verb involves change, i.e., whether a verb is dynamic or stative.*

*(Rappaport Hovav, 2008, 16)*

*(see also Dowty, 1979)*

e.g. via the notion of **energy (input)**

*Events require a constant input of energy.*

*(Smith, 1997, 36)*

*(see also Aristotle)*

## Verbs of maintaining: States or events?

e.g. English *stay, remain*

- Compatible with the progressive
- With simple present only habitual, even with non-agentive subjects
- Describe forces → dynamic, eventive predicates (Copley and Harley, 2015; Copley, 2019)
- Stative for others: No change (e.g. Levin and Rappaport Hovav, 1995)

e.g. English, German 'float' (and similar) (Geuder and Weisgerber 2006, 136)

- Describe an "equilibrium of buoyancy and gravitational forces"
- Contrast to 'remain': "movement [i.e. change] can be freely added"

## Verbs of maintaining: French

- *rester* 'remain' + progressive only with agentive subjects (7) (Martin, 2008)  
→ "agentive states" ("controlled states" in Krifka 2012)

- (7) a. Je suis en train de rester sur un PC à lire des posts  
I am in TRAIN of stay.INF on a PC to read.INF INDEF.PL posts  
sur des forums de fous.  
on INDEF.PL forums of crazy.PL
- b. #L'autocollant ne veut pas partir, il est en train de rester sur  
the.sticker not wants NEG leave it is in TRAIN of stay.INF on  
le PC.  
the PC

- *flotter* 'float' + progressive also with non-agents:

- (8) Le verre est en train de flotter sur l'eau.  
the glass is in TRAIN of float.INF on the.water

→ The **French progressive** requires transience, extendedness, energy input, AND (potential) change (*float*) OR control (*stay*).

# Hybrid events

## Event predicates that instantiate some key stative dimension(s)

- **Emission verbs**, e.g. *radiate, hibernate, germinate* (Pross, 2020)
- *wait, sleep*
  - Behave like unergatives across languages with regard to tests of eventivity or agentivity (e.g. they pass the *do*-test, see Cruse 1973)
  - Maienborn (2005): are (Davidsonian) states, because they cannot serve as antecedents of 'to happen' (9)

- (9) a. Die Kerze flackerte. Das geschah während...  
 the candle flickered this happened while  
 'The candle flickered. This happened while...'
- b. Heidi schlief. #Das geschah während...  
 Heidi slept this happened while  
 'Heidi slept. This happened while...' (German)

→ It seems that 'happen' requires change; 'wait'/'sleep' involve energy input but no change, resembling states in this latter respect.

# Interim summary

- **Hybrid states** differ from each other by the eventive and/or agentive dimension they can instantiate.
  - “**Non-stative**” tests found across languages are sensitive to different (combinations of these) dimensions.
  - The more eventive/agentive dimensions a stative predicate instantiates, the more distant it is from “typical stateness”.

→ **The state vs. event distinction is not binary, but scalar.**

(see also Fábregas and Marín 2017, Copley 2019, Fábregas and Rodríguez 2020)

Q **Are hybrid predicates states or events?**

- Not a question one should ask if stativity/eventivity is scalar
- But if asked: Depends on whether some dimension or another is defined as a necessary and sufficient dimension for events or states

e.g. **Maienborn (2005)**: Change as a core dimension of events?

(if non-dynamicity is the source of the incompatibility with ‘happen’)

e.g. **Copley and Harley (2015)**: Energy input as a core dimension of events

## Interim summary

predicate	change?	energy?	transient?	extended?	controlled?
<i>intelligent</i>	X	X	X	X	X
<i>hungry</i>	X	X	✓	X	X
<i>find/lose</i>	✓	X	✓	X	X
<i>sleep/stand/stay<sub>¬ag</sub></i>	X	✓	✓	✓	X
<i>wait<sub>ag</sub>/stay<sub>ag</sub></i>	X	✓	✓	✓	✓
<i>float<sub>¬ag</sub></i>	✓	✓	✓	✓	X
<i>float<sub>ag</sub></i>	✓	✓	✓	✓	✓

Table 1: Hybrid states and events discussed so far



## Interim summary

construction	change	energy	transient	extended	controlled
English progressive			<input type="checkbox"/>	<input type="checkbox"/>	
English <i>do</i> -test		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
German <i>geschehen</i>	<input type="checkbox"/>		<input type="checkbox"/>		
French progressive	( <input type="checkbox"/> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	( <input type="checkbox"/> )
Russian delimitative <i>po</i> -			<input type="checkbox"/>	<input type="checkbox"/>	
Russian ingressive <i>za</i> -	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

Table 2: Diagnostics for eventive dimensions across languages

More in Gehrke and Martin (in preparation)  
(see appendix)

Russian verbal morphology: dimensions and different PFV readings

# Implications

- 5 dimensions: 32 logically possible combinations
- The following implications rule out but 9 of these combinations (resulting table on the next slide):
  - 1 extended  $\rightarrow$  transient
  - 2 controlled  $\rightarrow$  extended  
(from 1. and 2. it follows: controlled  $\rightarrow$  transient)
  - 3 energy  $\rightarrow$  extended  
(from 1. and 3. it follows: energy  $\rightarrow$  transient)
  - 4 change  $\rightarrow$  transient
  - 5 controlled  $\rightarrow$  (change  $\vee$  energy)

# State-event scale

predicate	change?	energy?	transient?	extended?	controlled?
<i>intelligent</i>	X	X	X	X	X
<i>hungry</i>	X	X	✓	X	X
<i>live</i>	X	X	✓	✓	X
<i>find/lose</i>	✓	X	✓	X	X
<i>sleep/stand/stay<sub>¬ag</sub></i>	X	✓	✓	✓	X
<i>decay/fall?</i>	✓	X	✓	✓	X
<i>wait<sub>ag</sub>/stay<sub>ag</sub></i>	X	✓	✓	✓	✓
<i>float<sub>¬ag</sub></i>	✓	✓	✓	✓	X
<i>float<sub>ag</sub></i>	✓	✓	✓	✓	✓

**Table 3:** All logical options, after ruling out the ones that do not comply with the implications above

# Formal analysis (building on Joo et al. 2022)

- Definition of  $D$  as an eventive dimension:

$$(10) \quad \lambda D.\mathbf{dimension}(D, \lambda v.\mathbf{event}(v))$$

- The eventive dimensions:

$$(11) \quad \forall D(\mathbf{dimension}(D, \lambda v.\mathbf{event}(v)) \leftrightarrow \\ D = \lambda v.\mathbf{extended}(v) \vee D = \lambda v.\mathbf{transient}(v) \\ \vee D = \lambda v.\mathbf{controlled}(v) \vee D = \lambda v.\mathbf{change}(v) \\ \vee D = \lambda v.\mathbf{energetic}(v))$$

- **cardinality** counts the elements of a set of one-place relations:

$$(12) \quad \lambda \mathcal{R}.\mathbf{cardinality}(\mathcal{R})$$

- Application of **cardinality** to (10), given (11), yields the value 5:

$$(13) \quad [\lambda \mathcal{R}.\mathbf{cardinality}(\mathcal{R})](\lambda D.\mathbf{dimension}(D, \lambda v.\mathbf{event}(v))) = \\ \mathbf{cardinality}(\lambda \mathcal{R}.\mathbf{dimension}(D, \lambda v.\mathbf{event}(v))) = 5$$

# Formal analysis (building on Joo et al. 2022)

- Function **eventive** from events to degrees (see below):

$$(14) \quad \lambda v.\mathbf{eventive}(v)$$

- The value of this function for an eventuality  $v$  is identical to the number of eventive dimensions for  $v$  (see the counting-dimension function encoded by multidimensional predicates in [Sassoon and Fadlon 2017](#)):

$$(15) \quad \forall v(\mathbf{eventive}(v) = d \leftrightarrow \mathbf{cardinality}(\lambda D.\mathbf{dimension}(D, \lambda v'.\mathbf{event}(v')) \wedge D(v)) = d)$$

**eventive** is gradable  $\rightarrow$  “**eventive**( $v$ ) > **eventive**( $v'$ )” is meaningful (e.g., a sleeping eventuality is more eventive than a living eventuality)

- Dynamicity (either change or energy) as the key dimension for events:

$$(16) \quad \forall v(\mathbf{event}(v) \rightarrow \mathbf{energetic}(v) \vee \mathbf{change}(v))$$

(Any ‘event’ is characterised either by the dimension of change or by the dimension of energy)

# Deriving events from states

via perfectivity (and temporal adverbials)

## Derived events and states

- Effects of grammatical aspects and/or temporal adverbials
  - **Reinterpretation/coercion** (depending on the context and/or verb type: iterative/habitual/inceptive/ingressive/delimited/additive etc.)  
(see, e.g., Moens and Steedman, 1988; de Swart, 1998; Rothstein, 2004; Bott, 2013; Dölling, 2014)
  
- (17)
  - Sue played the sonata for about eight hours.
  - Nikki Lauda won the Monaco Grand Prix for several years.
  - #Red Rum won the race for the first few minutes. [M&S]
  
- (18)
  - John ran in a few minutes. [dS]
  - The program ran in four minutes. [dS]
  - She {found the key / won the race} in ten seconds. [R]
  
- Analyses of **PROG as a stativiser** (e.g. Asher 1993; de Swart 1998)  
We set this aside and focus on events derived from states via perfectivity.



## Derived events due to perfectivity

e.g. French (19) (de Swart, 1998): Reinterpretation of a state as **inceptive** [“inchoative”], triggered by *soudain* ‘suddenly’ + *passé simple*

- (19) a. (Soudain,) Jeanne sut la réponse.  
 suddenly Jeanne know.PS the answer  
 ‘(Suddenly,) Jeanne knew the answer.’  
 b. [PAST [ $C_{he}$  [Jeanne know the answer]]]

- **Our take on this:** The basic type is (and remains) a state.
  - Inceptivity is a result of perfectivity+‘suddenly’ → a perfective state that is interpreted as inceptive in the context of ‘suddenly’
  - Without ‘suddenly’, the sentence would mean that Jeanne *said* the answer (actualistic interpretation).

*In the following, we switch to the passé composé: (in certain contexts) it took over the PFV function from the passé simple, which is confined to the formal/written register.*

## Derived eventivity due to perfectivity: Actuality inferences

- **Actuality inference** with (stative) root modal + PFV (Bhatt 1999, Hacquard 2010); e.g. French *imparfait* (20-a) vs. *passé composé* (20-b)

- (20) a. Soumia pouvait soulever le frigo, mais elle ne l'a  
 Soumia can.IMPF lift the fridge but she NEG it.has  
 pas fait.  
 NEG done  
 'Soumia could lift the fridge, but she did not do it.'
- b. Soumia a pu soulever le frigo, #mais elle ne l'a  
 Soumia has could lift the fridge but she NEG it.has  
 pas fait.  
 NEG done

- **Mari and Martin (2007)**: actuality inference due to **clash between stativity** of root modal and *passé composé* semantics (needs a bounded eventuality; cf. de Swart 1998 on the *passé simple*)  
 NB: Same actuality inference with the *passé simple* (Mari and Martin, 2007)

## Actuality inferences

- **Coercion account** in [Homer \(2021\)](#) (21):
    - In the absence of any temporal adverbial, coercion must be actualistic.
    - Covert operator ACT (brings in an event actualising the modal state)
- (21) a. Soumia a pu soulever le frigo.  
           Soumia has could lift the fridge  
           ‘Soumia could lift the fridge.’
- b. [ PAST [ ACT [pouvoir [Soumia lift the fridge]]]] (*simplified*)
- Extension to event inference with non-modal statives like *coûter* ‘cost’  
 + *passé composé* (discussed in [Hacquard 2006, 19](#)):
- (22) Le pull a coûté trois euros.  
        the pullover has costed three euros  
        ‘The pullover costed three euros.’  
        ↗ The pullover was bought.
- **Aspectually hybrid statement:**  
 (21) asserts the existence of an event *e* of Soumia lifting a fridge, such that *e* is simultaneous with some state of Soumia being able to lift a fridge.

# Actuality inferences

- **Weakening of actuality inference** with *pendant un certain temps* ‘for a certain time’ (Mari and Martin 2007, Homer 2021):

(23) Soumia a pu soulever le frigo pendant un certain temps,  
 Soumia has could lift the fridge for a certain time  
 mais elle ne l'a pas fait.  
 but she NEG it.has NEG done

- Account in Homer (2021):
  - Adverbials trigger different kinds of repair to the mismatch between *passé composé* and modal stative, avoiding the actuality inference
    - e.g. MAX with ‘for a certain time’
    - e.g. INCH [inceptive] with ‘suddenly’
- **Only partial experimental support** (Martin et al., 2021)
  - Actuality entailment is weakened with ‘for some time’.
  - Unclear whether same effect with ‘suddenly’ or ‘several times’

## Further actuality inferences (or not)

- Event inference + *passé composé*:
  - **Attitude verbs**, e.g. *savoir* 'know' without 'suddenly' (→ 'said')
  - **Behaviour-related adjectives** (24) (cf. Smith 1997, Martin 2008)

(24) Ce matin, Khadija a été intelligente.  
 this morning Khadija has been clever  
 'This morning, Khadija was clever.'  
 ↪ Khadija did something clever.

**BUT not with 'live'** (25) (despite the absence of a temporal adverbial)

(25) Le peintre Henri Matisse a vécu à Nice.  
 the painter Henri Matisse has lived in Nice  
 'The painter Henri Matisse lived in Nice.'

→ 'live' is **transient**, **extended**: perfectivity can operate on these eventive dimensions alone (no need for coercion)

## More in the appendix

Deriving {events from / eventivity with} states  
via progressivity

via covert events (relative readings of behaviour-related adjectives;  
pancake sentences)

Against “inceptive states”  
as a basic eventuality type

# Inceptive states as a basic eventuality type?

- **Inceptive states** (term: Tatevosov 2002) describe a state and its onset.
- Suggestion to add a new basic event type (under different labels):
  - Salish “**inchoative states**”
    - Skwxwú7mesh (Bar-El, 2003)
    - SENĆOTEN (Kiyota, 2008)
    - Saanich (Turner, 2011)
  - Korean “**inchoative states**” (Choi, 2015a,b)
  - (Some) Spanish psych predicates
    - Marín and McNally (2011): “**inchoative state**”
    - Machicao y Priemer and Fritz-Huechante (2020): “**inceptive state**”
  - Polish psych predicates: “**initial boundary events**” (Rozwadowska, 2020)
  - al-bāḥah Arabic psych predicates: “**inceptive events**” (Alghamdi, 2022)



# Inceptives as derived events

- **Inceptive states are not a basic event type.**
  - Inceptive readings arise as a result of perfective semantics in most of the languages discussed (except for Spanish). (recall French 'know')
  - Effect of perfectivity with inceptives: adds an initial bound to an otherwise unbounded state
- **The inceptive reading is derived.**
- **Similar claims in the literature:**
  - Doubts about additional class of inceptive states: [Davis \(2011, 39\)](#), [Lyon \(2023, 263\)](#)
  - Lithuanian inceptive states, derived by prefixes from more basic types (processual, stative, multiplicative, punctual, strong telic, weak telic): [Arkadiev \(2011\)](#)

# Marín and McNally (2011)

- Spanish reflexive psych verbs (SRPVs)
  - Inceptive interpretation independent of aspect
  - Inceptive due to *se* (aspectual delimiter in Zagona, 1996)

## Two subtypes (26):

- *enfadarse*: non-telic achievements (event boundaries, Piñón, 1997)
  - Their understanding of telicity: ending-oriented
- *aburrirse*: inceptive states

(based on diagnostics for telicity, dynamicity, stativity, inceptiveness)

- (26) a. *enfadarse*:  $\lambda x \lambda e \exists e' [\mathbf{Beg}(e, e', \lambda e'' [\mathbf{angry}(e'', x)])]$
- b. *aburrirse*:  
 $\lambda x \lambda e \exists e', e'' [\mathbf{Beg}(e', e'', \lambda e''' [\mathbf{bored}(e''', x)])] \wedge e = (e'' \oplus e')$

# Our alternative proposal for SRPVs

- *aburrirse*-class: hybrid activities (activities with some stative dimensions)
  - Effector with no or limited control
  - *se* is semantically reflexive (not an aspectual delimiter) (see also Campanini and Schäfer, 2011; Martin and Arunachalam, 2022)→ The subject's referent is both a “weak” effector and an experiencer.
- *enfadarse*-class: achievements (i.e. instantaneous changes-of-states)
- *Telicity* does not require endings (final bounds), but just a transition/change of state.

## M&McN's claims about “aburrirse”

- ① SRPVs are inceptive (27-a), unlike stative passives (27-b).

- (27) a. Los estudiantes se aburrían en clase hace unos días.  
 the students REFL bore.3PL.IMPf in class since some days  
 ‘The students got bored in class a few days ago.’
- b. Los estudiantes estaban aburridos en clase hace unos días.  
 the students be.3PL.IMPf bored in class since some days  
 ‘The students were bored in class a few days ago.’

- ② Ongoing interpretation with simple present (contrast *enfadarse*: habitual):

- (28) Con su hermana pequeña se aburre.  
 with REFLPOSS sister small SE bores  
 ‘With his/her little sister he/she is bored (now).’

- ③ ‘already’-interpretation with the progressive (contrast *enfadarse*: ‘not yet’):

- (29) Juan se está aburriendo.  
 Juan SE is boring  
 ‘Juan is (already) bored.’

## Our proposal: “aburrirse”-class as hybrid activities

- **Stative passive**: copula + adjectivised participle (impossibility of inceptive interpretation: inceptivity requires verbal structure?)
- *aburrirse* behaves like (some) activities
  - can appear in the pseudo-cleft construction (30)
  - Hybrid activities like ‘sleep’ also allow ongoing interpretation in the simple present (31) (unlike, e.g., ‘read’).
  - Activities generally get an ‘already’-interpretation in the progressive (32) (cf. progressive test for telicity in [Dowty 1979](#)).

(30) Lo que hago es {aburrirme / #estar aburrido}.  
 what do.PRS.1SG is bored.REFL be bored  
 ‘What I am doing is getting bored.’

(31) Julia duerme.  
 Julia sleeps  
 (possibly interpretation) ‘Julio is sleeping.’

(32) Abeni was pushing the cart. → Abeni pushed the cart.

## M&McN's claims about SRPVs (both classes)

### 4 Both types of SRPVs lack dynamicity:

- (33) a. \*Juan se {aburre / enfada} lentamente.  
 Juan SE bores      angers slowly  
 Intended: 'Juan is/gets bored/angry slowly.'
- b. \*Ha parado de {aburrirse / enfadarse}.  
 has stopped of bore.SE      anger.SE  
 Intended: 'He/She has stopped being/getting bored/angry.'

### 5 Both types of SRPVs are atelic:

- (34) a. Se {aburrió / enfadó} {durante / \*en} toda la tarde.  
 REFL bored      angered during      in all the afternoon  
 'He/She was bored (continuously) / angry (repeatedly) the whole afternoon.'
- b. \*Ha terminado de {aburrirse / enfadarse}.  
 has finished of bore.SE      anger.SE  
 Intended: 'He/She finished being/getting bored/angry.'

## Both claims are problematic.

- Their dynamicity tests only shows that both SRPV types lack control.
  - *aburrirse* behaves like an uncontrollable activity, e.g. 'sleep' (#*sleep slowly*): out-of-control effector  
[also: plenty of google hits for *parar+aburrirse*]
  - *enfadarse*: lack of control + lack of duration (like other achievements)
- Issues with their understanding of telicity (as requiring final bounds, instead of changes of states)
- Issues with the application of the telicity tests

## Issue #1: 'in'-adverbials

- ① 'In'-adverbials are not sensitive to endings of an eventuality, but (more broadly) to the presence of a **bound** (transition/change of state)
  - This is not an appropriate test for telicity under their definition (reference to endings), but for transitions more generally (and maybe this is what telicity is about in any case).
- ② The 'in'-adverbial they employ is bad also with (English) achievements (35-a), whereas others are fine (35-b) (adds a preparatory process)

- (35) a. ???She {found the key / won the race} in the whole afternoon.  
 b. She {found the key / won the race} in ten seconds.

... as they show themselves for Spanish (37)

- (36) a. Las puertas se abrieron en un instante.  
 the doors REFL opened in an instant  
 'The doors opened in an instant.' (after M&McN: 476)



## Issue #1: 'in'-adverbials

- With the “right” adverbials + PFV (*indefinido*):
  - *enfadarse* patterns with telic predicates (37-a)
  - *aburrirse* needs an 'in'-adverbial that indicates a longer duration, but then it is also acceptable (37-b)

- (37) a. Se enfadó en un instante.  
REFL angered in a/one moment  
'She got angry in an instant.'
- b. Se aburrizó en {#un instante / cinco minutos}.  
REFL bored in a/one moment five minutes  
(Intended:) 'She got bored in {an instant / five minutes}.'

- This might be unexpected if *aburrirse* is an activity.  
Assumption: The 'in'-adverbial is acceptable due to perfectivity.

## Issue #2: Different readings with 'for'-adverbials

- *aburrirse*: the state of being bored extends over the duration indicated by the temporal adverbial (typical reading with atelic activities)
- *enfadarse*: repetition of getting angry during that time
  - Iterative reinterpretation (common for telic predicates + *for*-adverbials)

(38) Se {aburrió / enfadó} durante toda la tarde.  
 REFL bored      angered during all the afternoon  
 'He/She was bored (continuously) / angry (repeatedly) the whole  
 afternoon.' (after M&McN: 476)

## Issue #3: 'finish'-test

- Additional requirement: **extendedness**  
[as they note themselves in fn. 11]
- Non-extended achievements are also incompatible with 'finish' (39-a), as opposed to (more) extended ones [possibly + additive coercion] (39-b).

- (39) a. #She finished finding/to find the key.  
b. When she finished finding the planet she pressed a button and sent it to the autopilot. (Internet)

→ The 'finish'-test diagnoses **telicity+extendedness**, not just telicity.

## More in Gehrke and Martin (in preparation) (or in the appendix)

Polish psych predicates:

Also no good arguments for inceptive states

Stative uses of event predicates

e.g. extent readings: atemporal paths vs. fictive motion

e.g. French and Catalan colour verbs

# Conclusion

# Summary

## ① Stativity/eventivity as multidimensional concepts

Eventive dimensions: transience, extendedness, change, energy input  
(+ agentive dimension: control)

## ② Events derived from states

via perfectivity (and temporal adverbials)

## ③ Inceptive states are derived in perfective contexts, or lexically hybrid activities (instantiating some but not all eventive properties).

## • More general claims in Gehrke and Martin (in preparation):

- Combining semantic perfectivity with states gives rise to different perfective meanings (e.g. inceptive, temporally bounded), depending on the dimensions that the stative predicate brings to the table.
- Various dimensions are relevant for a predicate to find its spot on the scale between stativity and eventivity.
- Grammatical aspect is sensitive to this as well, with many points of (subtle) variation across languages.

Gràcies!

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# Derived eventivity + PFV: Russian

Background: **Aspectual pairs in Russian** (e.g. Isačenko, 1962)

- (40)
- |    |  |                            |
|----|--|----------------------------|
| a. | PFV <i>priglasit'</i> > IPFV <i>priglašat'</i> | 'to invite'                |
| b. | PFV <i>ubit'</i> > IPFV <i>ubivat'</i>         | 'to kill'                  |
| c. | PFV <i>uznat'</i> > IPFV <i>uznavat'</i>       | 'to get to know, find out' |
| d. | PFV <i>dat'</i> > IPFV <i>davat'</i>           | 'to give'                  |
| e. | IPFV <i>kazat'sja</i> > PFV <i>pokazat'sja</i> | 'to seem'                  |
| f. | IPFV <i>videt'</i> > PFV <i>uvidet'</i>        | 'to see, catch sight'      |

## Some generalisations on Russian

- **Simple IPFVs** (non-prefixed/suffixed)
  - Express a non-bounded event type (state, activity) or variable telicity (incremental verbs, degree achievements)
  - Affixes can provide particular bounds for these (temporal initial or final bounds, or both; resultativity)
- **Different stative predicates** behave differently with respect to the perfectivising prefixes they are compatible with, which in turn gives rise to different perfective meanings they acquire in these cases (e.g. inceptive state, temporal boundedness).
- **Our claim:** Restrictions on the types of PFV readings we get relate to different dimensions of eventivity/stativity.
  - PFV states and activities as derived events (also lead to narrative progression in discourse; see, e.g., [Gehrke 2022](#))



## Some generalisations on Russian

- Not all lexical meanings come in aspectual pairs.
  - Most states and activities (or predicates under an activity reading, e.g. (41-b)) are traditionally assumed to be imperfectiva tantum.
  - Imperfectiva tantum can be perfectivised by particular prefixes (which derive perfectiva tantum), e.g. (41-b).

- (41)
- |    |  |                         |
|----|--|-------------------------|
| a. | IPFV <i>pisat'</i> <i>pis'mo</i> > PFV <i>napisat'</i> <i>pis'mo</i> | 'to write a/the letter' |
| b. | IPFV. TANTUM intransitive <i>pisat'</i>                              | 'to write'              |
| c. | DELIMITATIVE PFV. TANTUM <i>popisat'</i>                             | 'to write for a while'  |

### Our focus here:

- Ingressive *za-*: adds an initial bound to a process
- Delimitative *po-*: adds temporal bounds to temporally unbounded eventualities

(others: perdurative, egressive, evolutive, semelfactive, saturative, distributive ...)

(cf. Isačenko, 1962)

## Russian posture verbs

- Posture verbs pattern with activities in one respect: Can be temporally bounded by **delimitative *po-*** (42)

- (42) a. Ona {po-stojala / po-sidela / po-ležala} tam  
 she PO-stood.PFV PO-sat.PFV PO-lay.PFV there  
 (neskol'ko vremeni).  
 some time  
 'She stood/sat/lay there (for some time).'
- b. Ona {po-pela / po-plakala / po-kričala}  
 she PO-sang.PFV PO-cried.PFV PO-shouted.PFV  
 (neskol'ko vremeni).  
 some time  
 'She sang/cried/shouted (for some time).'

→ **Relevant dimensions for *po-***: Extendedness, transience (but crucially no definite change: homogeneous input requirement)

## Russian posture verbs

- Posture verbs do not pattern with activities in another respect:  
Cannot combine with **ingressive za-** (43)

- (43) a. Ona vošla v komnatu i {za-pela / za-plakala/  
she in.walked in room.ACC and ZA-sang.PFV ZA-cried.PFV  
za-kričala}.  
ZA-shout.PFV  
'She entered the room and started to sing/cry/shout.'
- b. \*Ona vošla v komnatu i {za-stojala / za-sidela/  
she in.walked in room.ACC and ZA-stood.PFV ZA-sat.PFV  
za-ležala} tam.  
ZA-lay.PFV there

→ **Relevant dimensions for za-**: Extendedness, transience, change

# Hybrid states/events we talked about I

- *ždat'* 'wait' and *spat'* 'sleep'
    - IPFV tantum
    - compatible with delimitative *po-* → ✓extendedness, ✓transience
    - incompatible with ingressive *za-* → ✗change
      - There is no *zaždat'*
      - *zas(y)pat'* is a different lexical item ('fall asleep') in an aspectual pair
  
  - *plavat'* 'float' and *žit'* 'live'
    - IPFV tantum
    - compatible with delimitative *po-* → ✓extendedness, ✓transience
    - compatible with ingressive *za-* → ✓change
- BUT *za-* + 'live': colloq. 'to begin to live a quiet life', not many examples  
 → 'live' is rather like 'wait', 'sleep'?

## Hybrid states/events we talked about II

- *stoit'* 'cost' and *izlučat'* 'radiate'
    - IPFV tantum
    - incompatible with delimitative *po-* → ✗extendedness, ✗transience
    - incompatible with ingressive *za-* → ✗change
- BUT** Unexpected with 'radiate' (feels more eventive)
- There is already a prefix (*iz-*, to derive a verb from *luč'* 'light'), and this might be the problem (not semantics).

## Hybrid states/events we talked about III

- *osta(va)t'sja* 'stay, remain': Aspectual pair (PFV is the basic form)  
→ Suggests that they are lexically eventive
- Russian also has a bunch of (basic) PFV **copula-like verbs** (in aspectual pairs), used in contexts where it needs PFV + 'be'
  - *okaz(yv)at'sja* 'turn out to be'
  - *sta(va)t'* 'become'
  - *javit'sja/javljat'sja* 'appear'
  - maybe also *pokaz(yv)at'sja* 'seem' (aspectual triplet with *kazat'sja*)
  - ...

contra, e.g., Czech 'be' (Gehrke, 2002)

(Setting aside SLPs, evaluative As because there are other issues: long/short form etc.)

## Inceptive [inchoative] coercion in Russian?

(Suddenly, Jeanne knew the answer)

- Not with *znat'* 'know', but **switch to a different lexical item**, which comes in an aspectual pair: *uzna(va)t'* 'find out, get to know' (44)

(44) Vnezapno Žanna uznala otvet.  
 suddenly Žanna found.out.PFV answer

## Some more on Russian prefixes (polysemy)

- (Non-agentive) perception verbs are traditionally assumed to form aspectual pairs: *u-* signals an inceptive state (45)
 

(45) a. IPFV *videt'* > PFV *uvidet'* 'to see, catch sight'  
 b. IPFV *slyšat'* > PFV *uslyšat'* 'to hear'

(e.g. almost no secondary IPFVs: *??uvidyvat'*/*??uslyšivat'*; cf. Janda et al. 2013)
- But 'know' is traditionally assumed to be an ipfv. tantum:
 

(46) a. IPFV. TANTUM *znat'* 'to know'  
 b. PFV *uznat'* > IPFV *uznavat'* 'to get to know, find out'
- Related agentive pairs with *po-*:
 

(47) a. IPFV *smotret'* > PFV *posmotret'* 'to watch'  
 b. IPFV *slušat'* > PFV *poslušat'* 'to listen'
- Yet, *po-* can also seemingly derive an inceptive state:
 

(48) IPFV *kazat'sja* > PFV *pokazat'sja* 'to seem'
- Psych verbs ... (see below)



# Actuality inferences in Russian

- (49) a. Sumija mogla podnjat' xolodil'nik, no ne sdelala ètogo.  
 Soumia could.IPFV lift.INF.PFV fridge but not did.PFV this  
 'Soumia could lift the fridge but didn't.'
- b. Sumija smogla podnjat' xolodil'nik, #no ne sdelala ètogo.  
 Soumia could.PFV lift.INF.PFV fridge but not did.PFV this
- (50) a. Dvigatel' mog zapustit'sja.  
 motor could.IPFV start.INF.PFV  
 'The motor could (had the potential to) start.'
- b. Dvigatel' smog zapustit'sja.  
 motor could.PFV start.INF.PFV  
 'The motor could start (and did so).'

(see also [Zuchewicz 2020](#) on PFV clause-embedding verbs in Polish)

## Rozwadowska (2020) on Polish

- **IPFV accomplishments and achievements** are compatible with the negation of their PFV counterparts ( $\sim$  started but did not finish):

- (51) a. On pisał list, ale go nie napisał.  
 he wrote.IPFV letter.ACC but it.ACC not wrote.PFV  
 'He was writing a letter, but he did not write it.'
- b. Marek wygrywał mecz, ale go nie wygrał.  
 Marek.NOM won.IPFV match.ACC but it not won.IPFV  
 'Marek was winning the match but he did not win it.'

- **PFV psych verbs** do not pattern with ACCs/ACHs in this respect:

- (52) #Składnia fascynowała Janek, ale go nie  
 syntax.NOM fascinated.IPFV Janek.ACC but him no  
 za-fascynowała.  
 ZA-fascinated.PFV  
 Intended: 'Syntax fascinated (ipfv) Janek but it did not fascinate  
 (pfv) him.'

# Polish psych predicates (Rozwadowska, 2020)

- IPFV/PFV psych verbs are **true aspectual pairs**: No secondary IPFVs (53) (independent of subject/object experiencer verbs, and which prefix)

- (53)
- |    |   |                 |
|----|---|-----------------|
| a. | ipfv. <i>fascynować</i> > pfv. <i>za-fascynować</i> | 'to fascinate'  |
|    | > * <i>za-fascynow-yw-ać</i>                        |                 |
| b. | ipfv. <i>kochać</i> > pfv. <i>po-kochać</i>         | 'to love'       |
|    | > ipfv. * <i>po-koch-iw-ać</i>                      |                 |
| c. | ipfv. <i>dziwić</i> > pfv. <i>zdziwić</i>           | 'to surprise'   |
|    | > ipfv. * <i>zdziwiać</i>                           |                 |
| d. | ipfv. <i>cieszyć</i> > pfv. <i>u-cieszyć</i>        | 'to make happy' |
|    | > ipfv. * <i>u-ciesz-a-ć</i>                        |                 |

- **Inceptive states with atelic PFVs**  
(reference to beginnings, not to endings; but see above)

## Alternative proposal

- *z(a)-* (e.g. (53-a/c)): most common and quite productive “empty” prefix in Polish (to derive an aspectual pair), even found with states (see discussion in Młynarczyk, 2004)

NB this is probably different from Russian ingressive *za-* (requires transience, extendedness, change)

- Other prefixes in (53):
  - *u-* as a common indicator of inceptive meaning (recall Ru. ‘see’, ‘hear’)
  - *po-* can also sometimes mark inceptivity or ingressivity (see also Russian *po-ljubit’* ‘to fall in love’, *pojti* ‘start walking (directed)’)

→ The inceptive interpretation arises as a result of perfectivity and its interaction with the dimensions it can operate on.

## More generally: Different meaning effects of PFV

- If a PFV is morphologically derived from a simple IPFV (in RU, PO ...) it still needs to operate on the dimensions provided by its input.
  - PFV with stative psych predicates: inceptive meaning
  - PFV with “homogeneous” states (term: Kiyota, 2008) get different “bounded” interpretations  
e.g. posture states: delimited (temporally bounded on both sides)
  - Activities: delimitative, ingressive, egressive ...
  - “Multiplicatives” (e.g. ‘knock’, ‘jump’ ...): one-time (semelfactive suffix, e.g. Russian *-nu*, as a singulative marker)
  - Variable telicity (e.g. incremental verbs, degree achievements): resultativity via “empty” prefixes
  - ...
- “True” aspectual pairs with accomplishments and achievements (and only here PFV coincides with telicity).

(see also Młynarczyk, 2004, for detailed discussion of a classification of Polish verbs based on the affixes they can combine with)

## Derived eventivity due to progressivity

- English progressive + copula *be* + (some) stative predicates  
 → “agentive” *be* (54) (from Prysłowska, 2023, 53) (see also Goldsmith and Woisetschlaeger 1982, de Swart 1998, Zucchi 1998, Fernald 1999)  
 adds an intentional action, simultaneous to adjectival state  
 (54) He was being {nice / \*hungry}.
- The subject of agentive *be* must be an intentional agent (55)  
 No agentive coercion with instruments like ‘motor’ (from Zucchi, 1998),  
 which otherwise can access the agentive dimension “effectivity” (van Valin  
 and Wilkins, 1996; Alexiadou and Schäfer, 2006; Wolff et al., 2009)  
 (55) {John / \*The motor} was being noisy.
- Contrast: *pouvoir* allows ACT coercion with inanimate agents (56)  
 (56) Le moteur a pu démarrer.  
 the motor has could start.INF  
 ‘The motor could start.’  
 ↗ The motor started.

# Behaviour-related adjectives

- e.g. *clever, stupid, generous* (Barker, 2002)
  - Absolute use (57-a): Feynman is ascribed the disposition to behave stupidly.
  - Relative use (57-b): Feynman's stupidity is restricted to his involvement in a specific action.

- (57)     a.    Feynman is/was stupid.  
          b.    Feynman is/was stupid to dance like that.

- **Different labels:**
  - Propensity adjectives (Oshima 2009)
  - Behaviour-related adjectives (Martin et al. 2020)
  - Dispositional evaluative adjectives (Demonte 2019)
  - Evaluative adjectives (Fábregas et al. 2013, Tonhauser et al. 2020)

# Behaviour-related adjectives

- Marín (2010): “dynamic adjectives” (cf. Quirk, 1972) under relative use
  - Embeddable in perception reports, compatible with the progressive (see also Arche, 2006)
- Denote (agentive) events rather than states
- Arguments against this account (Fábregas et al., 2013; Martin, 2015)
  - e.g. Under the relative reading, the predicate does not have to be stage-level (unexpected if eventive).



## Behaviour-related adjectives, e.g. French

- ‘be a highly intelligent man’ + *passé composé*: lifetime effects → ILP  
No lifetime effects with ‘be intelligent/clever’

- (58) a. Jamal a été un homme d'une grande intelligence.  
Jamal has been a man of a great intelligence  
'Jamal was a highly intelligent man.'      ~→ Jamal is dead.
- b. Jamal a été très intelligent.  
Jamal has been very intelligent  
'Jamal was very intelligent.'      ↯→ Jamal is dead.

- Yet, a relative use is felicitous with this ILP:

- (59) Jamal est un homme d'une grande intelligence d'avoir fait un backup de son téléphone.  
Jamal is a man of a great intelligence to have made a backup of his phone  
‘Jamal is a highly intelligent man to have made a backup of his phone.’

# Behaviour-related adjectives

- Fábregas et al. (2013)
  - Under the relative reading, the subject does not refer to the individual itself but to an event involving him.
  - The adjective (an ILP) predicates a property of this covert event.
- Martin (2015): “Manifest” relation between the state of stupidity and the event described in the infinitive.
- Piñón (2016)
  - The infinitive expresses a property denoting a type of behaviour  $B$ .
  - The adjective is predicated of  $B$ .
  - $B$  can be explicit (as in the examples above) or remain implicit.

- (60) a. Lexical core of *generous*: (Piñón 2016)  
 $\lambda B.$ **generous** $(\lambda e.B(e))$  (behaviour of type  $B$  is generous)
- b. A semantic representation of *generous* (relative use)  
 $\lambda B \lambda x \lambda e.$ **resource-controller** $(e, x) \wedge B(e, x) \wedge$   
**generous** $(\lambda e'.B(e', x))$

# Predicates of personal taste (PPTs)

e.g. Bylinina (2017):

- Additional **experiencer argument**, can be expressed in a *to-/for-PP* (61)
- Reference to a direct perceptual experience (stative) eventuality involving the subject as part of the predicate semantics (62)
- Direct perception states require that the judge performs an event involving the subject → **event inference**

(61) {The book is interesting / ??Mary is stupid} for/to me.

(62) a. The pancake was tasty.  $\rightsquigarrow$  The judge tried the cake.

b. The workshop was fun.

$\rightsquigarrow$  The judge participated in the workshop.

- A subset of PTTs can have a subject which denotes an event (type):

(63) Eating pancakes is funny/\*tasty.

# Pancake sentences

- Martin et al. (2020): PPTs compatible with eventive subjects form “**pancake sentences**” (Wechsler 2013) (see also Roy and Shlonsky, 2019)
  - Unmarked (default) gender/number marking
  - The subject is interpreted as the theme not of the stative predicate, but of a covert event.
  - The counterparts of these sentences with full agreement receive a literal interpretation.

(64) Pannkakor är gott.  
 pancake.PL be.3SG.PRS good.N.SG  
 ‘Eating/baking... pancakes is good.’ (Swedish [W])

(65) Studentim ce'irim ze me'anyen.  
 student.M.PL young.M.PL be.M.SG interesting.M.SG  
 ‘Teaching/talking to... young students is interesting.’ (Hebrew [RS])

(66) Crianças é caro.  
 child.F.PL be.3SG.PRS expensive.M.SG  
 ‘Raising, taking care of... children is expensive.’ (Braz. Portuguese [M+])

# Pancake sentences: Different analyses

- Greenberg (2008)

The original denotation of the subject of (Hebrew) pancake sentences is “widened” to a contextually retrievable property involving the original denotation.

- Martin et al. (2020)

Pancake sentences describe agentive event types involving the original subject denotation as theme, while the adjectival phrase predicates a (second-order) property over this event type (building on Piñón, 2016).

## Martin et al. (2020) on pancake sentences

- In **Brazilian Portuguese**, pancake sentences have to be generic.
- In **French**, they can also be episodic; episodic pancake sentences trigger an actuality entailment, even with the *imparfait* (67).

(67) Hier les crêpes, c'était chouette.  
 yesterday the pancakes DEM=be.3SG.IMPF fun.M.SG  
 'Yesterday, making/eating... pancakes was cool/fun.'  
 ↗ Some agentive event involving pancakes as the theme took place yesterday.

→ **Episodic pancake sentences are aspectually hybrid statements:**

- Report an event instantiating some event types in the denotation of the "pancake subject"
- Predicate a (stative) property of this event

# Stative uses of event predicates

- Gawron (2009): **Event vs. extent readings**

- Degree achievements (e.g. *widen, redder*)
- “Path shape” verbs (e.g. *cross, zigzag*)

(see also Talmy, 2000; Matlock, 2004; Deo et al., 2013; Delbecque, 2015)

- (68) a. The road widens between San Francisco and San Jose.  
b. The road runs/zigzags along the coast.

- Most predicates with an extent reading also have an eventive reading.
- Very few predicates only have an extent reading, e.g. *span*.

also with *cover, fill, surround ...*

- (69) Snow covers the mountain.

## Event vs. extent readings

Under the eventive reading, these predicates pass typical tests for events (70), which they fail under the extent reading (71).

- (70)
- a. The car was crossing the river.
  - b. The car crosses the river {regularly/#today at 10}.
  - c. The car crossed the river {in/#for} 10 minutes.
  - d. The car crossed the river carefully.
  - e. Mila persuaded the car to cross the river.
  - f. Cross the river, car!
- (71)
- a. #The bridge was crossing the river.
  - b. Look, the bridge crosses the river! (not habitual)
  - c. The bridged crossed the river {#in/for} 10 years.
  - d. #The bridge crossed the river carefully.
  - e. #Mila persuaded the bridge to cross the river.
  - f. #Cross the river, bridge!



## Some analytical options

- **Kratzer (2000)**  
There is a causing eventuality that can be dynamic [under the event reading] or stative [under the extent reading].
- **Rappaport Hovav (2016)**  
The stative use does not involve an external argument: The subject is the figure contained in the location described by the object.
- **Gibert-Sotelo and Marín (2024)**
  - The stative use does not have causative semantics.
  - The subject is an external argument, but neither an agent nor a causer: “the entity that guarantees that the state holds” (p. 27).

## Option #1: Change does not have to be temporal

or: “Dynamicity” is a misnomer [if dynamicity requires change]

- **Underspecification account** in Gawron (2009):
  - Event/extent predicates are “dynamic”: Change along a particular axis
  - Change can be in the spatial or temporal domain ([±State])
- More generally: **Event structures of change-of-state/location predicates are not inherently temporal.**
  - The VP domain is atemporal and involves event kinds; temporality only comes in when the VP is embedded under aspect and tense (if at all).  
(Gehrke, 2011, 2015, 2019; Gehrke and McNally, 2019)

e.g. **Frequency adjectives (FAs)** (Gehrke and McNally, 2015; Gehrke, 2021)

- Involve distribution in some domain, not necessarily temporally (72)
- Non-temporal FAs *occasional*, *rare*, *odd* vs. temporal FAs (e.g. *daily*)

(72) The occasional/odd/rare tenth-grader is six feet tall.

## E.g. paths (Fong, 1997)

- English directional PPs with spatial, but not temporal change (73)
- Finnish illative case with neither spatial nor temporal change (74)

(73) a bridge into San Francisco

(74) Unohdi-n kaku-n uuni-in kahde-ksi tunni-ksi.  
 forgot-1SG cake-ACC oven-ILL two-TRA hours-TRA  
 'I forgot the cake in ('into') the oven for two hours.'

- **Fong's account:** Directional expressions denote ordered structures interpretable in diphasic domains, interpreted via phase quantification (independent of time and space).

## Atemporal paths more generally

- German, Russian 'in', 'on': Case distinction for goal-path PP (accusative complement) vs. place PP (see, e.g., Gehrke, 2008)

- (75) a. Sie tanzte in der / die Stadt.  
 she danced in the.F.DAT the.F.ACC city  
 'She danced {in (locative) / into (directional)} the city.' (German)
- b. Ona {tancevala v gorode / priexala v gorod-Ø}.  
 she danced.IPFV in city.M.PREP to-drove.PFV in city.M-ACC  
 'She {danced in the city (locative) / came to the city (driving) (directional)}.' (Russian)

- Non-temporal directional paths behave like temporal ones:

- (76) a. eine Brücke in die Stadt  
 a bridge in the.F.ACC city  
 'a bridge into the city' (German)
- b. most v gorod-Ø  
 bridge in city-M.ACC  
 'a bridge into the city' (Russian)

# Atemporal paths more generally

- Extent readings in Russian

- Present: With IPFV determinate motion verb or IPFV directed motion verb (77-a), not with indeterminate ones (77-b)
- Past: With (I)PFV directed motion verb (77-c)
  - IPFV: General description of the scenery
  - PFV: Like a sequence of events (the path went along the coast and then took a turn ...); we will come back to this

- (77)
- a. Doroga {idet / proxodit} po poberež'ju.  
 path.NOM goes.DET.IPFV THROUGH.goes.IPFV along coast  
 'The path goes along the coast.'
- b. #Doroga xodit po poberež'ju.  
 path.NOM goes.INDET.IPFV along coast
- c. Doroga {prošla / proxodila} po poberež'ju.  
 path.NOM THROUGH.went.PFV THROUGH.went.IPFV along coast  
 'The path went along the coast.'

## Option #2: Fictive motion

Change intrinsically involves temporal dynamicity.

- Talmy (2000): Extent readings involve “fictive motion”.
  - Experiments in Matlock (2004): Mental simulation of motion when processing motion predicates in fictive motion
  - Analysis option: Modalisation
    - Under their extent use, motion predicates describe motion events in possible worlds.
- e.g. *The road zigzags along the coast:*  
In all relevant worlds, a motion event which has the road as its path is a zigzagging along the coast event.

## Option #2: Fictive motion

- French fictive motion statements trigger an actuality entailment with the *passé composé*:

- (78)
- a. Le chemin a zigzagué jusqu'à la grotte, #mais personne  
 the path has zigzagged until the cave but nobody  
 n'a jamais osé l'emprunter.  
 NEG.has never dare it take
- b. Le chemin zigzaguait jusqu'à la grotte, mais personne  
 the path zigzag.IMPF until the cave but nobody  
 n'a jamais osé l'emprunter.  
 NEG.has never dare it take
- (Intended:) 'The path zigzagged up to the cave, but nobody ever dared to take it.'

- Alternative account within option #1: Coercion

## Option #2: Fictive motion

- Russian extent readings: Actuality entailment with the PFV (79)

- (79) a. Doroga propetljala po poberež'ju, #no nikto  
 path.F.NOM meandered.PFV along coast but nobody  
 nikogda ne osmelivalsja po nej projti.  
 never not dared.IPFV along her go.INF.PFV
- b. Doroga petljala po poberež'ju, no nikto  
 path.F.NOM meandered.IPFV along coast but nobody  
 nikogda ne osmelivalsja po nej projti.  
 never not dared.IPFV along her go.INF.PFV

(Intended:) 'The path meandered along the coast, but nobody ever dared to walk along it.'



## Stative and eventive uses: Colour verbs

- French *verdoyer* [< *vert* 'green'], *rougeoyer* [< *rouge* 'red']
  - (Dynamic/temporal) change-of-state use: 'turn green/red'
  - Non-dynamic use: 'look green/red(dish)'
- Spanish and Catalan *negrear* etc. (< *negro* 'black') (Pena, 1993; Ultra-Massuet and Castroviejo, 2014; Acedo-Matellán and Gibert-Sotelo, 2022)
  - Gradual change when used transitively (80-a)
  - Non-dynamic use when used intransitively (80-b) (stative behaviour: incompatibility with perception reports, aspectual verbs, etc.)

- (80) a. Aquesta pasta blanqu-ej-a les dents a poc a poc.  
 this pasta white-EJ-3SG the teeth slowly  
 'This pasta whitens the teeth slowly.'
- b. La neu blanqu-ej-a pel sender.  
 the snow white-EJ-3SG on.the path  
 'The snow looks white on the path.'

(Catalan; Acedo-Matellán and Gibert-Sotelo 2022, 10)

# Stative and eventive uses: Colour verbs

- Acedo-Matellán and Gibert-Sotelo (2022)
  - These verbs are eventive and have causative semantics in both uses.
  - Transitive use: An entity different from the theme initiates a change in colour.
  - Intransitive use: The theme is also an initiator (an emitter) which causes itself to look as having a certain colour.
- Causative account supported by **etymology**:  
 French *-oyer*, Spanish/Catalan *-ear* < (Late) Latin factitive suffix *-iza-*
- **Russian morphology**: Different aspectual pairs
  - *(po)krasnet'* (intrans.) 'to turn red(der)' < *krasnyj* 'red'
  - *(po)belet'* (intrans.) 'to turn white(r)' < *belyj* 'white'
  - *otbeliči(va)t'* (trans.) 'to turn sth. white'