

# Noun incorporation in English: Diachronic case-studies

Dana Louagie  
An Van linden

*Linguists' Day BKL-CBL-LSB, 21 October 2022, Liège*

(1) English

- a. *While only a third of the estimated 70 million Americans who **bird-watch** every year are serious birders, the Forest Service says the total of those participating has more than tripled in 20 years. (WB)*
- b. *Tom Cruise and Nicole Kidman are **house-hunting** in the Lake District. (WB)*
- c. *Sadly, I've missed a few matches recently **babysitting** the grandchildren. (WB)*
- d. *Rupert said: "There were some awkward scenes. There was a lot of **hand-holding** between me and Hermione." (WB)*

# Noun incorporation

(2) Mapudungun (Araucanian, Chili)

*ñi chao kintu-waka-le-y*  
my father seek-cow-PROG-IND.3SG.S

‘My father is looking for the cows.’

(Baker et al. 2005: 139)

= “grammatical construction where a nominal, usually bearing the semantic role of an object, has been incorporated into a verb to form a complex verb or predicate” (Massam 2017: Summary)

# In English?

‘English has no significant use of incorporation’ (e.g. Rosen 1989: 295; Mithun 1984; cp. Olthof 2020: 132)

“The few English constructions that most closely resemble NI (e.g. *to baby-sit*, *to mountain-climb*, or *to word-process*), do not actually result from a productive compounding process, but are rather V's backformed from compound N's”  
(Mithun 1984: 847)

- unproductive
- not without a related gerund form
- rarely with full set of inflections
- if fully-inflected: semantic relation of IN to V is different from what is observed cross-linguistically (no patient, location or instrument)

# In English?

BUT from constructional perspective: productive process

-- i.e. N+V compound resulting in V

Feist (2013; cf. also Hall 1956; Rice & Prideaux 1991)

- IN in different syntactic position from its non-incorporate counterpart & at lower syntactic level
- IN: reduced morphosyntactic form/potential (no number, case, definiteness marking)
- IN shows semantic reduction: no longer referential; generic interpretation
- NI is a marked usage: exceptional in syntax, morphology and semantics

# In English?

- How does NI in present-day English fit in with earlier typological analyses of NI?
- How did the present patterns come into being? How do these diachronic pathways fit in with earlier typological proposals?

# Mithun (1984, 1986)

1) **Lexical compounding:** for “nameworthy” activities; often valence-reducing

2) **Manipulation of case:** oblique argument → primary case role

(3) Tupinambá (Tupi-Guaraní; Brazil)

a. *a-pisá-eytí'k*  
I-fishnet-throw  
'I net-throw.'

b. *s-obá*    *a-yos-éy* /    *a-s-obá-éy*  
his-face    I-it-wash    I-him-face-wash  
'I washed his face.'    'I face-washed him.'

(ibid.: 856, 857)

# Mithun (1984, 1986)

3) **Manipulation of discourse structure:**  
background IN in portions of discourse

4) **Classificatory NI:** external NP identifies  
argument implied by IN; often results  
in classificatory system

(4) Huahtla Nahuatl (Uto-Aztecan, Mexico)

A: *askeman ti-'kwa nakatl.*  
never you-eat-it meat  
'You never eat meat.'

B: *na' ipanima ni-naka-kwa.*  
I always I-meat-eat  
'I eat it (meat) all the time.'

(ibid.: 860-1)

(5) Caddo (Caddoan, US)

a. kassi' háh-'ič'á-sswí'-sa'.  
bead PROG-eye-string-PROG  
'She is stringing beads.'

b. ka'ás háh-'ič'ah-'í'-sa'.  
plum PROG-eye-grow-PROG  
'Plums are growing.'

(ibid.: 865)

# Mithun (1984, 1986)

Synchronically: implicational hierarchy

Diachronically: pathway of evolution

I > II > III > IV

# This study

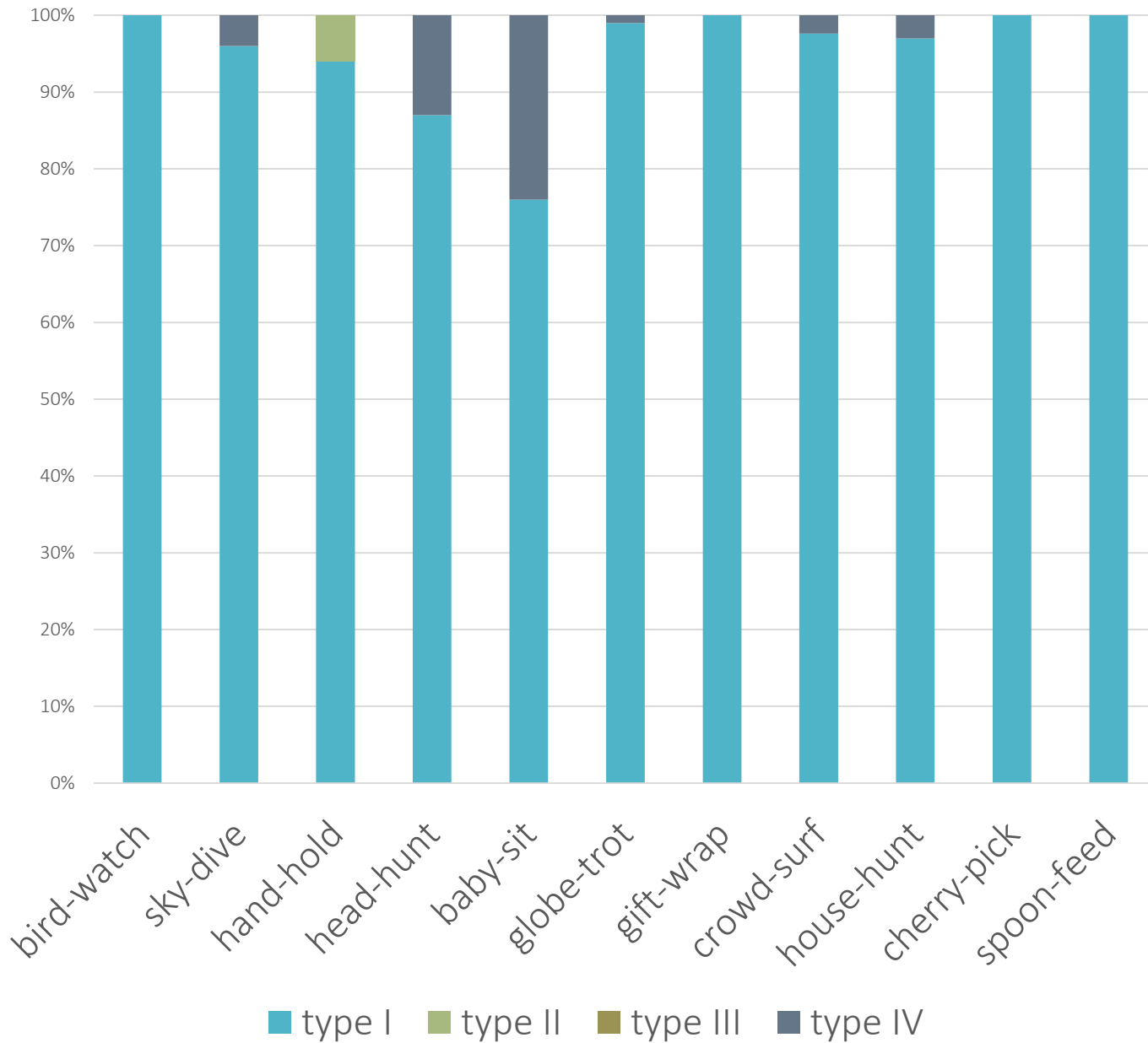
NI in English, from a typological perspective

→ Using corpora

- 1) Point of departure: synchronic findings
- 2) Diachronic findings
- 3) Conclusion

# Synchronic findings

Point of departure



# Mithun's typology

- Overwhelmingly type I
- Types II and IV found
- Type III lacking

*(100-hit random samples,  
WB)*

## Type I: lexical compounding

- (6) a. *For now, though, he will **globe trot**, following his game. (WB)*
- b. *[...] it would be impossible to **hand-hold** the camera and keep it still during the interview which would run for well over an hour. (WB)*

## Type II: manipulating case roles

- (7) a. *Mama's sleepless nearly ever night now and I sometimes sit with her hours-long **handholding her** and saying it's all right Mama it's all right. (WB)*
- b. *But if you were going to choose someone **to hand-hold you** through all this, Turner would be your man. (WB)*

~ holding her/your hand

*cf. also Rice & Prideaux (1991: 285), Feist (2013: 170)*

### Type III: manipulating discourse

Not found

### Type IV: classificatory

- (8) a. *“Listen, go to the fucking concert, okay? I don’t need you **baby-sitting** me all the time. I mean, for fuck’s sake.”* (WB)
- b. *Cut to Florida’s Keys and Rick Broca, a retired cop **babysitting** the yacht of his boss.* (WB)

- *me* identifies argument implied by IN *baby*
- *baby* semantically classifies referent of *me*
- *baby* has widened its semantic scope, e.g. lifted animacy restrictions

*baby* = entity in need of care

*cf. also Rice & Prideaux (1991: 285); Feist (2013: 137) rejects analysis in terms of type IV*

# Note on type IV

➤ Different from Mithun's examples

- classifying an object, prepositional complement or optional adjunct
- lexical restrictions
- cannot be used to keep topic straight over stretch of text (cf. absence type III)
- no broad classification system

but: *baby-sit, dog-sit, pet-sit, house-sit*

*head-hunt, house-hunt, apartment-hunt*

# gift-wrap, cherry-pick?

- (10) a. *The big poppyseed bun **gift wrapped** the burger, and the American cheese (my choice) quite nicely.* (WB)
- b. *Others will **cherry-pick** a narrow slice of data for publication while consigning the rest to the file drawer.* (WB)

~ wrap the burger which is a gift / as a gift / so that it becomes a gift?

~ pick a slice of data as if it were a cherry (i.e. carefully)

➤ Also type IV, if we broaden it to include also non-permanent predicative relations, (resultative/hypothetical)

# Mithun's (1984) typology

Hierarchy doesn't work for English:

Type I > Type II > ~~Type III~~ > Type IV

Explanation?

English = analytic language with overtly expressed external arguments

↔ languages displaying types III & IV: typically synthetic, with pronominal indexing (Mithun 1984: 859-872)

Diachronic findings

# Data & method

Evolution according to Mithun's (1984) suggested pathway?

→ 5 lexemes: *hand-hold*, *baby-sit*, *head-hunt*, *cherry-pick*, *gift-wrap*

→ Corpus of Historical American English (1820-2019): exhaustive datasets

- all spelling variants
- same analytical parameters as synchronic data

# 1. Hand-hold: types I & II

Construction 1: ~ hold in your hand (IN: manner/locative)

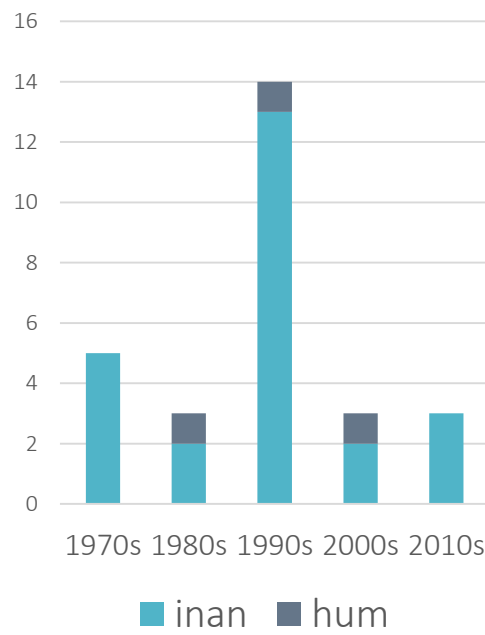
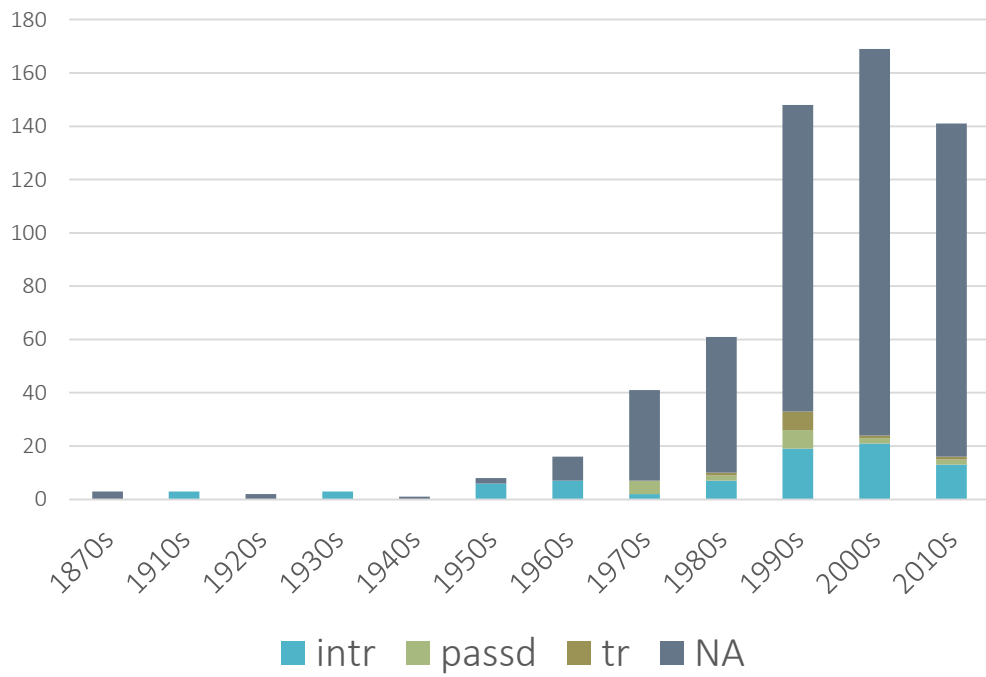
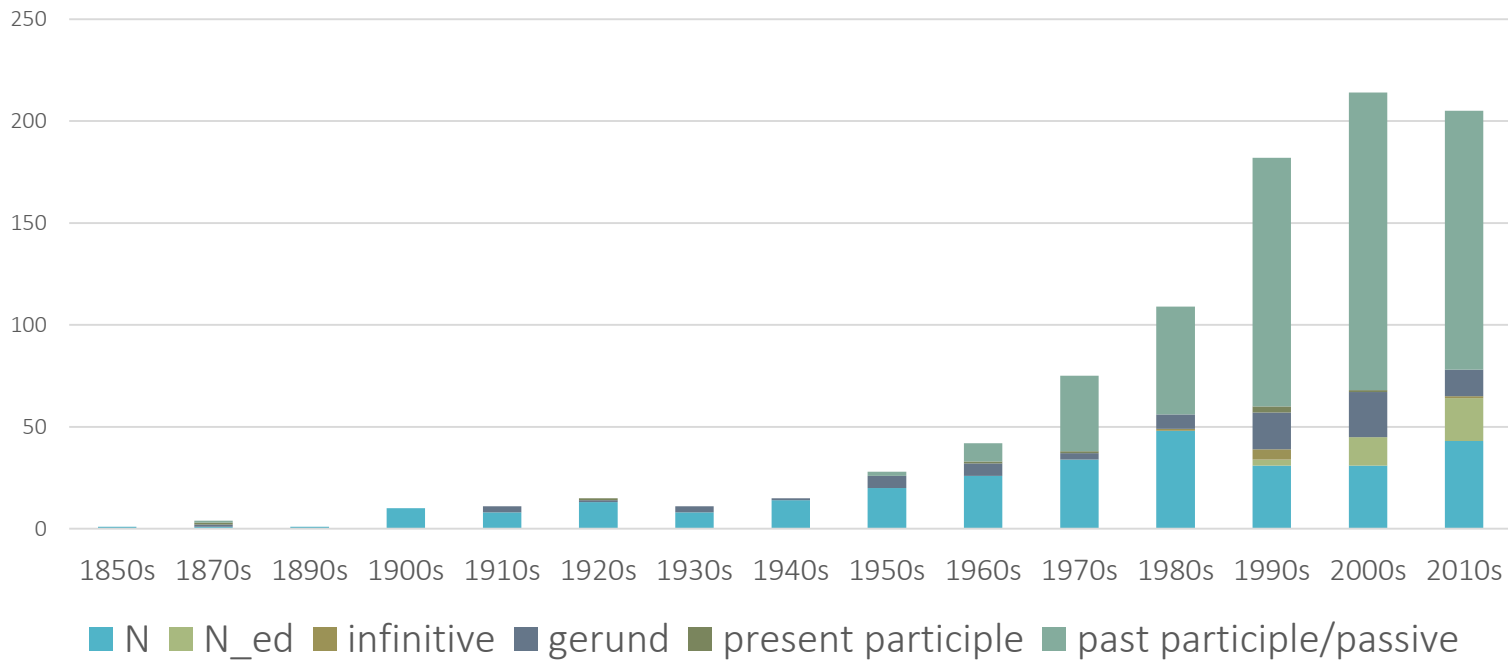
- (11) a. *These programs just scratch the surface of what is possible with **hand-held** computers.* (COHA, 1999)
- b. *I've found that while I can't **hand-hold** a 15X binocular, I can **hand-hold** the 12X Nobilem if I sit down.* (COHA, 1993)

- mostly past participles as adjectives
- patient = inanimate
- all uses (incl. transitive): type I

# 1. Hand-hold: types I & II

Construction 2: ~ hold someone's hand (IN: patient)

- (12) a. [...] *till he gave me a blow twixt the eyes, with his **hand-holding** and kissing.* (COHA, 1911) intransitive
- b. [...] *the crowd moved from awkward, ragged groups into **hand-holding pairs**.* (COHA, 1991) ptcp adjective; PR of hand in head N
- c. *So you can imagine how thrilled I am to get to do some celebrity hand-holding.* (COHA, 1987) NP classifier implies PR of hand
- d. *"C'm on, Mr. Archy," the boy said, now **hand-holding** him across the field. "Right this a' way."* (COHA, 1993) O-participant encodes PR of hand  
→ type II



## Hand-hold (n=596)

- clearly first N
- mostly prs/pst participle used as adjective, or classifying gerund

- transitive/passive use remains infrequent
- type I predominant
- type II (= transitive with human O) incipient (n=3)

## 2. Baby-sit: types I and IV

~ sit with someone/something (IN: comitative)

(13) a. *She is hep to new records and takes an occasional turn at **baby-sitting** for pocket money.* (COHA, 1945)

b. *Well, I just came up to tell you that I'll be able to **baby-sit** with Little Ricky this afternoon.* (COHA, 1953)

c. *Why did you insist on **babysitting** him when you have a cold?* (COHA, 1951)

➤ intransitive → type I

➤ identifying implied argument → type IV

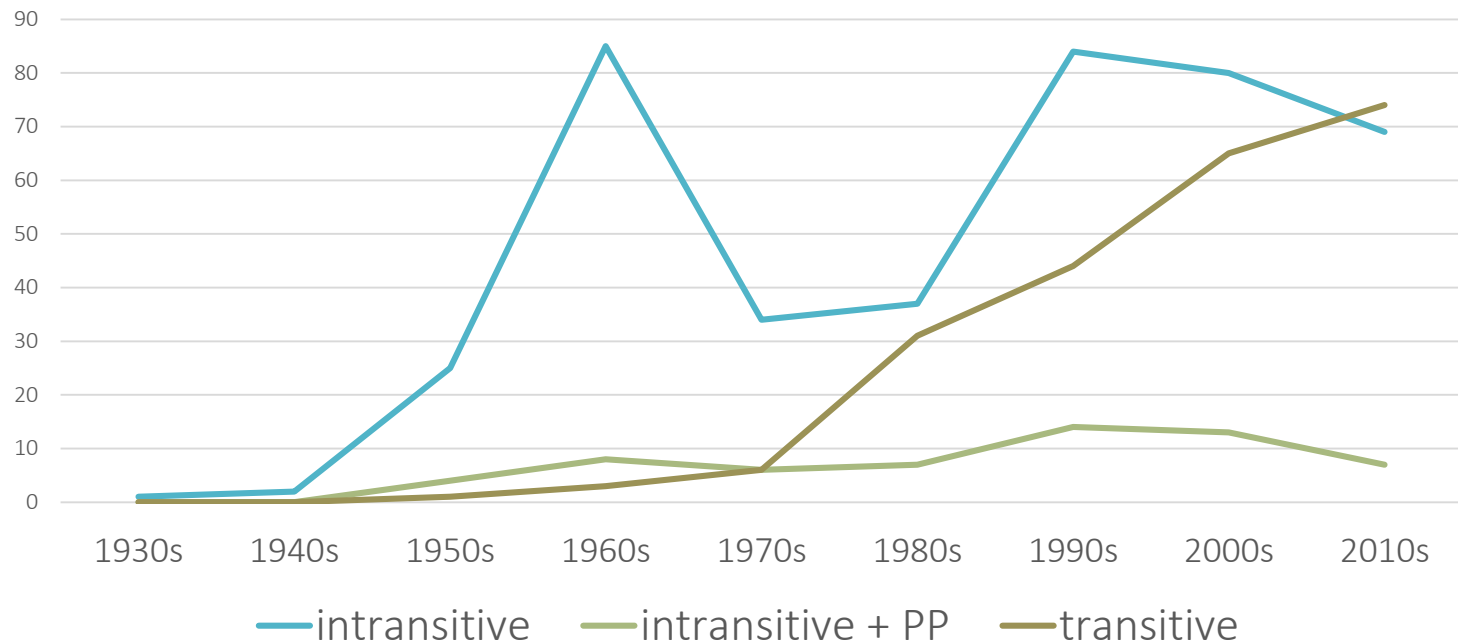
- intransitive + PP (patient)

- transitive

### Backformation?

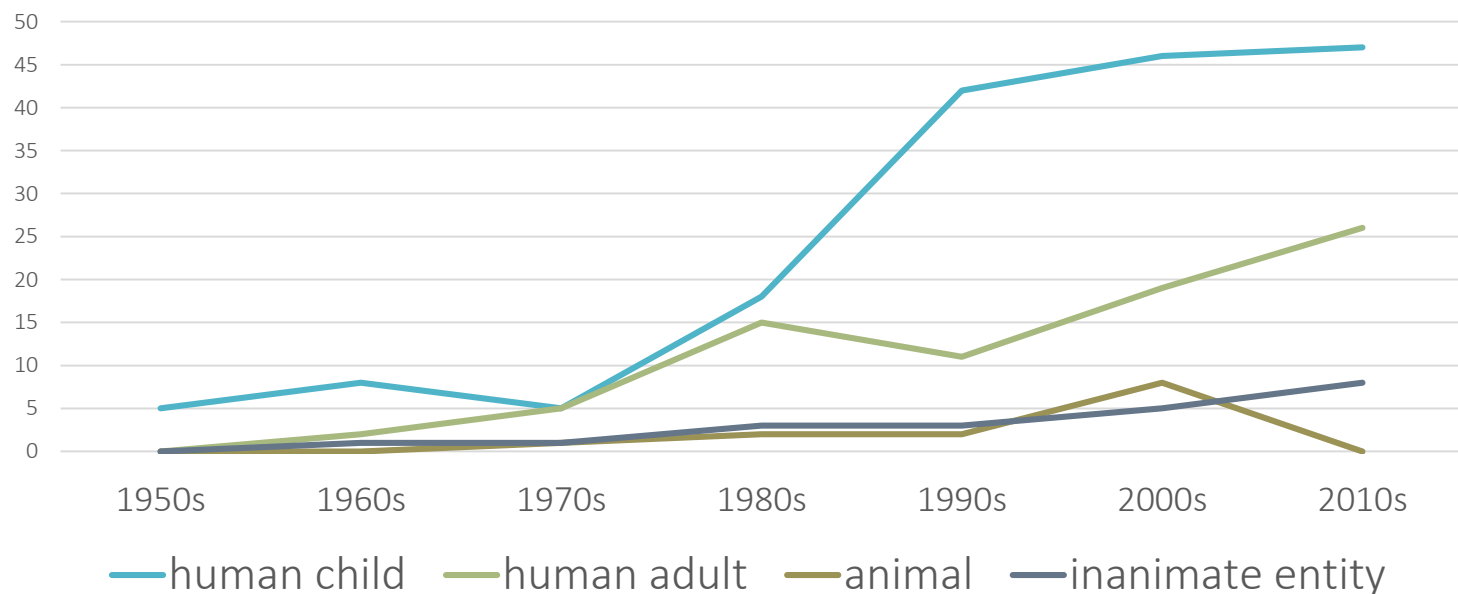
OED: baby-sitter (first use 1937);  
baby-sitting (1940);  
baby-sit (1946)  
(cp. 'sitter' in this meaning: 1943)

COHA: baby-sitting (ptcp, 1939);  
baby-sitter (1945);  
baby-sit (finite, 1955)



## Baby-sit (n=815)

- Type I (intrans) precedes Type IV (intrans + PP & trans)
- No intermediate type II or III
- Steady rise of transitive cxn



### Within type IV:

- Broadening of semantic scope
- Rise of adult, animal and inanimate patients

# x-sit: a mini classification system?

## Humans

- (14) a. *How long have you been **baby-sister-sitting**?* (COHA, 1965)
- b. *“Thanks anyway,” Chris said. “I’ll take care of Jason myself.” He didn’t add that he’d had most of the day to figure out that he could combine **Jason-sitting** with a morning at the community center.* (COHA, 1998)

## Animals

- c. *[...] and became a pet sitter. **Pet sitting** is a lot more dangerous than people think.* (COHA, 2012)
- d. *Where the hell have you been? I’ve been **cat-sitting** for a friend.* (COHA, 2006)
- e. *She had no one to **dog sit** her little black pup yesterday [...]* (COHA, 2016)
- f. *But I thanked him for his fine assassin bug, **insect-sat** it for an hour, only later read that they can sting.* (COHA, 1987)

# x-sit: a mini classification system?

## Houses

- (14) g. *My parents also **farm-sat** at critical times during the season.* (COHA, 1988)
- h. *I'm **house-sitting** a friend's cabin this weekend and I wouldn't mind a little company.* (COHA, 1994)
- i. *Or better yet, find a friend who has one and offer to **cabin-sit** for them.* (COHA, 2017)

## Compare

- (15) a. *I was wondering, would any of you mind **baby-sitting** the dog? I mean, he just hates to be left alone.* (COHA, 1995)
- b. *She needed to keep her ass at her own house instead of **babysitting** Jay's house while he was in jail.* (COHA, 2010)

# x-sit: a mini classification system?

Either: very specific items incorporated

- does not add to classification system
- not catching on; creative uses

Or: more general items incorporated

- adds to classification system
- catching on (esp. *dog-sit*, *house-sit*)
- also specific *dog* and *cat*; more frequent than *pet*
- *dog/cat-sit* equally common as *babysit a dog/cat*

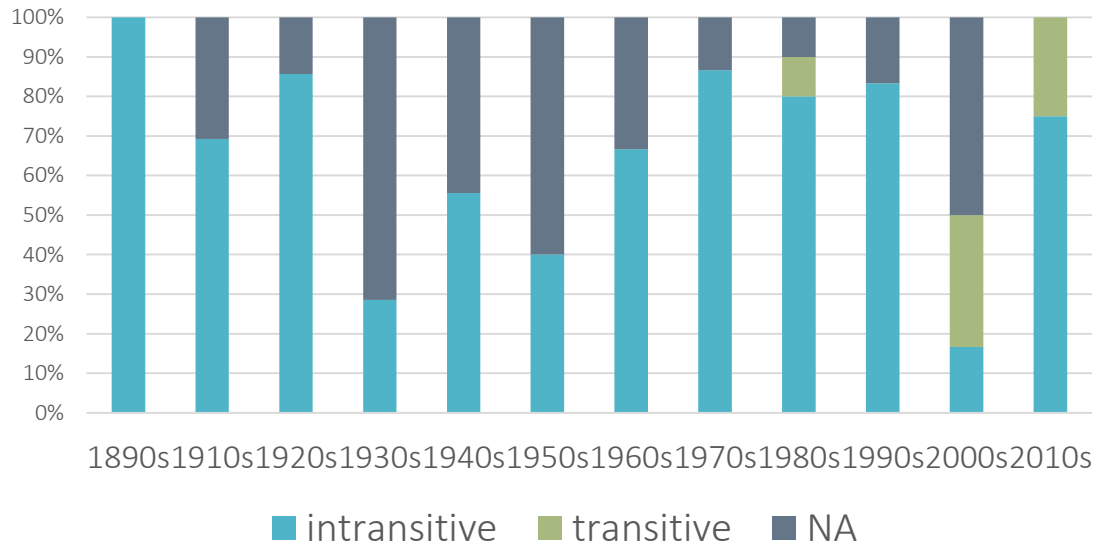
Overall: following *baby-sit*

- From 1960s on: increase of type I *x-sit* (with various forms)
- From 1980s: type IV (cp. *baby-sit* 1950s)
- Indicative of productivity and incipient classification system

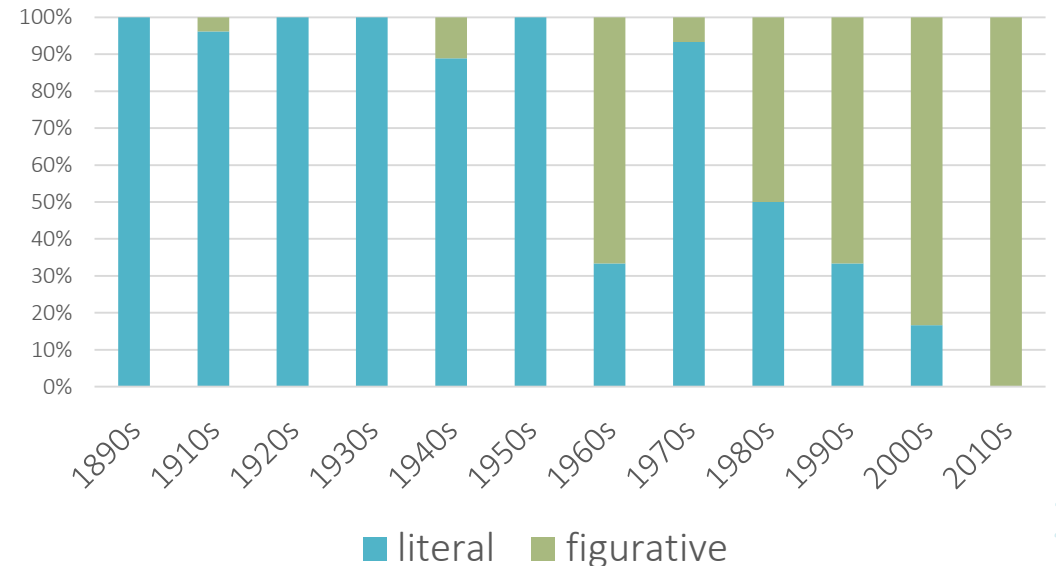
# 3. Head-hunt: types I and IV (n=200)

- (16) a. *Andreas says the Ti people had gone **headhunting** recently and had killed five people.* (COHA, 1972)
- b. *When the institute first **headhunted** him, they had offered a generous package.* (COHA, 2018)

Incipient transitive cxn (= type IV)



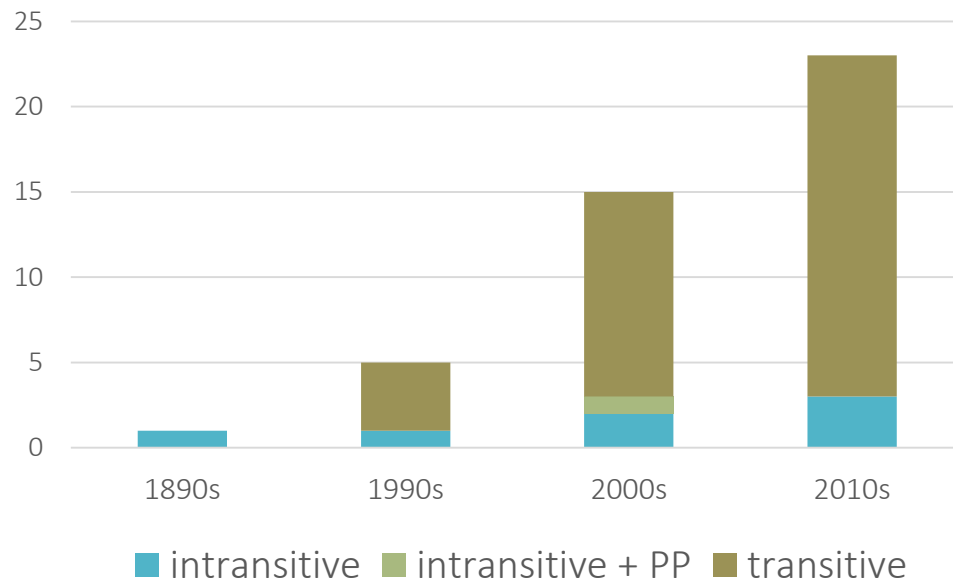
Rise of figurative uses (= type I or IV)



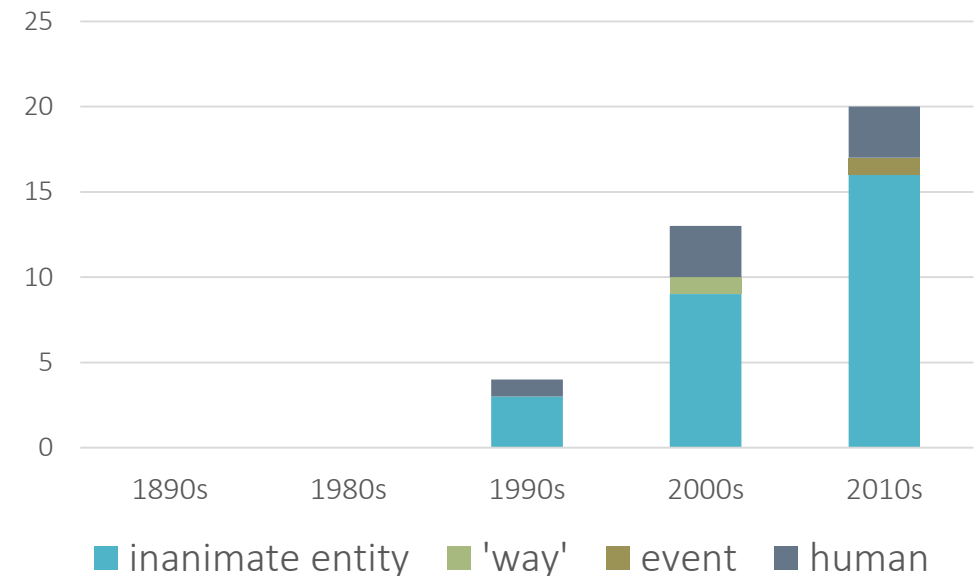
# 4. Cherry-pick (n=53)

- (17) a. [...] tells William and Rose, his children, to invite them to a picnic and **cherry-picking**. (COHA, 1899)
- b. Scrapbooks selectively browse through the past, **cherry-picking** its proudest moments. (COHA, 2005)

steep rise of transitive cxn (= type IV?)



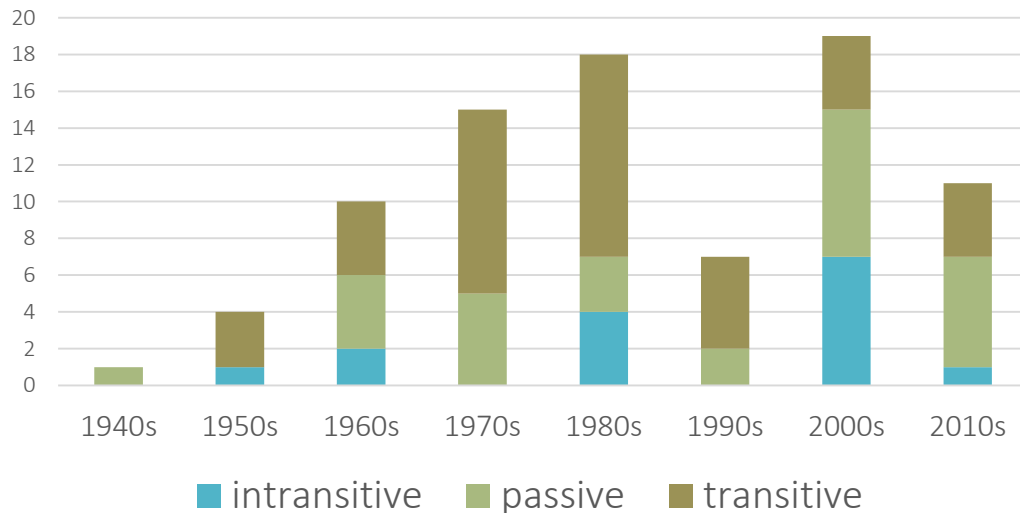
first inanimate, then animate patients



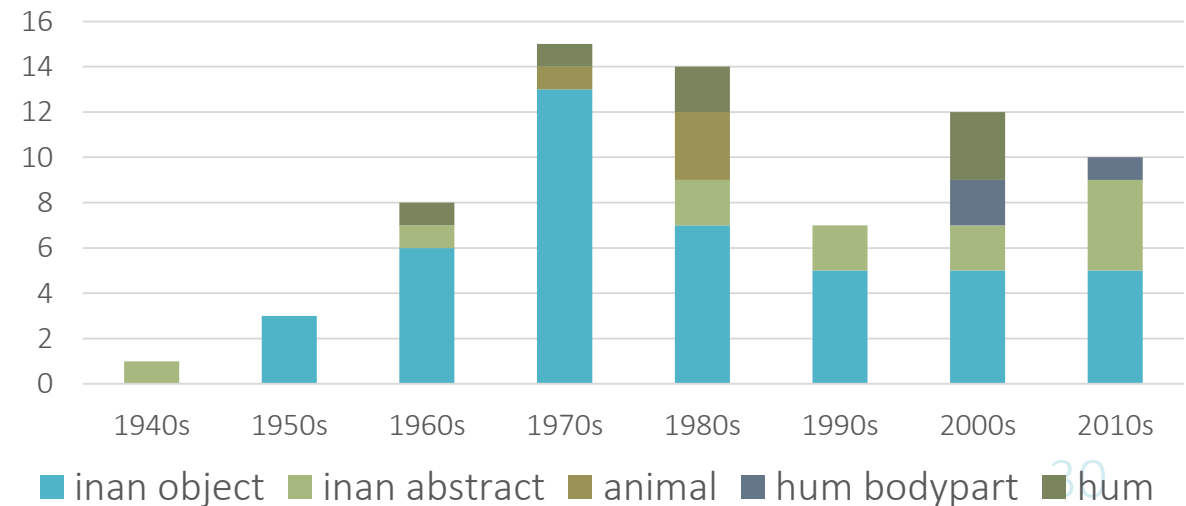
# 5. Gift-wrap (n=142)

- (18) a. *We only **gift-wrap**. We don't deliver.* (COHA, 1985)
- b. *"Maybe you should hypnotize me," he joked, **gift-wrapping** anxiety in humor.* (COHA, 1988)
- c. *Instead, she stood **gift-wrapped** in my best white towel, still sparkling with droplets of water* (COHA, 2002)

passive & transitive uses predominate



first inanimate, then animate patients



Conclusion

# Nuancing Mithun's (1984) typology

based on wide range of unrelated languages

- [SYNCHRONY] English: no type III, but type IV (though different characteristics)
- [DIACHRONY] English: going from type I to II, and from I to IV  
(for individual lexemes, with *gift-wrap* as potential counter-example)

Explanation?

Analytic vs. synthetic languages

# References

- Baker, M.C., Aranovich, R. and Golluscio, L.A., 2005. Two types of syntactic noun incorporation: Noun incorporation in Mapudungun and its typological implications. *Language* 81 (1): 138-176.
- Feist, J. 2013. Noun incorporation in English. *Functions of Language* 20 (2): 159-184.
- Hall, Robert A., Jr. 1956. How we noun-incorporate in English UTC. *American Speech* 31(2). 83–88.
- Massam, D. 2017. Incorporation and Pseudo-Incorporation in Syntax. Oxford Research Encyclopedia of Linguistics. Available at: <http://dx.doi.org/10.1093/acrefore/9780199384655.013.190>.
- Mithun, Marianne. 1984. The evolution of noun incorporation. *Language* 60 (4): 847-894.
- Mithun, Marianne. 1986. The convergence of noun classification systems. In Colette G. Craig (ed.), *Noun classes and categorization*, 379–397. Amsterdam: Benjamins.
- Olthof, Marieke. 2020. Formal variation in incorporation: a typological study and a unified approach. *Linguistics* 58(1). 131–205.
- Rice, Sally & Gary Prideaux. 1991. Event-packing: The case of object incorporation in English. In *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society: General session and parasession on the grammar of event structure*, 283–298.
- Rosen, Sara Thomas. 1989. Two types of noun incorporation: a lexical analysis. *Language* 65 (2): 294-317.

Extra slides

# Type III: manipulating discourse

Not found.

↔ Feist (2013): when indirect participant is incorporated, and resulting predicate is intransitive

(8) *At the base of a reef 65 feet down, ribboned sweetlips peer from a towering coral tree (right). The small school often shuffled its formation, but never left the sanctuary of the branches. They were like condors soaring on thermals, mantas with wingspans often feet and more, caught by sunlight as they glided and looped in currents ripping through Dampier Strait. While mantas **filter-feed** in this murky broth of plankton, yellow-striped jacks find protection among the giants.* (Feist 2013: 168, from COCA)

Not clear why this would be type III.

# Type IV: classificatory

- (9) c. *Now they and their children [...] are **househunting** for a luxury home. (WB)*
- d. *When my husband and I went **house-hunting** for a family home, we never planned to build a house. (WB)*
- e. *Bruce Wasserstein [...] has wasted no time in **headhunting** bankers from his old firm. (WB)*
- f. *You can **head-hunt** for them. (WB)*
- g. *Her ideal was to have no context at all, only weightlessly to **crowd-surf** on an endless sea of strangers who would hold, fondle, and pass along every facet of her glamorous existence. (WB)*
- h. *It centres around his bid to claim a unique world record by **skydiving** from the edge of space, [...]. (WB)*

type of house

head = person

type of crowd

place in the sky