

Noun incorporation in English from a typological perspective

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(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?

- Is NI in English productive and what are its features?
- How does NI in English fit in with earlier typological analyses of NI?

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-ová* *a-yos-éy* / *a-s-ová-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) Synchronic findings
- 2) Diachronic findings
- 3) Conclusion

Synchronic findings

Data & method

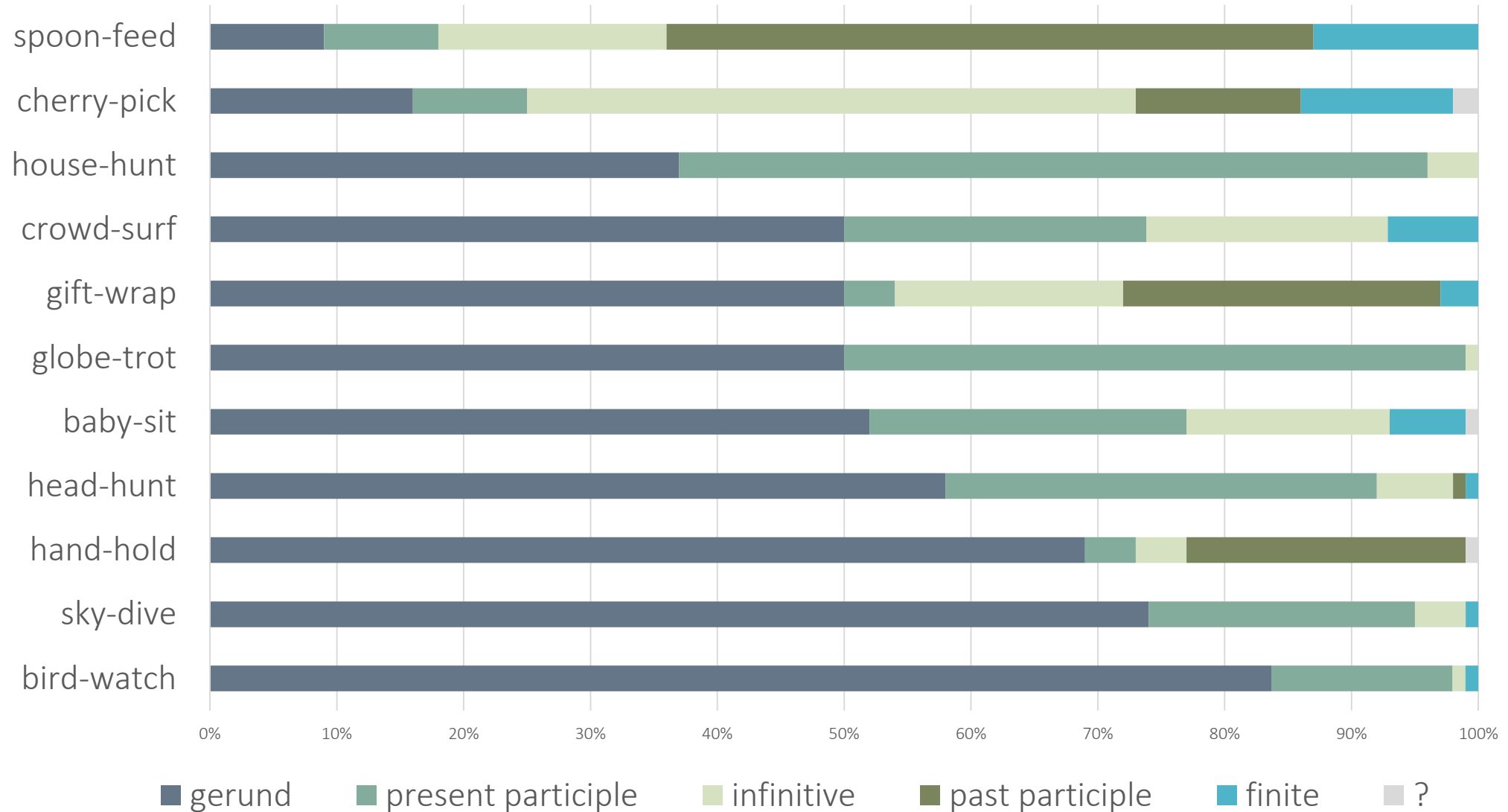
11 lexemes

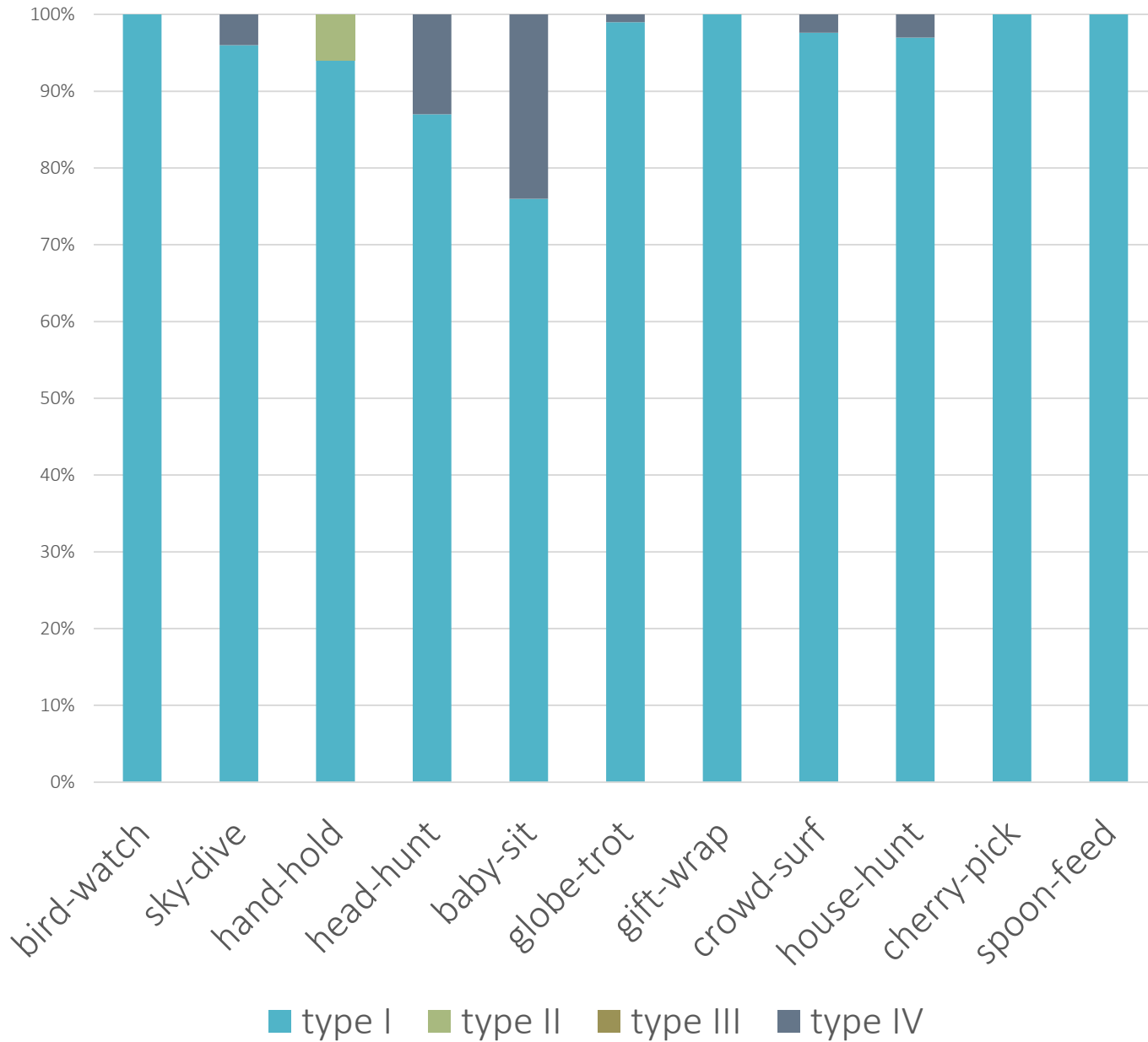
- *baby-sit, bird-watch, sky-dive, hand-hold, spoon-feed, cherry-pick, house-hunt, crowd-surf, gift-wrap, globe-trot, head-hunt*
- various semantic relations IN to V

WordBanks Online: random 100-hit samples

- all spellings
- *crowd-surf*: exhaustive, 42 hits
- analytical parameters: V form, transitivity, animacy of 'patient' (if applicable), type Mithun, literal/figurative

Productive; not only gerunds





Mithun's typology

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

Type I: lexical compounding

- (6) a. *For now, though, he will **globe trot**, following his game. (WB)*
- b. *All along, you know exactly what is happening, you are practically **spoon-fed** every plot twist, [...]. (WB)*
- c. *[...] members of Bloc Party **crowd surfed**, and the song [...] ended with all four bands walking to the front of the stage and taking a bow. (WB)*
- d. *[...] 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)*

- Not always valence-reducing: transitive and intransitive compound verbs
- Literal and figurative uses

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.

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

(8) *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) 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 the argument implied by the IN *baby* (cf. Mithun 1984: 863)
- *baby* semantically classifies the referent of *me*
- *baby* has widened its semantic scope, e.g. it has 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

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

Type IV: classificatory

➤ 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

rather mini-systems: *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)

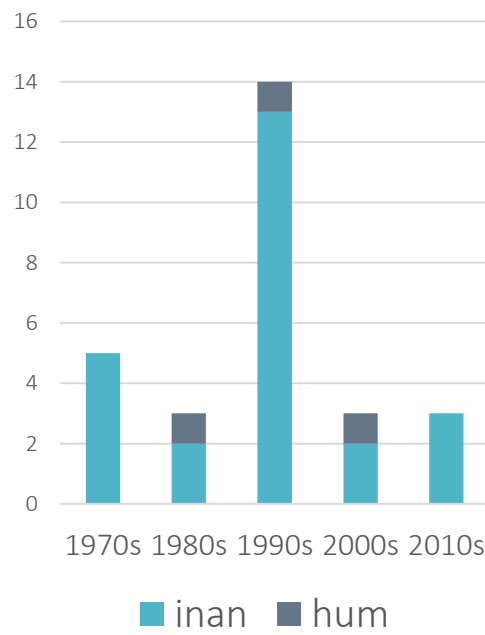
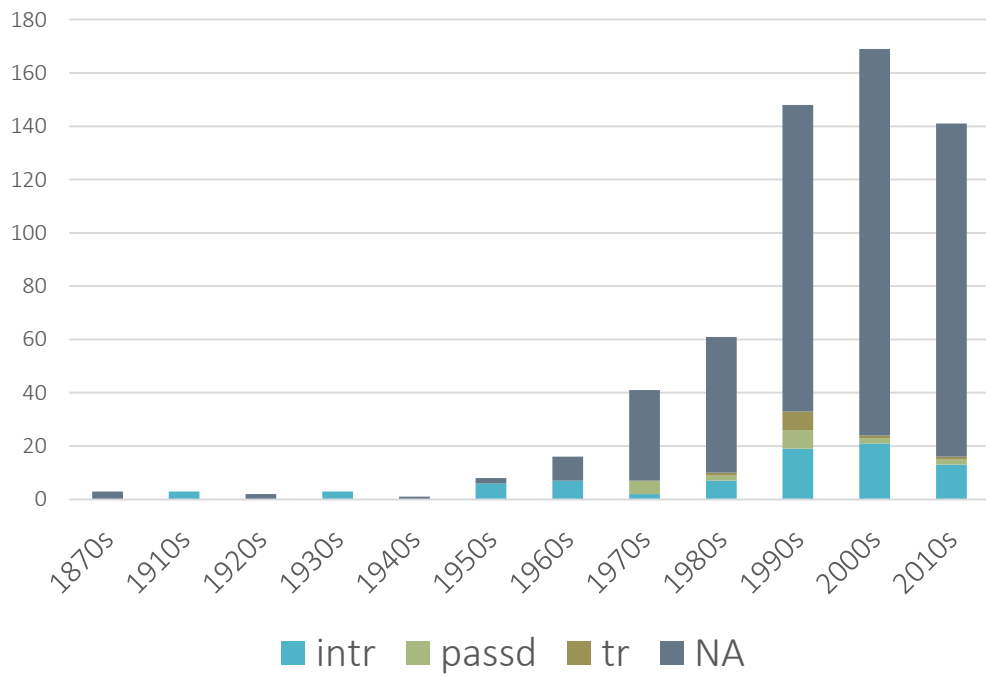
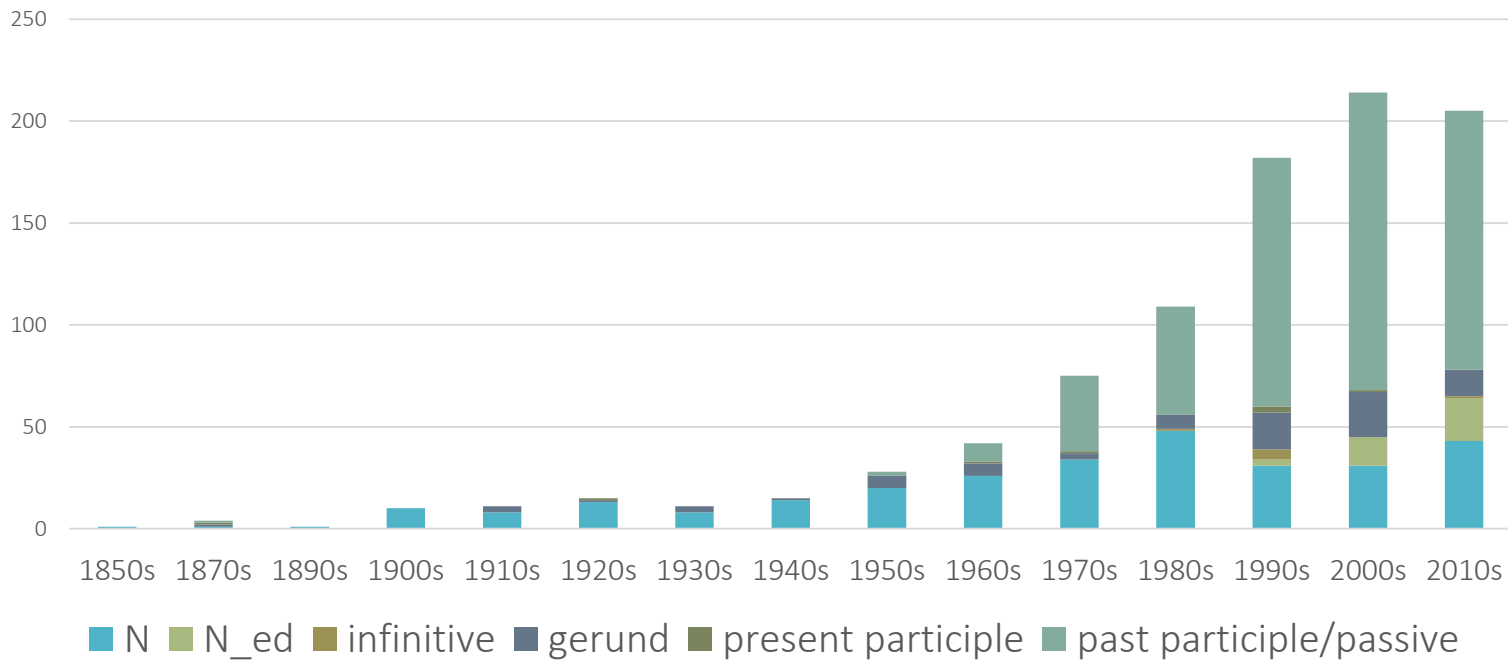
- (11) a. *These programs just scratch the surface of what is possible with **hand-held** computers.* (COHA, 1999)
- b. *I've found that while I can't **hand-hold** a 15X binocular, I can **hand-hold** the 12X Nobilem if I sit down.* (COHA, 1993)

- 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

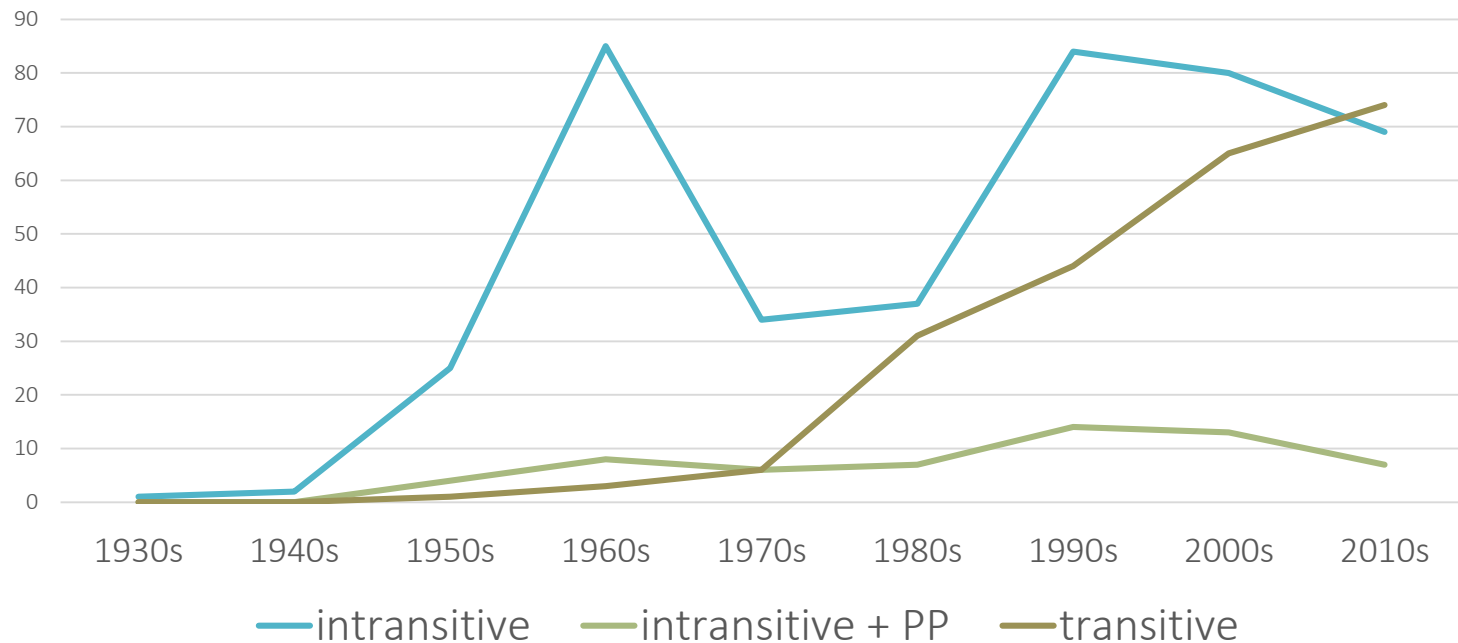
comitative relation IN-V: ~ sit with someone/something

- (13) a. *She is hep to new records and takes an occasional turn at **baby-sitting** for pocket money.* (COHA, 1945) ➤ intransitive → type I
- b. *Well, I just came up to tell you that I'll be able to **baby-sit** with Little Ricky this afternoon.* (COHA, 1953) ➤ identifying implied argument → type IV
- intransitive + PP (patient)
- c. *Why did you insist on **babysitting** him when you have a cold?* (COHA, 1951) • transitive

Backformation?

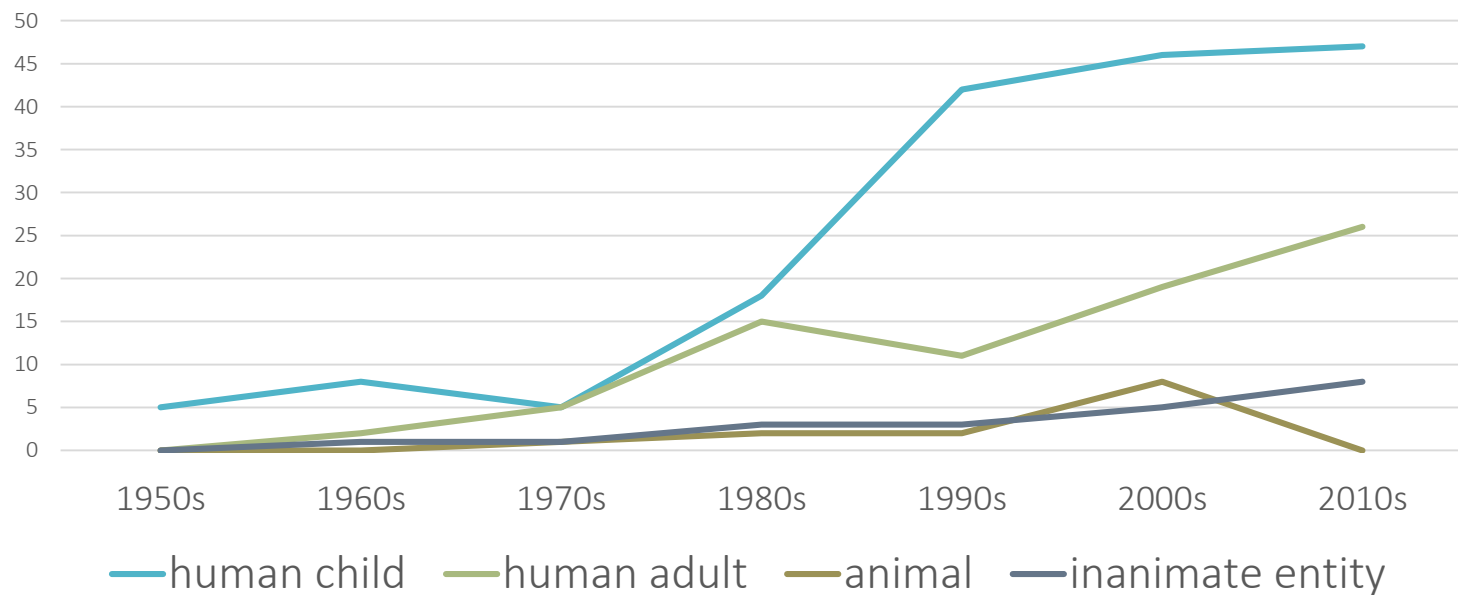
OED: baby-sitter (first use 1937);
baby-sitting (1940);
baby-sit (1946)
(cp. 'sitter' in this meaning: 1943)

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



- 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*

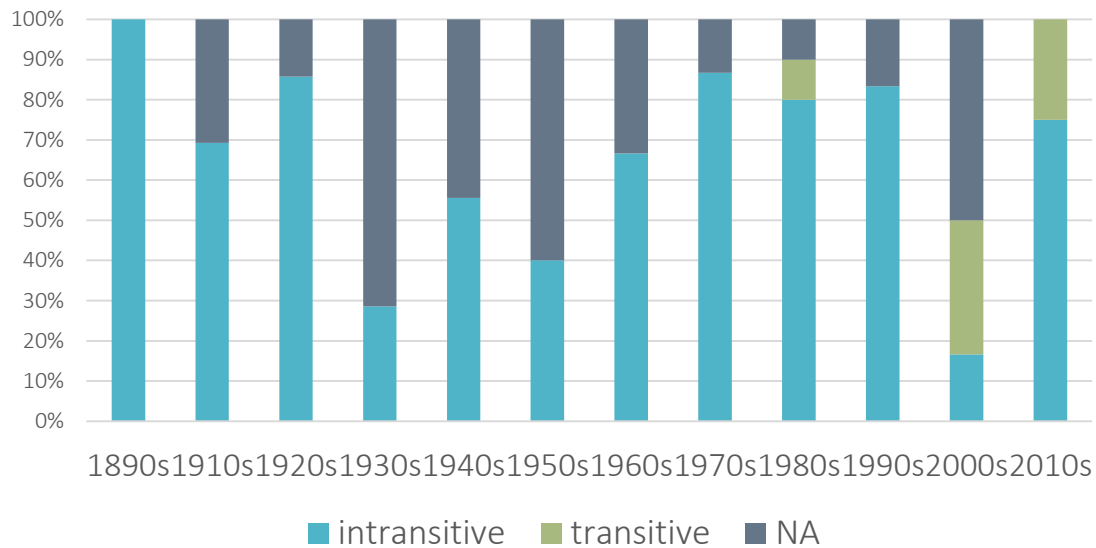
Overall: following *baby-sit*

- 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

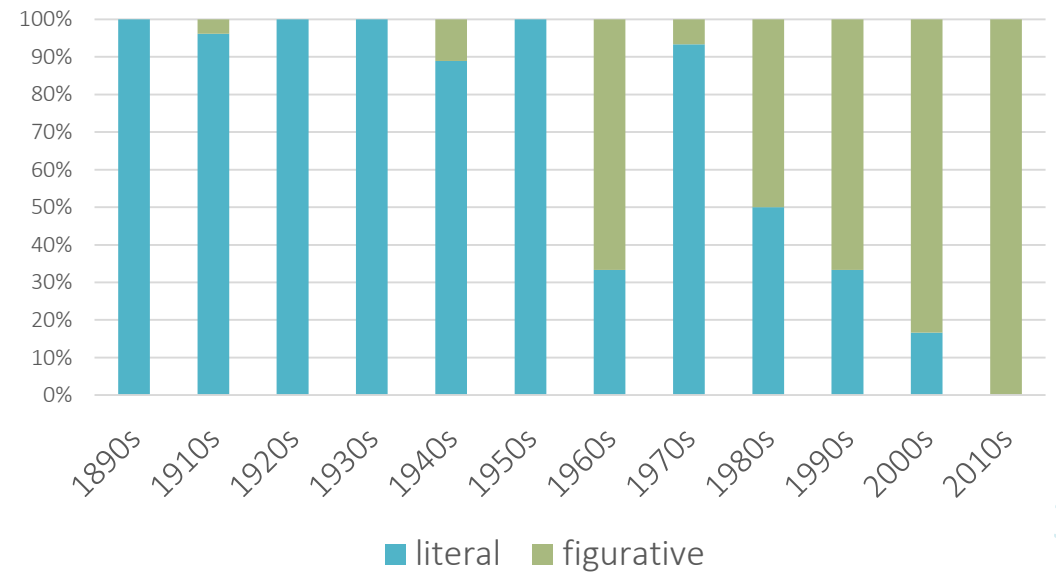
3. Head-hunt: types I and IV (n=200)

- (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)



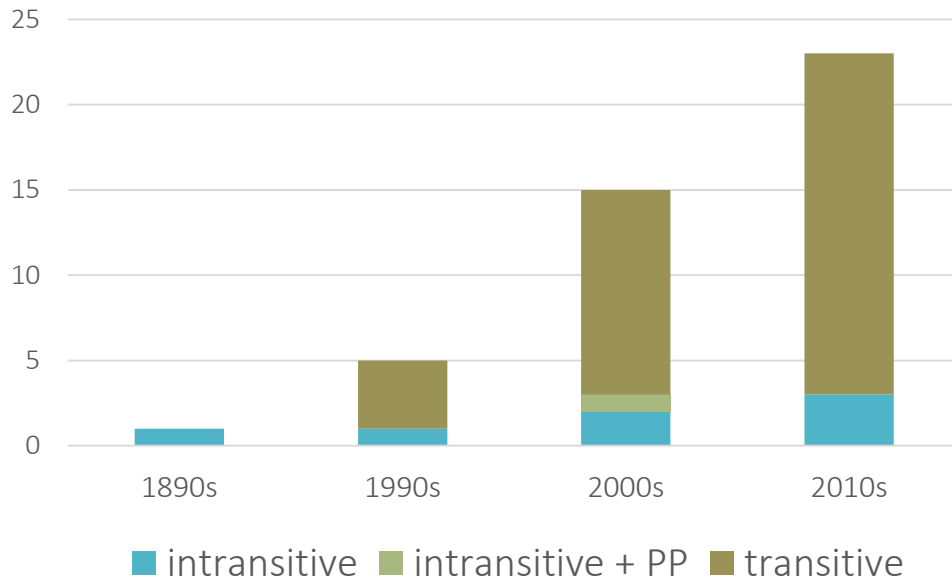
Rise of figurative uses (= type I or IV)



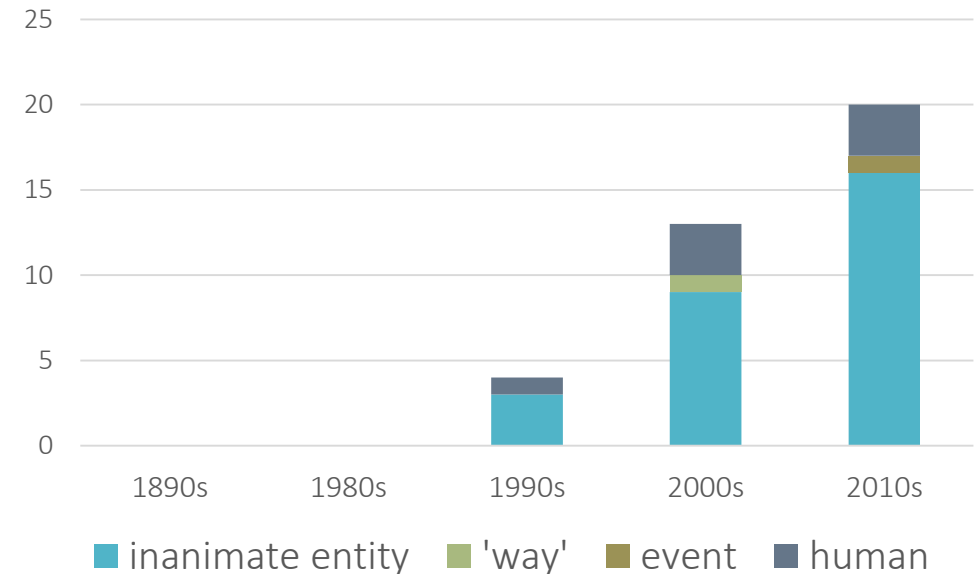
4. Cherry-pick (n=53)

- (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?)



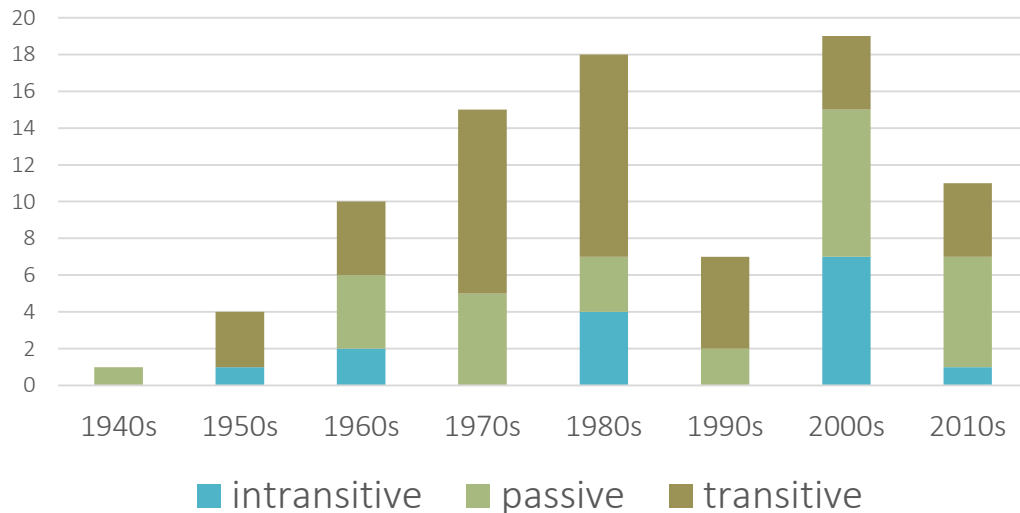
first inanimate, then animate patients



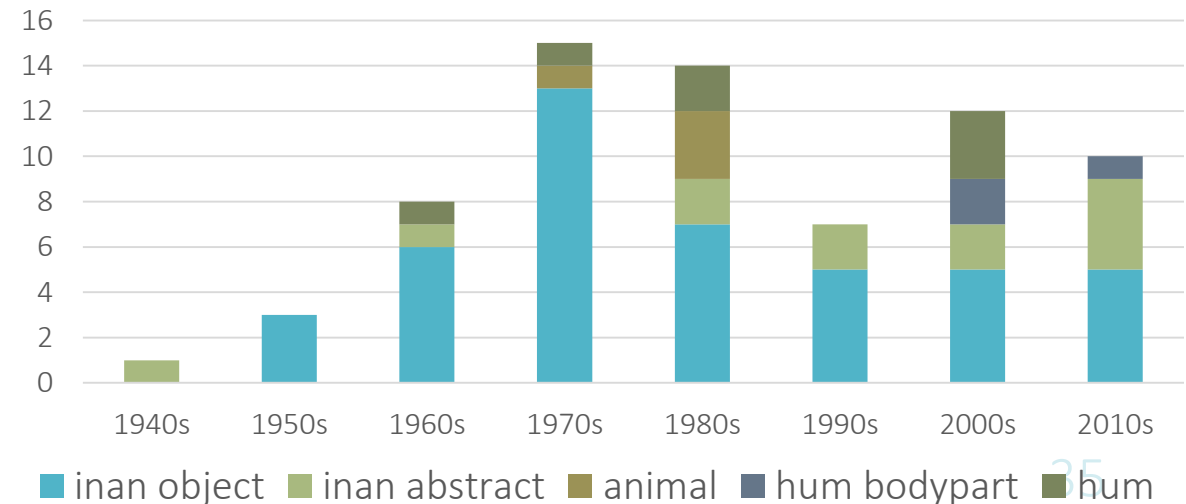
5. Gift-wrap (n=142)

- (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

NI is productive in English

- no reason not to analyse as NI
- wide range of semantic relations
- varied distribution of forms

Nuancing Mithun's (1984) typology

- based on wide range of unrelated languages
- English: no type III, but type IV (though different characteristics)
- 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

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