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# From community competition to complementarity in general linguistics:
# The eight complementary why questions

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## Overview:

• Do general linguists need to be organized in competing communities?

• My tentative answer is no.

• Instead, linguists could think of their methodological choices as **complementary**.

• There are in fact eight different theoretical questions of general linguistics,
which are as complementary as Tinbergen's famous **four why questions** in biology.


## 1. Community organization of linguistics

• linguists often belong to particular communities ("schools", "frameworks")

> e.g.   Prague School
> Leningrad Phonological School
> Columbia School of functional linguistics (e.g. Davis et al. 2006)
> Systemic Functional Grammar
> Role and Reference Grammar (e.g. Van Valin 2005)
> Functional Discourse Grammar (e.g. Hengeveld & Mackenzie 2008)
> Head-driven Phrase Structure Grammar (e.g. Müller et al. 2021)

• they come together at conferences around these communities,
  some of which are very big,

> e.g.   GLOW (Generative Linguistics in the Old World)
> UBL (Usage-Based Linguistics)
> ICLA (International Cognitive Linguistics Conference)
> ICCG (International Conference on Construction Grammar)

• these communities are often based on pedigrees

> e.g.   HPSG: **Ivan Sag** and his students
> LFG:   **Joan Bresnan** and her students
> FDG:   **Simon Dik, Kees Hengeveld** and their students
> CxG:   **Charles Fillmore, Paul Kay** and their students

• the communities sometimes describe their orientation in ideological terms

> e.g. "commitments" (Lakoff 1991), "tenets" (Goldberg 2003)
> and authors often say that they "subscribe to" a particular view

> or they divide linguistics into relevant and irrelevant parts

> e.g. Hornstein (2019):     "LINGuistics" vs. "LANGuistics"
> (Chomskyan vs. Greenbergian)

• one often gets the impression that these **communities compete** with each other – instead of competing hypotheses that can be distinguished by data, we seem to have "competing ideologies" where persuasion and rhetoric are more important than data

Is this **ideology/community-based organization** somehow a necessary feature of linguistics?

> My tentative answer is no – linguistics could be **reunified**.

There are no unsurmountable ideological differences, because we all respect the basic principles of science and rationality. (We do not need "political parties", because linguistics is not about dividing power, but about finding the truth.)

We may differ in **methodological choices**

> (including terminological choices) – but we must always be open.


## 2. Types of theoretical linguistics: Particular vs. general linguistics

Two terminological points:

Theoretical linguistics contrasts with *applied linguistics* – all non-applied research is theoretical.

Theoretical research is about understanding (asking **"why questions"**) – applied research is about changing the world.

**General linguistics** (the study of Human Language) contrasts with particular **linguistics** (the study of a particular language, or language family) (cf. Haspelmath 2021b)

It makes no sense to contrast

> "descriptive vs. theoretical"
> "typological vs. theoretical"

> because **all description and typology is theoretical**

"Theoretical" is often used as a synonym of "general-theoretical", e.g.

> Legate, Julie Ann. 2002: *Warlpiri: Theoretical implications*. PhD dissertation, MIT.

But it is better to say "general" *("Warlpiri: General implications")*

## 3. The eight theoretical questions of linguistics

cf. Tinbergen's (1963) four explanatory questions of behavioural biology

|  | static | dynamic |
|---|---|---|
| proximate | **mechanistic question:**<br><br>How does it work? | **ontogenetic question**:<br><br>How does it develop? |
| ultimate | **functional question:**<br><br>What is its survival value? | **phylogenetic question**:<br><br>How did it evolve? |

**Table 1. Tinbergen's four questions (or levels of analysis)**

– Like biologists, linguists can profit from accepting **explanatory pluralism** (or theoretical pluralism) as a foundational principle for their field.

– Different theoretical questions **coexist** and have answers at different levels of analysis, and none is reducible to the others.

– The questions **complement** each other, and there is space for different methods and different subcommunities in the field whose approaches are not necessarily in tension.

– A *theoretical* question (or "why question") is a question about an **explanation** (not about data or about possible practical applications), and we can ask such questions either about PARTICULAR LANGUAGES, or about Human Language in general.

Linguistics involves theoretical research both at the general level (Human Language) and at the level of particular cultures – **g-linguistics** and **p-linguistics**.

– Thus, we get eight questions in linguistics

|  |  | particular languages (particular linguistics) | Human Language (general linguistics) |
|---|---|---|---|
| proximate static | **mechanistic** | How does a particular language work? | How does language (in general) work? |
| proximate dynamic | **ontogenetic** | How is a particular language acquired by its speakers? | How does language grow in human children? |
|  |  |  |  |
| ultimate static | **functional-adaptive** | What are the functions of the parts of a particular language? | How is language adapted to its users' needs? |
| ultimate dynamic | **phylogenetic** | How did a particular language arise and change? | How does language evolve and change? |

**Table 2. The eight theoretical questions**

## 4. The four questions about particular languages (p-questions)

– How does English work?  e.g. Chomsky (1957),
        a reverse engineering approach
– How is English acquired?  e.g. Berko (1958)
– What are the functions of its grammar?  e.g. Halliday (1985)
– How did English arise?  e.g. Rask (1818)

## 5. The four questions about Human Language (g-questions)

– How does Human Language work?  e.g. Lenneberg (1966) – Greenberg (ed.) 1978
– How does language grow in children?  e.g. Guasti (2004) – Slobin (ed.) 1985
– How is language adapted to users' needs? e.g. Pinker & Bloom (1990) – Givón (2010)
– How does language change and evolve?  e.g. Darwin (1871) – Paul (1880)

These questions are related to the p-questions, but the p-questions are often independent of the g-questions.

Moreover, how can the g-questions be answered on the basis of the p-questions?

## 6. The eight subquestions about Human Language

| | general questions about Human Language | subquestions: biological capacity | subquestions: universal properties |
|---|---|---|---|
| **mechanistic** | How does language (in general) work? | How does the capacity for language work? | How do languages work? |
| **ontogenetic** | How does language grow in human children? | How does the capacity for language grow? | How are languages acquired? |
| | | | |
| **functional-adaptive** | How is language adapted to its users' needs? | What is the survival value of the capacity for language? | How are languages adapted to their users' needs? |
| **phylogenetic** | How does language evolve and change? | How did the capacity for language evolve? | How do languages change? |

**Table 3: The eight subquestions of the four questions of general linguistics**

## 7. A concrete example:
## Differential object marking in Spanish and in general

7.1. How does DOM work in Spanish?

(cf. Fábregas 2013)

7.2. How is it acquired in Spanish?

(cf. Rodríguez-Mondoñedo 2008)

7.3. What function does it have in Spanish?

(cf. Seržant 2019, on Russian)

7.4. How did it evolve in Spanish?

(cf. García García 2018)

7.5. How does DOM work in the mind/brain?

(cf. López 2012; Aissen 2003)

7.6. How is DOM acquired as a mental capacity?

7.7. What is the adaptive value of object marking in UG?

**?**

7.8. How did object marking in UG evolve in human phylogeny?

**? ?**

7.9. How does object marking work in languages worldwide?

<div align="right">(cf. Sinnemäki 2014; Comrie 2005)</div>

7.10. How is object marking acquired in the world's languages?

<div align="right">**?**</div>

7.11. What is the general purpose of (differential) object marking?

<div align="right">(cf. Bossong 1991)</div>

7.12. How does differential object marking develop?

<div align="right">(cf. Seržant & Witzlack-Makarevich 2018)</div>


## 8. The general purpose of differential object marking

<div align="right">(Moravcsik 1978; Bossong 1991; Haspelmath 2021a):</div>

• Languages tend to show extra marking when a semantic relationship is not readily predictable from other information – to serve as **efficient means of communication**.

• Object marking is favoured when the object nominal is **definite** or **animate** and thus unexpected as an object.

• In general, **highly ranked roles** tend to be filled by **referentially prominent arguments** (agent and recipients tend to be animate, definite, topical etc.), and vice versa (Haspelmath 2021a)

• Object markers have a diverse range of **diachronic sources**:

| | | |
|---|---|---|
| Spanish *a* | < | Latin *ad* 'to'/dative |
| Russian *-a* | < | *-a* (genitive) |
| Afrikaans *vir* | < | Dutch *voor* 'for' |
| Batavia Creole *kung* | < | Portuguese *com* 'with' (Maurer 2004) |
| Persian *-râ* | < | Old Persian *rādi* 'concerning' |
| Sri Lanka Malay *-yang* | < | Malay *yang* (relative marker) (Smith 2012) |
| German *-n* | < | stem-forming element (Haspelmath 2002: §12.1.5) |

In German, differential marking arose by **abandoning the distinction** in inanimates:

| | | | | | |
|---|---|---|---|---|---|
| medieval German | NOM | *affe* | 'ape' | *knote* | 'knot' |
| | ACC | *affe-n* | | *knote-n* | |
| | | | | | |
| Modern German | NOM | Affe | | Knoten | |
| | ACC | *Affe-n* | | Knoten | |

What exactly happened in all these languages remains unclear – but the changes have yielded analogous results in many different languages, apparently **due to the same selective pressure**.

Evidence for functional adaptation is not found in the changes themselves – but the changeability of linguistic conventions makes it possible for selective pressures to take effect.

**Multi-convergence** is evidence for adaptation (Haspelmath 2019).

Thus, efficiency considerations explain the worldwide distribution of object-marking phenomena (Comrie 2005; Sinnemäki 2014).

**Recapitulation: The eight (or twelve) questions:**

| | **particular questions** | **general subquestions:**<br><br>**biological capacity** | **general subquestions:**<br><br>**universal properties** |
|---|---|---|---|
| **mechanistic** | How does a particular language work? | How does the capacity for language work? | How do languages work? |
| **ontogenetic** | How is a particular language acquired by its speakers? | How does the capacity for language grow? | How are languages acquired? |
| | | | |
| **functional-adaptive** | What are the functions of the parts of a particular language? | What is the survival value of the capacity for language? | How are languages adapted to their users' needs? |
| **phylogenetic** | How did a particular language arise and change? | How did the capacity for language evolve? | How do languages change? |

**Table 4: The eight (or twelve) theoretical questions of linguistics**

These twelve questions are obviously complementary. So why do linguists think that there should be "community competition"?

Especially in research on grammar, there is a widespread stereotype that theoretical linguistics should be **monistic**, instead of **pluralistic**.

People often talk about **"linguistic theory"**, as if there were not many different theoretical questions that must be **complementary**.

And we often neglect the difference between general linguistics and particular linguistics – we try to answer **general questions** by using **particular data**.
This is overly ambitious (cf. Haspelmath 2021b).

## 9. The "language faculty" and human linguisticality

Some authors think that what divides us ideologically is the belief in **"the language faculty"**, or in **"Universal Grammar"**.

But these terms have not been used consistently.

Chomsky (2000) (https://chomsky.info/architecture01/)
> "If they believe that there is a difference between my granddaughter, a rabbit and a rock, then they believe that language is innate. So people who are proposing that there is something debatable about the assumption that language is innate are just confused. So deeply confused that there is no way of answering their arguments. There is no doubt that **language is an innate faculty**."

(Chomsky et al. 2019) (https://doi.org/10.5565/rev/catjl.288)
> "The term Universal Grammar (UG) is simply a label for this striking difference in cognitive capacity between "us and them" [= humans and non-human animals]. As such, **UG is the research topic of GG**: what is it, and how did it evolve in us?"

It is better to use the term **linguisticality** for the biological capacity for language (Haspelmath 2020), and **evolution of linguisticality** when talking about "Darwin's Question" (because there is also cultural evolution).

There can be no *ideological* question about linguisticality –
only **empirical** questions, e.g.

– to what extent is linguisticality is domain-specific?
– to what extent is it species-specific?                    (e.g. Pinker & Jackendoff 2005)
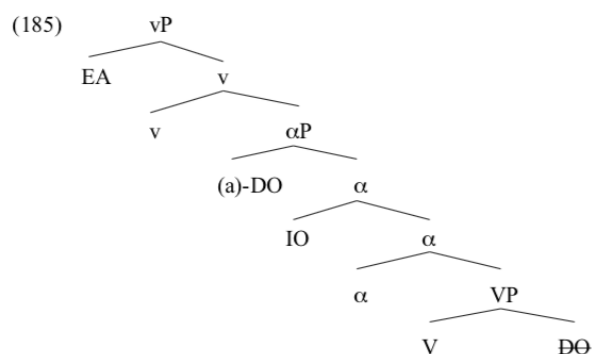– did linguisticality evolve by saltation or gradually?

The consensus seems to be that we do not know very much about all these questions, but it is of course interesting to ask them.

## 10. What is the purpose of second-level analyses?

Many linguistics papers contain **two levels** of description

> – once in terms that are generally comprehensible
> – and a second time using a technical metalanguage
> > and extremely abstract concepts ("theoretical analysis")

e.g. Fábregas (2013), reporting on López (2012) on differential object marking in Spanish:

(185)

```
            vP
         /      \
       EA         v
               /    \
              v       αP
                    /    \
                (a)-DO     α
                        /    \
                      IO       α
                             /    \
                            α       VP
                                  /    \
                                 V      D̶O̶
```

This **"two-level analysis" mode** makes sense only if the purpose is
**to do p-linguistics and g-linguistics at the same time**:

• The technical metalanguage ("the framework") is **hypothesized to be innate**,

• and by offering a second-level analysis of the Spanish facts in this metalanguage, the author provides support for **a particular claim about the innate building blocks** of grammar as part of human linguisticality

But if only one language is considered, this is a **very weak claim**, because
  • many other second-level analyses are possible
  • it would have to be shown that the same building blocks also work well for all other languages

There is no reason to be ideologically opposed to this approach, but it must be asked whether this one-language-at-a-time method is an efficient way of finding the innate building blocks (cf. Croft 2009).

Generative syntax is a **methodological choice**, not an "ideology", or a "commitment". There is no reason to "adopt" or "reject" it wholesale, but **its specific claims should be assessed in comparison** with other methodological choices.

Generative grammarians typically do not do this,
  cf. my blogposts about **Levin (2018)** (https://dlc.hypotheses.org/1119),
  **Kalin (2018)** (https://dlc.hypotheses.org/1496),

However, **Ormazabal & Romero (2019)** (https://dlc.hypotheses.org/2454) are a nice exception in that they do compare their approach to functionalist alternatives – though their paper is limited to Spanish, and how it might extend to other languages remains unclear.

So it's not that I "reject" generative approaches – I just find most of the work **very narrow** (limited to a few languages), and the claims are **extremely difficult to test**.

It appears that many linguists conceive of the generative approach as the only possible one, apparently because they think of linguistics in **monistic**, rather than **pluralistic** terms

BUT:

– particular linguistics is **theoretical** on its own (without the general Human Language perspective)

– general linguistics must be based on **large-scale cross-linguistic comparison** (Haspelmath 2021b) – if it is based on a few languages, it is very speculative

## 11. Conclusion

• There are many different theoretical questions of linguistics that are **complementary**.

• There is no reason to say that **description is "not theoretical"**, or that p-linguistics is somehow less worthy than g-linguistics.

• Different linguists differ in their **methodological choices**, but there is no reason why this should define isolated communities.

• A "theoretical framework" is a **methodological choice**, but without applying multiple **converging methods**, we will not know whether our theoretical claims are true. So it is not enough to work "within a framework" (cf. Haspelmath 2010).

• One real problem is that we often fail to understand each other – talking past each other is a frequent experience.

• This is sometimes due to simple vagueness of technical terms, so one way to improve the situation may be to raise awareness of terminological issues (cf. Leivada & Murphy 2021, Haspelmath 2021c)

## References

Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language & Linguistic Theory* 21(3). 435–483.

Berko, Jean. 1958. The child's learning of English morphology. *Word*. Taylor & Francis 14(2–3). 150–177.

Bossong, Georg. 1991. Differential object marking in Romance and beyond. In Kibbee, Douglas & Wanner, Dieter (eds.), *New analyses in Romance linguistics*, 143–170. Amsterdam: Benjamins. (https://www.rose.uzh.ch/dam/jcr:ffffffff-c23e-37d9-0000-00006e1a9200/Bossong_80.pdf)

Chomsky, Noam & Gallego, Ángel J. & Ott, Dennis. 2019. Generative grammar and the faculty of language: Insights, questions, and challenges. *Catalan Journal of Linguistics* 2019. 229–261. (doi:10.5565/rev/catjl.288)

Chomsky, Noam A. 1957. *Syntactic structures*. 's-Gravenhage: Mouton.

Comrie, Bernard. 2005. Alignment of case marking. In Haspelmath, Martin & Dryer, Matthew S. & Gil, David & Comrie, Bernard (eds.), *The world atlas of language structures*, 398–405. Oxford: Oxford University Press. ([http://wals.info/chapter/98)](http://wals.info/chapter/98))

Croft, William. 2009. Methods for finding universals in syntax. In Scalise, Sergio & Magni, Elisabetta & Bisetto, Antonietta (eds.), *Universals of language today*, 145–164. Dordrecht: Springer.

Culicover, Peter W. & Jackendoff, Ray S. 2005. *Simpler Syntax*. Oxford: Oxford University Press.

Darwin, Charles. 1871. *The descent of man*. London: Murray.

Davis, Joseph (ed.). 2006. *Advances in functional linguistics: Columbia School beyond its origins*. sfsl.57. Amsterdam: Benjamins. ([https://benjamins.com/catalog/sfsl.57](https://benjamins.com/catalog/sfsl.57)) (Accessed June 19, 2021.)

Fábregas, Antonio. 2013. Differential object marking in Spanish: State of the art. *Borealis – An International Journal of Hispanic Linguistics* 2(2). 1–80. (doi:[10.7557/1.2.2.2603](https://doi.org/10.7557/1.2.2.2603))

García García, Marco. 2018. Nominal and verbal parameters in the diachrony of differential object marking in Spanish. In Seržant, Ilja A. & Witzlack-Makarevich, Alena (eds.), *Diachrony of differential argument marking* (Studies in Diversity Linguistics), 209–242. Berlin: Language Science Press.

Givón, T. 2010. The adaptive approach to grammar. In Heine, Bernd & Narrog, Heiko (eds.), *The Oxford Handbook of Linguistic Analysis*, 27–49. Oxford: Oxford University Press.

Goldberg, Adele E. 2003. Constructions: A new theoretical approach to language. *Trends in Cognitive Sciences* 7(5). 219–224.

Greenberg, Joseph H (ed.). 1978. *Universals of human language (four volumes)*. Stanford: Stanford University Press.

Guasti, Maria Teresa. 2004. *Language acquisition: The growth of grammar*. Cambridge MA: MIT Press.

Halliday, M. A. K. 1985. *Introduction to Functional Grammar*. xxx. ([http://www.myilibrary.com?id=573446](http://www.myilibrary.com?id=573446)) (Accessed July 15, 2019.)

Haspelmath, Martin. 2002. *Understanding morphology*. London: Arnold. ([https://zenodo.org/record/1236482](https://zenodo.org/record/1236482))

Haspelmath, Martin. 2010. Framework-free grammatical theory. In Heine, Bernd & Narrog, Heiko (eds.), *The Oxford Handbook of Linguistic Analysis*, 341–365. Oxford: Oxford University Press.

Haspelmath, Martin. 2019. Can cross-linguistic regularities be explained by constraints on change? In Schmidtke-Bode, Karsten & Levshina, Natalia & Michaelis, Susanne Maria & Seržant, Ilja A. (eds.), *Competing explanations in linguistic typology*, 1–23. Berlin: Language Science Press. ([http://langsci-press.org/catalog/book/220](http://langsci-press.org/catalog/book/220))

Haspelmath, Martin. 2020. Human linguisticality and the building blocks of languages. *Frontiers in Psychology* 10(3056). 1–10. (doi:[10.3389/fpsyg.2019.03056](https://doi.org/10.3389/fpsyg.2019.03056))

Haspelmath, Martin. 2021a. General linguistics must be based on universals (or nonconventional aspects of language). *Theoretical Linguistics (to appear)*. ([https://ling.auf.net/lingbuzz/005158](https://ling.auf.net/lingbuzz/005158))

Haspelmath, Martin. 2021b. Role-reference associations and the explanation of argument coding splits. *Linguistics* 59(1). 123–174. (doi:[10.1515/ling-2020-0252](https://doi.org/10.1515/ling-2020-0252))

Haspelmath, Martin. 2021c. Towards standardization of morphosyntactic terminology for general linguistics. In Alfieri, Luca & Arcodia, Giorgio Francesco & Ramat, Paolo (eds.), *Linguistic categories, language description and linguistic typology*. Amsterdam: Benjamins. ([https://ling.auf.net/lingbuzz/005489](https://ling.auf.net/lingbuzz/005489))

Hengeveld, Kees & Mackenzie, J. Lachlan. 2008. *Functional Discourse Grammar: A typologically-based theory of language structure*. Oxford: Oxford University Press.

Hornstein, Norbert. 2019. The stupendous success of the Minimalist Program. In Kertész, András & Moravcsik, Edith & Rákosi, Csilla (eds.), *Current approaches to syntax: A comparative handbook*. Berlin: De Gruyter.

Kalin, Laura. 2018. Licensing and differential object marking: The view from Neo-Aramaic. *Syntax* 21(2). 112–159. (doi:[10.1111/synt.12153](https://doi.org/10.1111/synt.12153))

Lakoff, George. 1991. Cognitive versus generative linguistics: How commitments influence results. *Language and Communication* 11(1/2). 53–62.

Legate, Julie Anne. 2002. *Warlpiri: Theoretical implications*. Massachusetts Institute of Technology. (Thesis.) (https://dspace.mit.edu/handle/1721.1/8152) (Accessed June 22, 2021.)

Leivada, Evelina & Murphy, Elliot. 2021. Mind the (terminological) gap: 10 misused, ambiguous, or polysemous terms in linguistics. *Ampersand* 8. 100073. (doi:10.1016/j.amper.2021.100073)

Lenneberg, Eric H. 1967. *Biological foundations of language*. New York: John Wiley & Sons, Inc.

Levin, Theodore. 2018. On the nature of differential object marking: Insights from Palauan. *Natural Language & Linguistic Theory* 1–47. (doi:10.1007/s11049-018-9412-5)

López, Luis. 2012. *Indefinite objects: Scrambling, choice functions, and differential marking*. Cambridge MA: MIT Press.

Maurer, Philippe. 2004. La marca de los objetos en los criollos de Batavia y Tugu. In Fernández, Mauro & Fernández-Ferreiro, Manuel & Vázquez Veiga, Nancy (eds.), *Los criollos de base ibérica: ACBLPE 2003* (Manuel , Nancy). Frankfurt/Main: Vervuert Verlagsgesellschaft. (https://www.degruyter.com/document/doi/10.31819/9783865278555/html) (Accessed March 2, 2021.)

Moravcsik, Edith A. 1978. On the case marking of objects. In Greenberg, Joseph H (ed.), *Universals of human language*, vol. 4: Syntax, 249–289. Stanford: Stanford University Press.

Müller, Stefan & Abeillé, Anne & Borsley, Robert D. & Koenig, Jean-Pierre (eds.). 2021. *Head-driven Phrase Structure Grammar: The handbook*. Berlin: Language Science Press. (https://hpsg.hu-berlin.de/Projects/HPSG-handbook/)

Ormazabal, Javier & Romero, Juan. 2019. Prolegomena to the study of object relations. *Lingvisticæ Investigationes* 42(1). 102–131. (doi:10.1075/li.00031.orm)

Paul, Hermann. 1880. *Principien der Sprachgeschichte*. Halle: Niemeyer.

Pinker, Steven & Bloom, Paul. 1990. Natural language and natural selection. *Behavioral and brain sciences* 13(04). 707–727.

Rask, Rasmus. 1811. *Vejledning til det Islandske eller gamle Nordiske Sprog*.

Rodríguez-Mondoñedo, Miguel. 2008. The acquisition of Differential Object Marking in Spanish. De Gruyter Mouton 20(1). 111–145. (doi:10.1515/PROBUS.2008.004)

Seržant, Ilja & Witzlack-Makarevich, Alena. 2018. Differential argument marking: An introduction. In Seržant, Ilja & Witzlack-Makarevich, Alena (eds.), *The diachronic typology of differential argument marking* (Studies in Diversity Linguistics). Berlin: Language Science Press.

Seržant, Ilja A. 2019. Weak universal forces: The discriminatory function of case in differential object marking systems. In Schmidtke-Bode, Karsten & Levshina, Natalia & Michaelis, Susanne Maria & Seržant, Ilja A. (eds.), *Explanation in typology: Diachronic sources, functional motivations and the nature of the evidence*, 149–178. Berlin: Language Science Press. (http://langsci-press.org/catalog/book/220)

Sinnemäki, Kaius. 2014. A typological perspective on Differential Object Marking. *Linguistics* 52(2). 281–313.

Slobin, Dan Isaac (ed.). 1985. *The cross-linguistic study of language acquisition*. Hillsdale, NJ: Erlbaum.

Smith, Ian R. 2012. Adstrate influence in Sri Lanka Malay: Definiteness, animacy and number in accusative case marking. *Journal of Language Contact*. Brill 5(1). 5–22. (doi:10.1163/187740912X623389)

Tinbergen, N. 1963. On aims and methods of Ethology. *Zeitschrift für Tierpsychologie* 20(4). 410–433. (doi:10.1111/j.1439-0310.1963.tb01161.x)

Van Valin, Robert D., Jr. 2005. *Exploring the syntax-semantics interface*. Cambridge: Cambridge University Press.