## A Cartesian dream:

A geometrical account of syntax In honor of Andrea Moro

## **RGG Monographs**

Series Editors Guglielmo Cinque Luigi Rizzi

## A CARTESIAN DREAM

## A geometrical account of syntax In honor of Andrea Moro

Edited by
Matteo Greco & Davide Mocci



#### ISBN 978-2-8399-4196-9

#### © 2024 Lingbuzz Press

Published under the Creative Commons Licence CC BY-NC-ND: https://creativecommons.org/licenses/by-nc-nd/4.0/
You are free to copy and share this book, provided no change is made to it, and you do not resell it or use it commercially.

Cover: Lucie Janků Fonts: TeX Gyre Termes, Utopia Printed and binded by Lulu

Published by Lingbuzz Press
An imprint of Cercle Šnek / Šnek Circle
https://šnek.com/
snek@lingbuzz.org

To our *Maestro* (Matteo and Davide)

# Contents

Matteo Greco & Davide Mocci
The Miracle Creed and SMT Noam Chomsky
Notes on half, all, both, each & of Richard S. Kayne
The importance of anomaly in neurolinguistic research Valentina Bambini
<b>'Sono Andrea': Some reduced (cleft) answers in Italian</b> Adriana Belletti
"Moro's Problem": Finding grammar in the brain Robert C. Berwick
<b>Dynamic antisymmetry and type-driven interpretation</b> Valentina Bianchi
Was Pierre Marie right? Not really Stefano F. Cappa & Eleonora Catricalà
On the imperialism of the copula: Addressing some puzzling properties of reduced structures in Italian  Carlo Cecchetto & Caterina Donati
Some WISE advice Cristiano Chesi
Brief notes on the semantics of copular sentences  Gennaro Chierchia 149

Selective grammatical encoding of emotions in language Guglielmo Cinque	. 161
Linear Order, Labeling and the Language Design Denis Delfitto	. 171
Agreeable predicate nominals  Marcel den Dikken	. 183
Functional categories, the determinacy of merge, and principof computational efficiency  Anna Maria Di Sciullo	_
The antisymmetry of syntactic structure: a view from automorphisms  Robert Frank, William Min, Abhisar Mittal & Billy Zhong	. 209
Headlines, the grammar of omission and the grammars in the human mind  Maria Teresa Guasti	
Lost in translation: Subject drop in Christie's Easy to Kill Liliane Haegeman	. 227
Grammatical Parameters from a Gene-like Code to Self-Organizing Attractors: a research program Giuseppe Longobardi & Alessandro Treves	. 237
Form Sequence meets the Romance adjective M. Rita Manzini	. 253
Andrea Moro at the speed of 60  Massimo Piattelli-Palmarini	. 269
Negative concord as doubling Cecilia Poletto	. 279
A note on a typology of merge-based systems  Luigi Rizzi	. 287

Generalised Dynamic Antisymmetry & Smugglin tions	ng Deriva-
Ian Roberts	297
Are humans the only animal who makes "1"?  Andrea Serino	303
Suonano le campane – Es läuten die Glocken – 'Z l di klokkn. On rightward agreement with a post-v	
ject	211
Alessandra Tomaselli	311

# Selective grammatical encoding of emotions in language

### Guglielmo Cinque

University of Venice

In Cinque 2013 I considered one potential argument for Universal Grammar. One stemming from the limited number of functional notions that are grammatically encoded in the languages of the world. What we find is that only a fraction of our cognitive concepts and distinctions seems to receive a grammatical encoding, where by 'grammatical encoding' I mean encoding in one of the closed classes of categories (affixes, particles, auxiliaries, clitics, etc.) that belong to the functional rather than the substantive lexicon of languages. Most cognitive concepts and distinctions do not find any such encoding. For example, verbal projections in clauses never grammatically encode such human cognitive universals as "mourning", "incest avoidance", "health", "sexual attractiveness", (Brown 1991), etc., nor otherwise cognitively significant concepts like "peril", "hunger", "death", "pain", etc. (even those relevant to selection). We could very well imagine the existence of languages that marked grammatically some such distinctions in their verbs or nouns; yet none are found (see the discussion in Cinque 2013), a fact which we should find puzzling. The limitation does not appear to follow naturally from cognitive, historical, cultural, processing, or other factors; which makes it

<sup>1.</sup> Of course, any concept can be expressed linguistically through a combination of lexical (and grammatical) means (paraphrases), but this is very different from the specific sense utilized here of *grammatical encoding*, which is through one of the various closed classes of categories.

plausible to think of them as forced upon us by Universal Grammar, perhaps as a consequence of how it crystallized at some distant point of the evolution of our species. Here I focus on the specific domain of emotions.

If one considers emotions one finds that only a tiny subset is grammatically encoded, and universally so, it appears. Among the emotions listed in Darwin 1872 and Ekman 1992, only commiseration/compassion/pity (commiserative morphology/syntax), affection (endearment morphology), contempt (pejorative morphology), and possibly wish/desire (optative morphology/syntax) are attested, but not 'love', 'hatred', 'joy', 'sadness', 'embarrassment', 'remorse', 'pride', 'shame', 'jealousy', 'envy', etc. Here I document the case of commiseration/pity. For affection and contempt see Cinque 2015 and Guillaume 2018.

A commiserative grammatical morpheme is found in the following language families:

**Algonquian:** Meskwaki (Goddard 2011: p. 91) =tike: enclitic morpheme meaning 'poor thing'.

**Arawakan: Tariana** (Aikhenvald 2003: p. 178) **=miki**: "poor.thing clitic".

**Austronesian: Belep** (Oceanic - McCracken 2012: p. 232f) commiserative particle (= 'poor..'). **Ledo** (Celebic - van den Berg 2021: p. 60) *pakasi*: 'poor thing' particle. **Muna** (Celebic - van den Berg 2021: §3) *kaasi*: commiserative particle. **Napu** (Celebic - Hanna 2001: §5.3.3) commiserative pronoun. **Pamona** (Celebic - van den Berg 2021: p. 60) *tobusi*: 'the poor thing, exclamation of empathy'. **Uma** (Malayo-Polynesian - Martens 1987: §4) = hawo: commiserative clitic.

**Cariban**: **Hixkaryana** (Kalin 2011: p. 12) *uro tho* Lit. me poor 'poor me': 'devalued particle', which follows the N.

**Chibchan**: **Guatusa** (Umaña Constenla 1998: p. 82) *sajá*, *chumá*: partículas conmiserativas

(curíjurí sajá mujer pobre 'the poor woman').

**Guajiboan: Sikuani** (Queixalós 2011: p. 159) *boka:* commiserative modal auxiliary.

**Indo-European: Arvanitic Albanian** (https://afbo.info/pairs/88) *mavro-*: 'black, pitiful', e.g. *mavro-p ák* 'poor old man'. **Paduan** *poro*: grammaticalized form of *povero* 'poor', only meaning 'arousing pity': *el me poro nono* 'my poor grandfather' (Paola Benincà, p.c.)<sup>2</sup>. **Yiddish** (Matisoff 1973: p. 574) *neb∂x*: 'commiserative particle'.

**Panoan:** Chácobo (Tallman 2018: §11.9.7) "The morpheme = tapirá [..] encodes that the speaker feels self-pity [..]. It is often translated in Spanish as "pobrecito mí" (roughly "poor me")." **Yaminawa** (Neely 2019: p. 146) The suffix -nãbe, which is also sometimes realized as -nãmē, expresses pity, typically for a very elderly or very ill person, or for someone who is deceased.

**Papuan: Tayap** (Torricelli - Kulick & Terrill 2019). "Vowel length expressing sympathy and pity ('poor thing')" (§2.1.2.1). **Ulwa** (Sepik - Barlow 2018: §6.8) affective/commiserative pronouns (pronoun + ngusuwa 'poor') un 2ndPers. + ngusuwa - ungusuwa 'you poor thing'.

**Tai-Kadai:** Lakkja (Fan 2018: §2.1.12) *kho*<sup>51</sup>: prefix meaning 'pitiful'.

**Takanan: Takana** *ichenu*: clitic marker of compassion (*deja=ichenu* Lit. person=poor 'pitiable person') (Guillaume 2018: §3.2); similarly in other Takanan languages: *chenu* in **Reyesano** and *shana* in **Cavineña** (Guillaume 2018: §4.2).

**Tupi-Guaraní**: **Guaraní** (Estigarribia. 2020) *anga*: 'commiserative particle'. "*Anga* expresses speaker commiseration for an event participant" (p.188).<sup>3</sup>

<sup>2.</sup> The adjective 'poor' is also used to express commiseration in Italian and other Romance varieties, even though it is not as reduced as it is in Paduan.

<sup>3.</sup> See:

<sup>(</sup>i) Jairo h-eta anga o-sufri o-kakuaa aja Jairo possm3-numerous poor.thing 3.act-suffer 3.act-grow.up while 'Jairo suffered a lot growing up, poor thing.'

**Kokama-Kokamilla** (Vallejos Yopán 2010: §5.4.2.3) =chasu 'affective clitic'; ayuma 'brother in law' ayuma=chasu 'poor brother in law'; wayna 'woman' wayna=chasu 'poor woman'.

**Uralic: Mansi** (Keresztes 1998: p. 419) 'commiserative mood'.

**Yukaghir: Tundra Yukaghir** (Schmalz 2013: p. 51,and §3.4.3.3.2) *–ködi*: 'commiserative suffix'.

**Wakashan**: **Kwak'wala** (Sardinha 2016: abstract) = gas: clitic meaning 'poor thing'.

**Language isolates: Kamsá** (Fabre 2001: p. 8; O'Brien 2021: §5.3). In Kamsá the pre-nominal adjective 'poor' is rendered with a "caritative" suffix, *-jema* (while adjectives are either pre-nominal or postnominal).

**Kwaza** (van der Voort 2004: p. 967; 2015,§3.7) –*wỹte*: 'lamentative suffix'.

**Trumai** (Guirardello-Damian, Trumai and Trumai. 2017: passim) the *de* and *ita* morphemes mean 'pitiful'.

In many languages commiseration is expressed via a non-intersective, non-predicative, functional adjective, which appears to be merged very high in the hierarchy of adjectives, also preceding value adjectives and even adjectival and participial reduced relative clauses, as well as cardinal numerals.<sup>4</sup> The high Merge of commiserative modifiers is also clearly indicated by languages like Maltese, whose adjectives are otherwise postnominal (Borg 1996: section 3.12), as they precede the noun (see (1)) like the synthetic superlative adjectives (2)

<sup>4.</sup> See the possible pre-numeral order of *poor* in English (*My poor two children*, attested in internet: (https://www.tripadvisor.com/ShowUserReviews-g294009-d16883392-r766171218-Al\_Messila\_a\_Luxury\_Collection\_Resort\_Spa\_Doha-Doha.html, The Irish Widow, p. 76, https://books.google.it/books?id=DUdWAAAAcAAJ, much like the adjective in the superlative form (*The black\*(est) two dogs that I've (ever) seen.*-Kayne 2008, note 15). Both can also follow the numeral in English. Also see the higher position of *poor* relative to other prenominal non-intersective adjectives: *My poor<sub>comm</sub> little<sub>endear</sub> old<sub>longstanding</sub> friend.* In Kokama-Kokamilla the commiserative suffix is external to the diminutive/endearment suffix, as expected from the mirror principle.

and the ordinal adjectives (3), which precede the cardinal numeral in pre-nominal position (cf. Winchester 2019: p. 17).<sup>5</sup>

- (1) il-povra mara
  DEF-poor.FSG woman

  'the unfortunate woman' (Gatt 2018: ex. (3) of section 2)
- (2) a. l-aħjar tliet ristorante

  DEF-best three restaurant.PL

  'the best three restaurants' (Winchester 2019: p. 18)
  - b. l-isbah ktieb
    DEF-beautiful(superl) book
    'the most beautiful book' (Fabri 2001: p. 156)
- (3) a. l-ewwel ghaxar volume

  DEF-first ten volume.PL

  'the first ten volumes'

  (Winchester 2019: p. 17)
  - b. l-ahhar każ
     DEF-last.MSG case.MSG
     'the last case' (Gatt 2018: ex. (4) of section 2, p.176)

While 'commiseration' (as well as 'endearment' and 'contempt') appear to be universally encoded grammatically, it remains to be seen whether other emotions are similarly encoded in the languages of the world. There is, to date, no clear evidence that they are.

<sup>5.</sup> In the analytic form the superlative morpheme precedes the noun while the adjective follows:

<sup>(</sup>i) a. 1-izjed ghadu kattiv the-most enemy cruel 'the cruelest enemy' (Borg 1996: p. 14)

b. l-aktar ktieb interessanti
DEF-most book interesting
'the most interesting book'

(Fabri 2001: p. 156)

#### Acknowledgements

This is excerpted from a talk given at the workshop "The Ontology of the Mind and Its Linguistic Reflection: Emotions" Nice, 28-29/04/2022. I wish to thank Sara Chayani, Friederike Moltmann, Tobias Scheer, and Martina Wiltschko, for their comments. I also thank two anonymous reviewers for their observations. I dedicate this paper to Andrea, whose interests span over an exceptionally wide spectrum.

#### References

- Aikhenvald, Alexandra Y. 2003. *A Grammar of Tariana, from Northwest Amazonia*. Cambridge: Cambridge University Press.
- Barlow, Russell. 2018. *A Grammar of Ulwa*. PhD Dissertation. University of Hawai'i. http://ling.hawaii.edu/wp-content/uploads/RussellBarlowFinal.pdf.
- Borg, Albert J. 1996. The structure of the noun phrase in Maltese. *Rivista di Linguistica*. 8(1). 5–28. https://www.italian-journal-linguistics.com/app/uploads/2021/06/2\_Borg-structure.pdf.
- Brown, Donald. 1991. *Human Universals*. New York: McGraw-Hill. Cinque, Guglielmo. 2013. Cognition, Universal Grammar, and typological generalizations. *Lingua* 130. 50–65. https://iris.unive.it/retrieve/e4239ddb-366e-7180-e053-3705fe0a3322/LINGUACognition%26amp%3bUG.pdf.
- Cinque, Guglielmo. 2015. Diminutive, endearing, augmentative and pejorative heads in the extended nominal projection. In E. Di Domenico, C. Hamann & S. Matteini (eds.), *Structures, Strategies and Beyond. Studies in Honour of Adriana Belletti.* 67–81. Amsterdam: Benjamins. https://www.academia.edu/16561510/Diminutive\_endearing\_augmentative\_and\_pejorative\_heads\_in\_the\_extended\_nominal\_projection.

- Darwin, Charles. 1872. *The expression of the emotions in man and animals*. London: John Murray.
- Ekman, Paul. 1992. An Argument for Basic Emotions. *Cognition and Emotion* 6 (3/4). 169–200.
- Fabre, Alain. 2001. Kamsá, a Poorly Documented Isolated Language Spoken in South-Western Colombia. Paper presented at the Symposium "Linguistic Perspectives on Endangered Languages", University of Helsinki, August 29 September 1, 2001. http://www.humanas.unal.edu.co/colantropos/files/8814/7313/3494/Kamsa Fabre.pdf.
- Fabri, Ray. 2001. Definiteness marking and the structure of the NP in Maltese. *Verbum.* 2. 153–172.
- Fan, Wenjia. 2018. Word Formation and Morphological Processes in Lakkja. *Proceedings of the 51st International Conference on Sino-Tibetan Languages and Linguistics* 17. https://repository.kulib.kyoto-u.ac.jp/dspace/bitstream/2433/235272/1/proc icstll51 17.pdf.
- Gatt, Albert. 2018. Definiteness agreement and the pragmatics of reference in the Maltese NP. STUF- Language Typology and Universals 71(2). 175–198. https://www.um.edu.mt/library/oar/handle/123456789/22282.
- Goddard, Ives. 2011. The Twenty-Nine Enclitics of Meskwaki. Papers of the Forty-Third Algonquian Conference. 72—116. https://ojs.library.carleton.ca/index.php/ALGQP/ issue/view/129.
- Guillaume, Antoine. 2018. The grammatical expression of emotions in Tacana and other Takanan languages. *Studies in Language* 42. 114–145.
- Hanna, Roger. 2001. An Introduction to the Grammar of Napu: a work in progress. Ms., SIL. https://www.sil.org/resources/archives/90807.
- Kalin, Laura Mennen. 2011. Hixkaryana: The Derivation of Object Verb Subject Word Order. M.A. Thesis, UCLA. https://static1.squarespace.com/static/586960e5197aea52834230a2/t/5962cd MA.pdf.

- Kayne, Richard S. 2008. Some preliminary comparative remarks on French and Italian definite articles. In R. Freidin, C.P. Otero & M.L. Zubizarreta (eds.), *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud.* 291–321. Cambridge, MA: MIT Press.
- Keresztes, László. 1998. Mansi. In *The Uralic Languages*, 387–427. London: Routledge.
- Kulick, Don & Angela Terrill. 2019. A Grammar and Dictionary of Tayap: The Life and Death of a Papuan Language. Berlin: Mouton de Gruyter. https://bioling.psychopen.eu/index.php/bioling/article/view/9155/8361.
- Martens, Michael P. 1987. The Poor Fellow and the Assertive Fellow. A Study of Two Conjugated Clitics in Uma. Soenjono Dardjowidjojo, ed. *Miscellaneous studies of Indonesian and other languages in Indonesia*. part 9, 19-47. (NUSA: Linguistic Studies of Indonesian and Other Languages in Indonesia 27). Jakarta: Universitas Katolik Indonesia Atma Jaya. http://sealang.net/archives/nusa/pdf/nusa-v27-p19-48.pdf.
- Matisoff, James A. 1973. *The Grammar of Lahu*. Berkeley: University of California Press.
- McCracken, Chelsea Leigh. 2012. A Grammar of Belep. Rice University dissertation. https://scholarship.rice.edu/bitstream/handle/1911/71287/MCCRACKEN-THESIS.pdf?sequence=1&isAllowed=y.
- Neely, Kelsey Caitlyn. 2019. The Linguistic Expression of Affective Stance in Yaminawa (Pano, Peru). University of California, Berkeley dissertation. http://www.etnolinguistica.org/tese:neely-2019.
- O'Brien, C. A. 2021. A Typological Sketch of Kamsá, a Language Isolate of Colombia. Forma y Función 34(2). https://revistas.unal.edu.co/index.php/formayfuncion/article/view/88673.
- Queixalós, Francesc. 2011. Nominalization in Sikuani. *Amerindia* 35. 155–188. http://qxls.free.fr/QxlsProf/SikNominali.pdf.

- Sardinha, Katie. 2016. Expressive clitics in Kwak'wala. Syntax and Morphology Circle (Smircle). https://linguistics.stanford.edu/events/syntax/expressive-clitics-kwakwala.
- Schmalz, Mark. 2013. *Aspects of the grammar of Tundra Yukaghir*. University of Amsterdam dissertation.
- Tallman, Adam J. 2018. A Grammar of Chácobo, a southern Pano language of the northern Bolivian Amazon. University of Texas at Austin dissertation. https://repositories.lib.utexas.edu/handle/2152/74212.
- Umaña Constenla, Adolfo. 1998. *Gramática de la lengua guatusa*. Heredia (Costa Rica): UENA.
- Vallejos Yopán, Rosa. 2010. A Grammar of Kokama-Kokamilla. University of Oregon dissertation. https://scholarsbank.uoregon.edu/xmlui/handle/1794/11051.
- Van den Berg, René. 2021. Commiserative *kaasi* and mirative *garaa*: two modal particles in Muna. *Language and Linguistics in Melanesia*. 39: 56-67 https://c-cluster-110.uploads.documents.cimpress.io/v1/uploads/72638b3e-4aa2-42ed-836a-f7e29da15178 110/original?tenant=vbu-digital.
- Voort, Hein van der. 2004. *A Grammar of Kwaza*. Berlin: Mouton de Gruyter.
- Winchester, Lindley. 2019. The Morphosyntax of the Maltese Determiner Phrase. Georgetown University dissertation. https://repository.library.georgetown.edu/handle/10822/1054969.