

Universal Grammar and Iconicity

Within linguistics, the formal and functional approaches each offer insight into what language might be and how it operates, but so far, there have been hardly any systematic attempts to integrate them into a single theory. This book explores the relationship between Universal Grammar – the theory that we have an innate mechanism for generating sentences – and iconicity – the resemblance between form and meaning in language. It offers a new theory of their interactions, the “UG–iconicity interface” (UG-I), which shows that not only do Universal Grammar and iconicity coexist, but in fact they collaborate in intricate and predictable ways. The theory explains various recalcitrant cross-linguistic facts surrounding serial verb constructions, coordination, semantically and categorically obscure “linkers,” the multiple grammatical aspects of the external argument, and noncanonical arguments. This groundbreaking work is essential reading for researchers and postgraduate students in linguistics, as well as scholars in psychology and cognitive science.

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To those in my life
who have made me be who I am and inspired me to do
what I have done

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Preface

Four things happened during the writing of this book, all unexpected in one way or another.

First, whereas this is the longest work I have ever written in my academic career, it also turned out to be among the easiest if I put aside the inevitable commitment of time needed to convert the thoughts into words. Part of the reason is that some contents were already written out in the form of papers, a few published and the rest not. What somewhat surprised me was that the ideas in these papers, taking shape separately over a span of thirty years on totally different subject matters, could all fall into place under a single central theme so snugly, reminding me of a long-ago experience of putting together a 3-D jigsaw puzzle of the Eiffel Tower – I did have to figure out where to put which piece, but once that was worked out, all the pieces simply fit. As with the puzzle, I surely had the initial general belief that these apparently unconnected ideas could be assembled together – otherwise the book project would not have been attempted. Still, it would give me a happy surprise each time one more smooth and technically detailed integration not only proved available between thoughts/analyses years and topics apart, but also lent itself readily to more facts and new analyses not imagined while initially planning the book.

Out of professional habit, I sought to explain why this happened and came up with two possible answers. (A) Our current understanding of the human language faculty and our control of the linguistic data are still rudimentary enough to evoke uncertainty, which in turn creates room for more than one seemingly plausible “theory” regarding the design of language and its components. (B) The core analyses in these separately written papers, as well as the particular formulation of the UG–iconicity interface, are overall on the right track. The rational side of me says that both (A) and (B) are partly at work; emotionally, I would like to think of (B) as playing a significant role. Regardless, it has been a totally enjoyable experience that a wide range of linguistic facts, from Chinese verbal compounds to cross-linguistic coordination to applicatives to word order typology, to list but a few, can be unified in a theory consisting merely of two highly general principles (the FICH and the USM), a couple of functional voids (Void_F1, 2) plus the basic operations of UG.

The surprises described above were rewards any researcher would be glad to encounter.

Second, of the nine months spent on the first complete draft of this book, over half of the period coincided with Covid-19 where I live. I take it that not many authors could claim this “privilege,” which has been, let’s put it mildly, inconveniencing for everyone. But there is a classic Chinese saying which keeps people optimistic when things look gloomy: *huo xi fu suo yi* ‘disaster PARTICLE blessing SUO lean.on’. Ignore *xi* and understand *suo* as a marker when the object DP undergoes A'-movement, and the sentence translates into this: Oh disasters, good fortunes accompany them! Pre-coronavirus, the summer months would always have me travel abroad, visiting relatives, giving lectures and attending linguistic conferences. I was mentally prepared not to be able to finish the book on time because a summer itinerary so packed that every half-day slot would be filled for a prolonged stretch of time was not rare. With this hideous virus, however, I have been literally staying in the house for weeks in a row during the past months, even resisting the urge to visit my two-year-old granddaughter in California. So I had no excuse but to concentrate on the book and ended up wrapping things up a few weeks earlier. This pandemic is bad, sad things have been happening because of it, and I personally felt and feel the worries about my family and my relatives first in China and later in the USA. But as the American author Wayne Dyer once said, “You can’t discover light, by analyzing the dark.” Writing a book that integrates many ideas throughout my whole academic career and being able to finish it on time is the light I have had the good fortune to discover.

The other two happenings carry a heavy emotional weight. Two people passed away during my book-writing time who had life-shaping influences on me: my father LI Ming, and my mentor and friend Wayne O’Neil. On the way to the first day of my elementary boarding school, my father said to me some words to this effect: Your teachers and classmates may have an opinion about a student, and it could be popular, but you should always form your own based on your observations and best judgment. He said it and I forgot it. Only in my mid-50s – exactly half a century later – did I suddenly realize that I had been practicing these words throughout my life and my career. The only deviation I made was the target. My father was talking about people while I applied it to ideas, as reflected everywhere in this book. I met Wayne in China, wrote a term paper on Chinese locative-inversion for his course, and he brought me to MIT without me requesting or doing anything. Looking back, working with the type of linguistics that MIT started and pursuing a career in American higher education is the best choice of life and work for someone with my strengths and weaknesses, a choice which Wayne enabled and which I thank him for, eternally. In brief, Wayne presented me with the opportunity, and my father planted in me the principle through which to pursue that opportunity. I could not be grateful enough.

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Abbreviations

| | |
|----------------------|---|
| 3 rd F | third-factor principle |
| <i>a</i> (P) | “light adjective” |
| A(P) | adjective (phrase) |
| Adv(P) | adverb (phrase) |
| Appl(P) | applicative (phrase) |
| Appl _H | high applicative |
| Appl _L | low applicative |
| APT | Auxiliary Plane Theorem |
| Arg _E | external argument |
| &(P) | conjunction (phrase), or as a feature in “[&]” |
| C(P) | complementizer (phrase) |
| CApp | complement approach |
| CCS | categorial complement space |
| <i>c_n</i> | <i>n</i> th conjunct from left |
| CSC | Coordinate Structure Constraint |
| <i>cu</i> | computational unit |
| CUDH | Computational Unit Disparity Hypothesis |
| D(P) | determiner (phrase) |
| Del _C | total count of deletions required to yield superficial conjunct C |
| Depth _X | number of different phrases traversed with respect to X (see specific contexts) |
| DM | Distributed Morphology |
| <i>e</i> | event |
| ECM | exceptional case marking |
| EM | External Merge |
| Ep | epistemic (adverb class) |
| Ev | evaluative (adverb class) |
| <i>φ</i> -feature | any of [person, number, gender] |
| F(P) | functional head (phrase) |
| FCA | first-conjunct agreement |
| FEO | fact-event object |
| F _{HL} | human language faculty |

List of Abbreviations

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| | |
|--------------------|---|
| FICH | Functional Iconicity Complementation Hypothesis |
| Focus(P) | focus head (phrase) |
| Fr | frequency (adverb class) |
| G/B | Goal or Benefactive |
| GE | genetic endowment |
| IM | Internal Merge |
| L(P) | lexical head (phrase) |
| LCA | Linear Correspondence Axiom, or last-conjunct agreement (in Serbo-Croatian) |
| LF | Logical Form (conceptual–intentional) |
| Ln | linker (in den Dikken’s sense) |
| LPM | Lexical Phonology and Morphology |
| Ma | manner (adverb class) |
| MC | Mandarin Chinese |
| N | smallest node dominating all conjuncts |
| N(P) | noun (phrase), or category feature with “±” values |
| NCA | noncanonical argument |
| NCC | non-constituent conjunct |
| Neg | negative (as a category label) |
| NPI | negative polarity item |
| O(bj) | object |
| O _i | operator indexed with <i>i</i> |
| P(P) | pre/postposition (phrase) |
| P _{AUX} | auxiliary plane |
| PCC | predicate cleft construction |
| P _D | default plane |
| PF | Phonological Form (sensorimotor) |
| PIC | Phase Impenetrability Condition |
| Poss | possessor |
| PR | possessor raising |
| <i>pro</i> | phonologically empty pronoun |
| PRO | phonologically empty pronoun as the subject of infinitive clauses |
| QP | quantifier phrase |
| QR | quantifier raising |
| √ or <i>r</i> | root (of a lexical item) |
| R | relator |
| R _{&} | ‘and/or’ relation |
| R _C | lexico-semantic relation |
| RC | relative clause |
| R _L | linear relation |
| R _M | semantic relation of generalized modification |

| | |
|-------------------|---|
| xvi | List of Abbreviations |
| RNR | right-node-raising |
| R _S | structural relation |
| R _T | relation of temporal precedence |
| S | entropy (in Boltzmann's equation only), or clause (only as node label) |
| S(ubj) | subject |
| Sa | speech act (adverb class) |
| SC | Serbo-Croatian, or small clause (only as node label) |
| <i>sh</i> | shell |
| SMH | Structural Mapping Hypothesis |
| So | subject-oriented (adverb class) |
| Spec | specifier (in X'-theory) |
| SVC | serial verb construction |
| SVP | Serial Verb Parameter |
| <i>t</i> | trace |
| T(P) | tense (phrase) |
| θ- | thematic |
| TopP | topic phrase |
| T _S | thermodynamic system |
| TSC | Temporal Sequence Condition |
| UG | Universal Grammar |
| UG-I | Universal Grammar-iconicity interface |
| USM | Uniform Structure Mapping Principle |
| v(P) | “light” verb (phrase) responsible for introducing the agent argument |
| V(P) | verb (phrase), or categorial feature with “±” values |
| VM | verb modifier (in Hungarian) |
| Void _F | functional void (of Universal Grammar) |
| W | number of microstates in a thermodynamic system with the same macrostate |
| wh | generic reference to the type of words like <i>what, which, where, why, how</i> |
| X, Y, Z . . . | generic categorial labels (when used in structure) |
| XSM | exo-skeletal model |

In language examples

| | |
|---------|-----------------|
| 1, 2, 3 | person |
| ACC | accusative case |
| AFF | affix |
| AGR | agreement |

List of Abbreviations

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| | |
|--------|--|
| APPL | applicative morpheme |
| ASP | aspect |
| AUX | auxiliary |
| BEI | <i>bei</i> (glossing the morpheme without analysis) |
| C | complementizer |
| CAUS | causative morpheme |
| CL | classifier |
| COM | comitative |
| DAT | dative case |
| DE | <i>de</i> (glossing the morpheme without analysis) |
| DECL | declarative |
| DET | determiner |
| ERG | ergative case |
| F(EM) | feminine gender |
| FOC | focus |
| FUT | future tense |
| FV | final vowel (in Bantu) |
| GEI | <i>gei</i> (glossing the morpheme without analysis) |
| GEN | genitive case |
| HAB | habitual |
| IMPERF | imperfect aspect |
| INDEF | indefinite |
| IO | indirect object agreement |
| L | linker |
| LE | <i>le</i> (glossing the morpheme without analysis) |
| LOC | locative |
| M(ASC) | masculine gender |
| N(EUT) | neuter gender |
| NEG | negation |
| NML | nominalizer |
| NOM | nominative case |
| O(BJ) | object agreement/case |
| OBV | obviative |
| P | generic/semantically unspecified preposition |
| PASS | passive |
| PAST | past tense |
| PERF | perfect/perfective aspect (difference being irrelevant to this book) |
| PL | plural number |
| POSS | possessive |
| PRES | present tense |
| PRT | particle |

xviii List of Abbreviations

| | |
|--------|--------------------|
| REAL | realis |
| REM | remote (with PAST) |
| S | singular number |
| SUBJ | subject agreement |
| SUBORD | subordinate marker |
| SUF | suffix |
| T | tense |