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Editors

Perspectives on the Architecture and Acquisition of Syntax

Essays in Honor of R. Amritavalli

Springer

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Foreword

Raghavachari Amritavalli has made outstanding contributions to syntactic theory, the study of the interfaces, and the analysis of South Asian languages. She also focused on the acquisition of morpho-syntax and on language-related developmental pathologies, as well as on language teaching and education curricula.

This volume honors Amritavalli's contribution to the field through a collection of cutting-edge research papers ranging from syntactic theory and the morpho-syntax of South and East Asian languages, to the syntax–semantics interface, and the acquisition of syntax. This impressive collection mirrors Amritavalli's wide range of interests and reflects the need to extend the empirical coverage of syntactic theorizing to new empirical domains, such as the study of language acquisition, a need that many syntacticians now consider a priority for the field.

Why is this aspect so important? In these introductory remarks, I would like to briefly dwell on the reasons which lead many of us to consider different kinds of enrichment of the empirical domains of our formal models. One motivation finds its roots in the very nature of formal linguistic theoretical work (and, in fact, in any form of abstract modeling). Theoreticians are typically confronted with a proliferation of analytic options, consistent with the available empirical data and inconsistent with each other. One reasonable tack to reduce the explosion of possible analytic paths is to severely constrain the technical apparatus, our "bag of tricks," trying to admit only the bare minimum required to meet empirical adequacy. This is the tack adopted by minimalism. One difficulty that this research strategy is confronted with is to agree on what the "bare minimum" is: Different concepts of simplicity may give conflicting results on what is the minimal specification of analytic tools. For instance, if we understand "simplest" as "least constrained," we may be led to assume n-ary merge as the optimal form of the operation: The least constrained formulation of merge is one which does not specify the number of elements undergoing the operation, hence n-ary merge, for n = 1, 2, 3,…. On the other hand, if we understand "simplest" as "requiring minimal computational resources," we may be led to assume binary merge: Unary merge is too weak in expressive power to capture the properties of natural languages, and ternary merge (and, a fortiori, merge of 4 elements, 5 elements, etc.) requires more

resources than binary merge, as all the elements to be merged together must be held simultaneously in operative memory. In this case, much evidence in favor of binary branching syntactic structures, ever since Richard Kayne's classical contributions in the 1980s, supports the conception of simplicity qua "requirement of minimal computational resources," which selects binary merge.

This leads us to the second strategy to limit the proliferation of analytic paths, which can fruitfully integrate the minimalist strategy. If the empirical coverage of theoretical models is extended to new domains, it is to be hoped that new kinds of evidence will emerge which will favor certain analytic paths over others. Over the last quarter of century, much work on the theory-guided study of language acquisition has nourished formal theoretical work in important ways, and the same is to be expected from the theory-guided experimental study of production and comprehension, of language-related pathologies, and, through brain imaging techniques, of the concrete expression in neural circuitry of our linguistic capacities, among other research directions.

Reciprocally, richly structured theoretical analyses are of fundamental importance for all kinds of experimental work on language, with the role of generators of precise predictions identifying interesting research questions. Otherwise, there is a concrete risk that a sophisticated methodological apparatus may be used by experimental approaches to merely test commonsense ideas on language. Clearly, experimental approaches must be based on structured theories of the fundamental capacities under investigation, rather than on mere commonsense ideas, if the potential of an extraordinary investment in methodology, a characteristic of experimental psycholinguistics, is to be fully exploited.

Another important reason favoring the extension of formal syntactic approaches to new testing grounds has to do with the image and role of syntactic theory in the larger scientific context of cognitive and brain studies, and of its applications in clinical work and education. It is of decisive importance for the future of our discipline that it will not be perceived as an exoteric, self-centered domain, but as a fundamental research direction capable of offering insights on language to neighboring disciplines and generating a wealth of applicative studies on linguistic capacities broadly construed. This is essential if formal linguistics wants to maintain the central role that it had from the outset of the cognitive revolution.

Amritavalli's work has always aimed at such a breadth of range, without sacrificing the necessary depth of formal analysis of such phenomena as ergativity, finiteness, argument structure and the nature and properties of thematic roles, and the other phenomena addressed in her scientific production. This volume, through its joint focus on theoretical architecture and language acquisition in chapters written by major figures in the field, pays a well-deserved tribute to Amritavalli's influential contribution to linguistic studies, in Asia and in the world.

Geneva, Switzerland   Luigi Rizzi
December 2016   Professor of Linguistics, University of Geneva

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About the Editors

Gautam Sengupta received his Ph.D. in linguistics from the University of Massachusetts at Amherst in 1990 and is currently Professor at the Center for Applied Linguistics and Translation Studies, University of Hyderabad. He has also taught at the Jawaharlal Nehru University, New Delhi, and Jadavpur University, Kolkata. His areas of interest are syntax, semantics, and language processing.

Shruti Sircar teaches at the Department of Linguistics and Contemporary English, EFL University, as a Professor. Her major areas of interest are first- and second-language acquisition, psycholinguistics, reading development, and disorders.

Madhavi Gayathri Raman teaches at the Department of Materials Development, Testing and Evaluation, EFL University. Her research interests are Specific Language Impairment and Dyslexia in the ESL context, curriculum development, materials design and cognitive linguistics.

Rahul Balusu teaches at the Department of Computational Linguistics, EFL University. He received a Ph.D. in linguistics at NYU in 2009. His areas of interest are syntax and semantics, focusing on Dravidian languages.

Contributors

Josef Bayer is professor of linguistics at the University of Konstanz. Before 2000, he held a professor's position at the University of Jena and various research positions. His interest focuses on syntax and its interfaces as well its relation to language processing. He has worked on Germanic (mainly German and its dialects) and on Indo-Aryan (Bangla). For a number of years, the proper syntactic representation of focus, as well as discourse particles, has been central to his work. Josef Bayer's research was funded by a number of grants from the Deutsche Forschungsgesellschaft (DFG) (German Research Counsil). He is author or coauthor of two monographs and seventy six articles, and editor or coeditor of eight volumes.

Rajesh Bhatt received his Ph.D. in Linguistics from the University of Pennsylvania in 1999 and is currently Professor in the Department of Linguistics at the University of Massachusetts Amherst. He has also taught at UT Austin and MIT. His work focuses on syntax and its interfaces with semantics and on the Modern Indo-Aryan languages.

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Probal Dasgupta Ph.D. (Linguistics), 1980, New York University, has taught in New York, San Francisco, Melbourne, Barlaston, Kolkata, Pune, Hyderabad and is presently based at the Indian Statistical Institute, Kolkata, since 2006. His editorial work includes *Indian Linguistics* (1982–87), *Language Problems and Language Planning* (with Humphrey Tonkin, Tim Reagan 1990–), *Beletra Almanako* (with Jorge Camacho, Istvan Ertl, Tim Westover, Jesper Jacobsen, Suso Moinhos, 2007–), book series *Language and Development* (with Udaya Narayana Singh, 1993–2004), and *Yearbook of South Asian Languages and Linguistics* (with Rajendra Singh, 1998–06).

He is Member of the Akademio de Esperanto since 1983 [on account of translation of 50 poems by Tagore into Esperanto, published as *Primico*, Antwerp: TK/Stafeto, 1977], its Vice-President 2001–15, and now its President (2016–). He is an honorary member of the Linguistic Society of America (2004–) and was President of the World Esperanto Association, *Universala Esperanto-Asocio* (2007–2013). He was awarded the Annual Visiting Lectureship in Philosophy 2008–09 by the Indian Council of Philosophical Research.

He has over 400 other publications in Bangla, English, Esperanto, in the domains of linguistics, literature, translation, philosophy. Book-length publications in English include *The Otherness of English: India's Auntie Tongue* Syndrome, New Delhi: Sage, 1993; *Inhabiting Human Languages*: The *Substantivist Visualization*, Delhi: Samskriti, on behalf of the Indian Council of Philosophical Research. Books in Bangla include: *Kathaar Kriyaakarmo* (Dey's 1987), *Chinno Kathaae Shaajaaye Taroni* (Gangchil 2011), *Bhaashaar Bindubishargo* (Gangchil 2013), *Merur Praarthonaa*: *Bishuber Uttor* (Abhijan 2015). Books translated into Bangla: *Hlaapicer Kaando* by Ivana Brlić-Mažuranić (Samatat 2006); *Nemesis* by Alfred Nobel (M.C. Sarkar 2014).

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K.A. Jayaseelan obtained an M.A. in Linguistics from Lancaster University. He was at that time employed at the Central Institute of English and Foreign Languages (CIEFL) in Hyderabad. Further interest in linguistics ensued, and at Simon Fraser University in Canada he completed a Ph.D in 1980, the dissertation being on Deletion and Interpretation in Comparatives. He returned to CIEFL and was able to create a unique atmosphere for generative linguistics at CIEFL which had a lasting impact for years to come. Jayaseelan held the chair of the School of Language Sciences until his retirement in the year 2002 and trained an impressive number of students up to the level of Ph.D.

Pui Fong Kan is an Associate Professor in the Department of Speech, Language, and Hearing Sciences of the University of Colorado at Boulder. Her research examines the effects of language experience on bilinguals' language learning across the life span. Her current projects investigate the developmental trajectory of the language learning in typically developing bilingual children and bilingual children with language impairments.

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Hilda Koopman is Professor of Linguistics at the University of California at Los Angeles. She works in formal syntax and comparative (morpho-) syntax. As a fieldworker and theoretician, her descriptive and theoretical interests interact closely in her research. She brings data from typologically diverse languages to bear on issues of a highly theoretical nature, and conversely, she applies abstract and complex theoretical concepts to their analysis. Her current research explores the idea that syntactic properties of individual languages fall out from the way surface constituency is built by merge from minute atomic parts that underlie morpho-logical and syntactic constituency, with linear order mapping onto asymmetric c-command. Her publications include several books such as *The Syntax of Verbs From V Movement in the KRU Languages to Universal Grammar* (1983), *The Syntax of Specifiers and Heads* (2000), *Verbal Complexes* (2000, with Anna Szabolcsi), and *Introduction to Linguistic Analysis and Syntactic Theory* (2013, with Dominique Sportiche and Edward Stabler), and numerous articles. Since 2013,

she has been in charge of the development of SSWL Syntactic Structure of the World's Languages, a community database for the (morpho-)syntactic properties of the world's languages.

Utpal Lahiri is an Associate Professor at the Department of Linguistics and Contemporary English, EFL University, Hyderabad. His research interests are primarily in semantic theory, with its interfaces with syntax and other areas of theoretical linguistics. He has published widely on the semantics of questions, polarity, scalar particles and on their relevance to semantic theory in general and is currently involved in research on modals.

Keiko Murasugi is Professor at Nanzan University. Her research interests are syntax and psycholinguistics, in particular, grammar acquisition. She was born in Nagano Prefecture, Japan and holds a Ph.D. in Linguistics from the University of Connecticut (1991).

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Mamoru Saito after completing his Ph.D. at MIT in 1985 taught at USC, University of Tsukuba, and University of Connecticut. He has been Professor of Linguistics at Nanzan University since 1995. His main research interest is in Japanese syntax and syntactic theory. Among his recent articles are "Sentence Types and the Japanese Right Periphery" (in Günther Grewendorf and Thomas Ede Zimmermann, eds., *Discourse and Grammar*, de Gruyter, 2012), "Selection and Incorporation in Complex Predicate Formation" (in Audrey Li, Andrew Simpson, and Wei-Tien Dylan Tsai, eds., *Chinese Syntax in a Cross-Linguistic Perspective*, Oxford University Press, 2014), "Cartography and Selection: Case Studies in Japanese" (in Ur Shlonsky, ed., *Beyond Functional Sequence*, Oxford University Press, 2015), "Remnant Movement, Radical Reconstruction, and Binding Relations" (in Günther Grewendorf, ed., *Remnant Movement*, de Gruyter, 2015), and "(A) Case for Labeling: Labeling in Languages without ϕ-feature Agreement" (*The Linguistic Review* 33.1, 2016). He has been a coeditor of *Journal of East Asian Linguistics* since 1995 and edited a few books, the most recent being *Japanese Syntax in Comparative Perspective* (Oxford University Press, 2014).

William Snyder is Professor of Linguistics at the University of Connecticut. His work examines the time course of child language acquisition as a source of insight into what exactly the child is acquiring, and how exactly the child is doing it.

Specific research topics include argument structure (datives, resultatives, particles, path phrases), A- and A-bar movement (passives, reflexive-clitic constructions, P-stranding, comparatives), compound words, and syllable structure. Snyder completed his S.B. and Ph.D. degrees at the MIT. He is past editor of the journal *Language Acquisition: A Journal of Developmental Linguistics,* and he is the author of *Child Language: The Parametric Approach,* and coeditor of *The Oxford Handbook of Developmental Linguistics.*

Wei-Tien Dylan Tsai received his Ph.D. degree in linguistics from MIT in 1994 and is currently Professor at the Graduate Institute of Linguistics, National Tsing Hua University, Taiwan. His recent research explores issues on the syntax-semantics interface under the cartographic approach, with an emphasis on Chinese, Austronesian, and Slavic languages from a comparative point of view. These studies lead to a series of publications on the inner-outer dichotomy of *wh*-adverbials, reflexive adverbials, affectives, and light verbs, which is shown to encode comitativity in the *v*P periphery and causality in the left periphery. Furthermore, he proposes a formal analysis of the grammaticalization of conjunctions/linkers across languages, based upon the notion of "conjunctive reduction." He serves as Editor of *International Journal of Chinese Linguistics* (with Hongming Zhang and Ning Yu) since 2013.

Madison Wagner is an undergraduate student at Scripps College. She is studying Gender Studies, French, and Linguistics. Her research interests include reproductive justice and linguistic relativity.

Chapter 1
A Life in Linguistics

Gautam Sengupta, Shruti Sircar, Madhavi Gayathri Raman and Rahul Balusu

Raghavachari Amritavalli was born in Bangalore and obtained an M.A in English from Bangalore University in 1972, before finding employment at the Central Institute of English and Foreign Languages (CIEFL) in the Department of Media and Television. This department had the distinction of being the pioneer (in India) of the use of radio and television for educational purposes—specifically English Language Teaching. Her work here involved making English lessons for All India Radio (AIR), the state-run national radio channel, and producing TV programs for English teaching that combined game, drama, and documentary-style narrative. This was the background to her abiding interest in the language curriculum: she would eventually play a pivotal role in developing a national curriculum for English in Indian schools. She has also written books in this field such as *English in Deprived Circumstances: Maximizing Learner Autonomy* (Cambridge University Press, 2007) and *Language as a Dynamic Text: Essays on Language, Cognition and Communication* in the CIEFL Akshara series in 2000. Her interest in English

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language learning and the role of language in society and education has led to such output as "Teaching Language and Achieving Literacy: Interfering with Learning or Guiding It?" (Amritavalli 2014a); "An English for Every Schoolchild in India" (Amritavalli 2013a); "Helping Children Become Readers" (Amritavalli 2012a); "Visible and Invisible Aspects of Language Ability" (Amritavalli 2012b); "Media Work: An Authentic Context for Developing Communication Skills in English" (Amritavalli 2008a,b); "Students' Understanding of Dictionary Entries: A Study with Respect to Four Learners' Dictionaries" (Amritavalli et al. 2003); "Pictured Realities and Pictures of Reality: Cross-cultural Intelligibility of the Visual in Television" (Amritavalli 1997a); "Communication, technology, and the evolution of systems of knowledge and education" (Amritavalli 1996); "Audio Versions of Textbook Materials: A Tryout" (Amritavalli and Visalakshy 1992); "Understanding English by Radio" (Amritavalli 1988a); and "The role of audio-visual aids in distance education" (Amritavalli 1988b).

Her fascination for the cognitive and scientific underpinnings of natural language took her to the linguistics department of Simon Fraser University, from where she obtained a Ph.D. in linguistics in 1980. She came back to CIEFL to teach and do cutting-edge research in theoretical linguistics, before retiring a few years after holding the post of vice-chancellor's at EFLU (CIEFL had been made a university and renamed the English and Foreign Languages University some years previously), one of India's largest public universities specialized in humanities and languages. In CIEFL and EFLU, she epitomized an intellectual life that was as honest as it was creative and balanced. She was the chairperson of the English Focus Group of the committee that formulated the National Curriculum Framework (NFC) (2005) of the National Council of Educational Research and Training (NCERT); a member of National Assessment and Accreditation Council for Universities, University Grants Commission, India; and a member of the National Knowledge Commission, Working Group on Languages. She is currently a member of the Task Force, Cognitive Science Research Initiative, Ministry of Science and Technology, Government of India (GOI).

She views "India as a laboratory for language and cognitive science" (Amritavalli 2015). Her academic career over four decades involved sharing her passion for generative linguistics and language acquisition through both highly original papers and innovative teaching. Her research interests span a broad gamut of topics in Cognitive Science—Theoretical linguistics (morphology, syntax); acquisition/teaching of first and second languages in natural and instructional settings; and the psychology of perception, especially in media and education, and reading research. Her broad spectrum of interests culminated in her founding and editing *The EFL Journal*, a peer-reviewed journal published twice a year, that includes articles from both young and established researchers internationally in the areas of literature, language learning and teaching, and linguistics pertaining to English and foreign languages such as Arabic, Chinese, French, German, Japanese, Russian, and Spanish; this journal has been publishing now for over seven years (2010–2017) (www.openhumanitiesalliance.org/journals/eflj).

She has worked on a wide range of significant empirical phenomena in South Asian languages that have broadly impacted syntactic theory, including ergativity,

non-nominative subjects, causatives, argument structure, case assignment and agreement processes, number and gender, and finiteness.

Her landmark paper, "The genesis of syntactic categories and parametric variation," with K. A. Jayaseelan (Amritavalli and Jayaseelan 2003) argues from a crosslinguistic perspective that the dative case on experiencers and inalienable possessors is tied to an absence, or at least impoverishment, of the category of adjectives, which is true of Dravidian languages. The dative experiencer construction has three properties that are pursued in quite a few of her research papers. The experiencer dative is the focus on some of her works where she argues that it is in the result projection of the verb, and is thus actually a resultative, which starts in the lowest projection in the verb phase and moves out of this low PP and gets dative case in the Spec of a P/Kdat. The dative case on the experience-theme noun, an instance of the dative case floating onto this argument, a unique property of Kannada among the Dravidian languages, is capitalized on in another strand of her work, which leads her to conclude that the possessive dative case adjectivalizes the noun. In languages like English, Jayaseelan and Amritavalli posit that this case is absorbed by the experience noun to yield an adjective. This completes the paradigm where the dative case appears on either the subject, the predicate noun, or the copula which then gets realized as *have* (Kayne 1993, following the analysis of the Hungarian possessive construction in Szabolcsi 1983), all three constructions being derived from the same underlying thematic structure according to them. In a third strand, she examines the verb in the predicate beyond the copula, to other light verbs, and concludes that the experiencer and the experience nouns occur in the result projection of the verb under a first-phase approach, thus giving it a rich result structure and depleting the process projection.

Another major focus of her work is finiteness in Dravidian. Recent theories of finiteness, looking crosslinguistically, arguing against a universal instantiation of TenseP and reducing finiteness to a property of Tense, propose finite vs. nonfinite contrasts even without the realization of Tense, in languages that lack morpho-syntactic realization of contrastive tense marking. Rizzi (1997) proposes that clausal finiteness is the function of a dedicated Fin head in a low CP layer of the clause. Ritter and Wiltschko (2014) propose that finiteness is a property of INFL. Amritavalli, in her most recent work on finiteness, "Separating Tense and Finiteness: Anchoring in Dravidian," published in 2014 in *Natural Language and Linguistic Theory* (Amritavalli 2014b), and also her earlier paper co-authored with K. A. Jayaseelan, "Finiteness and Negation in Dravidian," in 2008 in the *Oxford Handbook of Comparative Syntax* (edited by G. Cinque and R. Kayne) (Amritavalli and Jayaseelan 2005), proposes that finiteness in Dravidian is a property of MoodP. She further examines how negative sentences are formed in Kannada and Malayalam and shows how their tense interpretations arise from aspectual properties of nonfinite heads. Finiteness on the other hand is claimed to be anchored by a finite negative element, or agreement, or modals. Thus, negation is argued to contribute finiteness features, and what is currently understood as Tense is broken down into a complex of finiteness features and temporal aspect features. *Neg*, *Agr*, or modals, which are all in complementary distribution with each other, Amritavalli

claims, are the heads that instantiate the markers of finiteness in MoodP in Dravidian languages. The temporal aspectual features are located in an Aspect projection. The Dravidian verb in negative sentences, it is argued, first adjoins to the negative auxiliary in MoodP and then moves to AspP.

In her 2003 paper, "Question and Negative Polarity in the Disjunction Phrase," published in *Syntax* (Amritavalli 2003), she discusses in detail how Kannada very interestingly instantiates in the same language two forms of disjunction, inclusive and exclusive, that are each common typologically, but separately in various languages. Russian, Hungarian, French, and others have *or* preceding each disjunct to yield an exhaustive disjunction interpretation. Kannada instantiates this with the *illa….illa* disjunction marker. Sinhala, Japanese, and Malayalam have iterated versions of *or* on each disjunct, but the interpretation is not exhaustive but inclusive, like the plain noniterated English *or* Kannada instantiates this with the *oo…oo* disjunction marker. She also shows how when finite clauses in Kannada are coordinated by the disjunction marker, the coordinated clauses are interpreted as questions.

Her work on resultatives—"Rich Results" (Amritavalli 2014c) and "Result Phrases and Dative Experiencers in Kannada" (Amritavalli 2013b)—examines the achievement resultatives found in this language, and argues that the dative experiencer construction is also an achievement resultative.

A large body of her linguistics research is on Kannada, with output such as "Nominal and Interrogative Complements in Kannada" (Amritavalli 2013c), where she examines the right periphery in Kannada, and draws parallels to Japanese complementizers. In "Parts, Axial Parts and Next Parts in Kannada" (Amritavalli 2007), she explores the function of the dative case in Kannada in forming structures that denote a place or a region, called "axial parts" by Svenonius (2006) like *in front of*, from part-denoting nouns or stems like *the front of*. Other oeuvre include "Some Developments in the Functional Architecture of the Kannada Clause" (Amritavalli 2004a), "Experiencer Datives in Kannada" (Amritavalli 2004b), "Lexical anaphors and pronouns in Kannada" (Amritavalli 2000a), "Result Clauses in Kannada" (Amritavalli 2000b), "A Kannada perspective on morphological causatives" (Amritavalli 1997b), "Case and Theta-role Absorption in Kannada" (Amritavalli 1988c), and "Anaphorization in Dravidian" (Amritavalli 1984).

In Hindi, her work has included a detailed analysis of its person-split ergativity, where she argues that the ergative appears where nominative fails, due to the absence of Person checking. Ergative she argues is a participial case, and Person checking is essential for nominative case to obtain. Languages do not differ in case "alignment," i.e., there are no "ergative alignment" languages such that intransitive subjects and transitive objects pattern together for case. Rather, ergative languages differ from nominative languages in the ways in which they allow or disallow person checking (and therefore nominative case). In Hindi/Urdu, these differences she observes are seen between imperfective and perfective aspect. In person-split ergative languages, they are seen between [+Person] and [−Person] or [0Person] arguments.

Her research in theoretical linguistics makes specific reference to Kannada and Hindi, but she has made forays into Dakkhani ("Tense and the Epistemic Modal in Dakkhani and Hindi-Urdu," with Naila Iffat; Amritavalli and Iffat 2012), Tamil ("The Acquisition of Functional Categories in Tamil with special reference to Negation," with Deepti Ramadoss; Ramadoss and Amritavalli 2007), and Assamese ("A Case Distinction between Unaccusative and Unergative Subjects in Assamese" with Partha Protim Sarmah; Amritavalli and Sarmah 2002) in collaboration with students whom she guided in finding and situating theoretically interesting and challenging data from languages of which they are native speakers.

Her acquisition work includes "Inflection in Specific Language Impairment (SLI) and Second Language Acquisition" (Raman and Amritavalli 2007); and "The Acquisition of Functional Categories in Tamil with Special Reference to Negation" (Ramadoss and Amritavalli 2007), among others.

An early paper of hers "Addressee markers on verbs: a form of agreement?" (Amritavalli 1992) looked at addressee agreement before its time, when it was not the rage yet as it is now. She has even made forays into pragmatics with a paper "The Pragmatic Underpinnings of Syntactic Competences" (Amritavalli 1998).

She has also tried her hand at creative writing with a short story "Past Indefinite" in *Indian Literature* published by the Sahitya Akademi in 2006, and a translation of her grandfather Masti Venkatesa Iyengar's "Venkatiga's wife," in Yatra One: Writings from the Indian Subcontinent, edited by Alok Bhalla, Nirmal Verma, and U.R. Anantamurthy, brought out by HarperCollins in 1993.

We would like to end this brief sketch of her academic enterprise by thanking Amritavalli for her spirited interest and generosity in engaging with topics and researchers in linguistics that have come her way, and for inspiring generations of South Asian linguists with her out-of-the-box thinking which has always been true to the language even if at the cost of breaking the theoretical tools that try to analyze it.

The present volume contains 12 essays written in honor of R. Amritavalli's lifelong work. The themes of these essays, broadly divided into four parts— *Architecture of Syntax: The engines of Syntax*, *Architecture of Syntax: Focus and the VP domain*, *Architecture of Syntax: The Syntax-Semantics Interface*, and *Acquisition of Syntax*—are related to her work—crosslinguistic syntax and its acquisition, with state-of-the-art linguistic theorizing.

Hilda Koopman's chapter (Chap. 2), "A Note on Huave Morpheme Ordering: Local Dislocation or Generalized U20?" addresses the question whether postsyntactic ordering mechanisms that rearrange morpheme orders as in frameworks like distributed morphology (DM) can be dispensed with, thus making syntax and morphology of one piece, a desirable goal a priori. To this end, it takes the famous Huave dataset of Embick and Noyer (2007) which led to the proposal for postsyntactic local dislocation in the first place, and attempts to implement it in an antisymmetric framework with no postsyntactic rules. The author shows that not only can this be done, but also it better accounts for the dataset and the typological patterns for such data based on Cinque's (2009) pioneering model for U20 patterns. The local dislocation analysis, on the other hand, it is shown, needs a syntax that is

as a matter of fact unworkable. U20 patterns have generalized to many syntactic domains and the Huave data too falls within the U20 typology, including variation between different Huave dialects. The author leverages a lot on the U20 pattern of invariant prenominal patterns and very variable postnominal patterns, derived by pied-piping and variation in the height of movement. U20 patterns by now have been shown to exist not only in the DP, but also for adverbs; for tense, mood, aspect and V; and verbal complexes. This paper is one of the first to study U20 patterns with respect to morpheme orders.

The antisymmetric model that the author assumes has only phrasal movement, no complex feature bundles or fully inflected items entering the numeration, prefixes and suffixes as heads (with an extra EPP feature on suffixes to pull up the stem to its left) and of course, no postsyntactic morpheme order readjustment mechanisms. DM, on the other hand, allows only semantically contentful items to project in syntax and all semantically vacuous but phonologically active items to merge postsyntactically which has its own structure building, structure reducing, and readjustment mechanisms.

In Huave, the postverbal alignment of affixes is a puzzle. The order Refl-1 is excluded in the context of a plural, and the order 1-Refl is obligatory in the context of a plural. Embick and Noyer (2007) capture this by ordering Refl directly before the final verbal affix, if any, with local dislocation to adjust any mismatches, basically achieving a second position effect from the right edge of the verb. So when PL is present, it is the last morpheme and Refl is ordered before it. When PL is absent, -1 is the last morpheme and Refl is ordered before it. The author shows that this, however, is a very problematic assumption as the syntax it needs is highly implausible. For this to work, Refl has to be peripheral to inflection, but Refl affixes are closer to the verb, both typologically, and in Huave as well, when checked in transitive verb data. So even within a DM syntax, this assumption is unviable.

The author then carefully and convincingly demonstrates that a U20 account derives the possible and impossible morpheme orders in Huave. -1 must be merged highest given the person hierarchy. The relative order of PL and Refl is unclear and treated as two hypotheses: Refl > Pl and Pl > Refl. The verb is at the bottom. Taking -1 Refl Pl V as 1 2 3 4; and -1 Refl V as 1 2 3, the attested morpheme orders 1423, and 4123; and 132, 321 are possible U20 patterns. 4213 is not generated and also ungrammatical. But the order 4231 or 312 is generated which should be ungrammatical. A combination of pied-piping and stranding is exploited to rule it out. Unexpectedly, the 4213 pattern, which is a U20 violation, is found in a dialect of Huave. Here, the author appeals to the variable relative order of Pl and Refl, and the relative order Pl > Refl now derives the otherwise excluded dialect pattern of V Refl 1 Pl as 4 3 1 2, a U20 pattern. Interestingly, neither of the relative orders generates any other variation, thus closing the space for variation. The data falls exactly into this grid. Variation is thus at the level of the indeterminacy in the order of merge, which makes specific predictions about patterns of dialectal variation. Thus, the author shows there is no motivation to adopt Local dislocation for Huave. The antisymmetric U20 account delivers and more.

In their chapter "Tense and the Realization of the Feminine Plural in Hindi-Urdu" (Chap. 3), Rajesh Bhatt and Stefan Keine develop a structured representation of tense and the neutralization of the number feature in the feminine and show a range and types of interactions among them. Plural is neutralized in the feminine in Hindi-Urdu—a phenomenon that patterns with Gujarati, and contrary to Punjabi, Sindhi, and Kashmiri where the plural and the feminine are encoded with two separate morphemes. The neutralization is shown to disappear in freestanding participles, negative triggered auxiliary deletion, counterfactuals, and past habituals, where the plural feature is realized as nasalization.

What Bhatt and Keine quite convincingly claim is that this neutralization is a property of agreement and finiteness rather than of morphological feature bundles. The plural feature is neutralized in the feminine when it is not a sister of TP, and is realized as nasalization when it is a sister of TP, i.e., in freestanding participles. This agreement-based neutralization is, however, called into question in the second person context, where number neutralization in the feminine is seen in freestanding participles that are sisters of TP.

To sort this confusion, the authors claim that freestanding participles have a covert auxiliary, and that if the covert tensed auxiliary has nasalization, then the freestanding participle also has nasalization. The present auxiliary "hE/ho" shows nasalization in first and third person in the feminine but not in second person, while the past auxiliary shows nasalization only in the feminine plural. In order to represent a covert feature that determines spell-out, the authors present two explanations: a morphological and a syntactic one. In the first, the realization of nasalization depends on the internal morphological complexity and grouping of the person and plural features. When the agreement controller has feminine plural features and the participle has a [PL] feature that has not been spelled out, then it is realized via nasalization. In the second person, since there is only a [2, PL] feature and no distinct [PL] feature, it results in a silent T[PL]. In the syntactic explanation, the burden of realization/neutralization is simply shifted from the morphological grouping to the syntactic features of the auxiliary.

Both explanations in a way try to bring syntax and morphology under the same roof, and do away with a distributed morphology account. What remains further to be brought under this proposal are the morpho-syntactic properties of the freestanding past participle and the [PL] feature on the second person singular pronoun *tum*, which apparently poses a potential threat to this agreement-based explanation for nasalization/neutralization.

Richard S. Kayne's chapter (Chap. 4), "English *One* and *Ones* as Complex Determiners," is a *tour de force* with silent nouns and adjectives. It proposes that all instances of the English *one* (and *ones*, with the plural-*s*) are complex determiners, that have a bimorphemic internal structure of a classifier plus an indefinite article, which the author glosses as *w* + *an*. This central claim of the chapter that *one* is an indefinite article (plus classifier), the author observes, nicely complements Postal (1966) who proposes that pronouns are definite articles, with both items (*one* and pronouns) resisting compounds. The differences in the distribution of *one* and *an* (which Perlmutter 1970; Barbiers 2005 have tried to unify) can now be accounted

for in terms of the classifier on *one*, which among other things prevents it from occurring with *few* (because the silent noun NUMBER accompanying *few* resists the classifier on *one*, as it itself is classifier-like). Similarly, the classifier on *one* blocks the preposing of degree phrases with *one*.

The chapter starts with Perlmutter's (1970) attempt at unifying non-numeral pre-N *one* and numeral *one*, and finds this line promising by noting that they pattern together in being incompatible with plural nouns and mass nouns. The author then takes on the tough task of unifying into this *one*, the anaphoric *one* that seems like a noun "I have a red pen and you have a blue one." The author marshals a number of data points against a nominal and in favor of a determiner analysis for this *one*, beginning with the inability to be a bare plural, followed by close parallels between English *ones*, and French *uns*, and a milder similarity with Spanish *unos*, in that they are all not nouns but have determiner properties. A possible significant objection that the noun-like *one(s)* cannot take an overt noun, as in "blue ones cars," is defused by noting a parallel to French *lesquels* (clearly a complex determiner) which again disallows an overt N.

Then, the author tackles the question of how these complex determiner DPs are derived. Basing himself on his earlier proposal (Kayne 2006) that a silent noun is not in the same position as its pronounced counterpart, the author proposes that *lesquels* starts off as quel [les NOUN] and "blue ones" as [one [blue PEN-s]]. The -s of *ones* the author asserts actually follows the silent noun here, rather than *one* itself. The relation with the antecedent is mediated by the silent noun, and not directly by *one*. The antecedent-(pro)noun relation is thus in all cases (following Kayne 2002) mediated by movement, is another strong claim that the author makes in this paper, with the only recourse to co-indexing that derivational syntax has is via internal merger.

The author then observes that not all adjectives are good with *ones*. *Few*, for example, is not, contends the author, because it comes with NUMBER, which is incompatible with the classifier of *one*. But when *few* occurs not by itself but as a modifier of another adjective, then suddenly it is compatible with *ones*, thus supporting the author's claims. The licensing role of the pre-*ones* adjective is thus important, and a parallel between prenominal adjective/reduced relative licensing in colloquial Slovenian is drawn (Marušič and Žaucer 2006; Leu 2015). Another licensing requirement similar to that of *ones* the author notes is the *the* of "the very poor" which also needs an adjective in the context of a silent noun PEOPLE, though here the adjective is a postdeterminer.

The author now comes back to numeral *one*, which seems to need no adjective even with a silent noun "Here are three books. Only one is worth reading." The special status of numeral *one* is extended from Barbiers (2007), and the author analyzes this numeral *one* as coming with a silent adjective SINGLE, or sometimes silent ONLY. Ordinals cannot be formed with this *one* it is claimed because the ordinal *-th* resists either the complex determiner or the silent SINGLE.

The ability of demonstratives to license *one* is then noted. This, the author shows, is not surprising since demonstratives are significantly like adjectives. However, the ability of plural demonstratives to license *ones* is more variable, and

its unacceptability for a set of speakers is left as an open question. Possessors on the other hand uniformly do not license *one* or *ones*.

Finally, human *one* as in *someone* is examined, and the author establishes that this *one* is also the same *one*, only differing in its syntactic context and thus distribution, by having a silent PERSON. The difference between *someone* and *somebody* it is claimed is due to *somebody* being underlyingly [some ONE body].

K.A. Jayaseelan's contribution (Chap. 5), "Parallel Work Spaces in Syntax and the Inexistence of Internal Merge," explores and explodes an assumption in the generative syntactic framework that till now has not been given its rightful scrutiny, though works such as Koster (2007), Epstein et al. (2014) have recognized it—the ephemeral nature of nonmain workspaces. External merge assumes that the external argument is merged into Spec, vP from a different workspace where it is built up. Once this phrase is merged into the main derivation, the parallel workspace is supposed to perish. The author makes a radical and far-reaching proposal that the parallel workspaces where arguments and adjunct phrases are built up and then merged into the main derivation do not disappear after merge but persist and sourced for further merges of the phrases built up in them for later merge into the main derivation, thus leading to multi-dominance of the phrase here by multiple mother nodes in the main derivation. This was otherwise the work of internal merge, which now is done away with. The consequences of this main thesis of the paper that there is always and only external merge have manifold significance. The closest that previous literature comes to this idea is the "survive minimalism" proposal of Putnam and Stroik (2010), but that does not push the idea to its logical conclusion.

The first the author considers is pied-piping. Subextraction does not exist as all arguments of arguments have their own workspace and are directly sourced from into the main derivation. This avoids the problem of feature percolation. The most problematic part of feature percolation is that it must jump over VP and TP to CP. In this proposal, since only arguments/adjuncts get a parallel workspace from which they can be remerged, functional projections on the clausal spine of the main derivation are fixed at merge and cannot move. This includes VP and TP. They cannot thus be pied-piped. CPs on the other hand are arguments, and therefore have their own workspaces, and as a consequence can be remerged. Significantly, this account is the only one in the market that can predict this difference between CPs and VP/TPs with respect to pied-piping. All other analyses of pied-piping have to stipulate it.

The second is the problem of labeling that still persists in current theory and receives ad hoc solutions in the likes of Chomsky (2008). This is nicely solved in the current proposal as only elements in the main derivation project and determine labels. Phrases brought in from parallel workspaces are inert.

A third ramification of this proposal is on successive-cyclic movement. Since there is no internal move and no need for phase edges to which a phrase has to move to survive spell-out and be accessible to higher derivation, the existence of intermediate landing sites would seem like a problem for this proposal. But the author makes interesting use of a third-factor explanation of keeping a phrase active

in derivational memory by constantly remerging it as the reason for intermediate remerges.

Finally, the author considers extraction islands, and accounts for them in terms of late insertion and postcyclic derivational timing. This also buys the author an explanation for parasitic gaps, as the gap in the adjunct is now parasitic on the gap in the main derivation, due to the fact that the arguments in the main derivation are already built up when the adjunct is being built up (which happens late in the derivation). The author, however, remains silent about remnant movement, which if it exists has to be an operation of internal merge, which thus cannot be completely banned from syntax.

Argument doubling is ubiquitous in Japanese. On the basis of this evidence, Kuroda (1988) concluded that the standard version of the θ-criterion was untenable. Taking Kuroda's work as his point of departure, Mamoru Saito in his chapter (Chap. 6), "Argument Doubling in Japanese with VP-Internal Focus," argues that "although the θ-criterion seems untenable, there may be a more general requirement that each argument plays a unique role in semantic interpretation." On the basis of extensive data, Saito shows that subjects, dative and accusative objects, as well as prepositional phrases can be doubled under certain conditions. While in the case of subject doubling—in the so-called major subject constructions—the two arguments do not bear the same thematic relation with the predicate, in instances of VP-internal argument doubling they must. The latter, then, appear to be clear counterexamples to the θ-criterion.

Saito demonstrates that the argument doubled constructions are degraded unless the second argument is extraposed to a focus position or the first is topicalized. It is also shown that these constructions are felicitous only if a certain semantic relationship obtains between the two arguments: The first must specify the set of alternatives for the focus indicated by the second. Predictably, the constructions turn infelicitous if the first argument is focused. Each of the two elements of the doubled argument thus plays a unique role in semantic interpretation, suggesting that the θ-criterion may need to be reformulated along these lines.

Wei-Tien Dylan Tsai's chapter (Chap. 7), "*Self* and *Only*: A Comparative Study of Reflexive Adverbials in Squliq Atayal and Mandarin Chinese," investigates the syntax and semantics of *nanak* in Squliq Atayal in a crosslinguistic context. When construed as an adverbial, *nanak* very often gets a focus reading, akin to *only* in English, and its distribution is relatively free. By contrast, when attached to an argument, *nanak* has a much restricted distribution, and its reading is distinctively reflexive. However, there is a gray area in between the two construals, where *nanak* occupies an adjunct position, though interpreted with a variety of reflexive readings shown below.

Tsai's chapter tries to find out whether there is a conceptual connection between *only* and *self*, especially in view of a strong resemblance from Chinese *ziji* "self," which behaves much like an intensifier before negation while serving as a reflexive adverbial after negation. In Squliq Atayal, when *nanak* is associated with an external argument, it is interpreted as "only," and when the focus is only a peripheral argument, it is interpreted as self and results in the inner-outer

dichotomy. Reflexive adverbials show a far greater range of interpretative possibilities closely associated with their syntactic distributions, and the syntax-semantics correspondence strictly observes an inner-outer dichotomy of adverbials also observed across languages, i.e., inner Self expresses comitativity, whereas outer Self expresses causality. The inner self is consistently blocked when the subject is not an agent, as in passives, unaccusatives, and psyche verbs; however, agentive subjects allow outer and inner reflexive interpretations. This hybrid structure of adverbial reflexives, he argues, can be accommodated by a general theory of reflexivity along the line of Reinhart and Reuland (1993).

In the latter part of this chapter, Tsai attempts an interpretive procedure which aims to capture the generalization behind various construals of *nanak* and *ziji*. Tsai builds upon Horn's (1969) classic analysis of *only*, and characterizes reflexive adverbials as focus operators involving negation over an alternative set, thus presenting a unified account of *only* and *self* in the following manner:

$$F(x) \mathbin{\&} \sim (\$y) \quad \left(y^1 x \mathbin{\&} F(y)\right)$$

which explains away the spectrum of "selfhood" readings across Squliq Atayal and Mandarin Chinese. The chapter will lead to a deeper understanding of how focus semantics interacts with reflexivity in natural languages.

Bangla sentences that instantiate the structure [...[V_1te] V_2te] (where V_1 and V_2 are verbs bearing the infinitival suffix *-te* and $V_1 = V_2$) appear to be hard to comprehend. In his chapter, "Getting the Identical Infinitives Filter in Bangla Under Control" (Chap. 8), Probal Dasgupta sets out to situate this observed phenomenon "on the map of familiar processes in grammar and in psycholinguistics." Until a descriptively adequate account of the phenomenon is available, he proposes to encode this observation in the form of a filter, the Identical Infinitives Filter, and mark the sentences filtered out by it with the double ampersand notation "&&." It is demonstrated on the basis of uncontroversial data that the filter does not apply unless V_1 and V_2 are identical. It is further argued, albeit on the basis of not-so-uncontroversial data that the filter effect is also absent unless the V*te* V*te* sequence doubles as a progressive participle in other sentential contexts. For instance, when the V in the V*te* V*te* sequence is a multi-word, "composite" verb, the participial reading is unavailable and according to the author, so is the filter effect. Similarly, if a focus particle intervenes between the two elements of a V*te* V*te* sequence, the progressive participial reading is precluded and the filter effect is absent. Dasgupta notes that native speakers respond differently to these sentences depending on whether they are presented with written or spoken stimuli. The progressive participial construal is preferred, but this effect can be offset by intonation in an ambiguous spoken stimulus. Parallels are drawn between these and adjectival constructions in Bangla with reduplicated adjectives.

It would appear that the observed phenomena lend themselves to a processing account, while a grammatical account remains somewhat elusive. However, after providing a meticulous description of the phenomena to be accounted for and the patterns that emerge from them, the author stops short of taking a decisive stance on

whether the effect of the proposed filter is due to grammatical or processing factors, leaving it open to further inquiry within a paradigm rooted in whole word morphology and a substantivist approach to grammar.

Utpal Lahiri's contribution (Chap. 9), "Binding Theory, Scope Reconstruction, and NPI Licensing Under Scrambling in Hindi," uncovers some novel facts and makes an important addition to the discussion of reconstruction and presents very interesting data on reconstruction. The author sets up his discussion in the context of two generalizations about the interaction of binding theory reconstruction and scope reconstruction, namely generalizations A and C. Simply put both these generalizations make the point that binding theory and semantic scope go hand in hand. The author clearly and convincingly shows that these generalizations do not hold in Hindi. This is a clear contribution of major theoretical import. The reconstruction required for NPI licensing is different. Following an extensive line of research in the literature (Romero 1998; Fox 2000; Fox and Nissenbaum 2004, among many others), the chapter assumes that syntactic reconstruction (SynR) exists in the grammar. With this background, the chapter presents data on scrambled NPIs in Hindi that "seem to suggest that semantic reconstruction [SemR] should be an available, though possibly marked, option." The upshot is that, once we leave out cases that do not have the adequate test configuration (examples [19]–[22], [28]), the NPI examples in the text are best explained if the mandatory scope reconstruction of the scrambled NPIs is done not through SynR but through SemR. More concretely:

(a) Simple scope reconstruction: (16) can be done equally by SynR or by SemR.
(b) Scope reconstruction plus Principle C: (23), (24), and (26) have mandatory scope reconstruction but no Principle C violation. This contradicts the prediction of SynR and matches the expectation of SymR.
(c) Scope reconstruction plus Principle A: (33)–(35) have mandatory scope reconstruction. (33)–(34) could be accounted equally with SynR or with SemR. But the (local) binding of the reciprocal in (35) seems to be performed not from the reconstructed position but from the surface position. Again, this contradicts the prediction of SynR and matches the expectation of SemR.

Josef Bayer's chapter (Chap. 10), "Prima La Musica, Dopo Le Parole? A Small Note on a Big Topic," uses five interesting crosslinguistic datasets to show that the semantic system prefers alternatives, but when a feature is used merely to satisfy certain formal constraints, the semantic distinction is suspended or underspecified.

In German, for instance, indefinites such as *etwas* "something", *nicts* "nothing" and feminine substance nouns such as *kalter* "coldness", *hitze* "heat" are bare in structural case and get a definite reading with a definite determiner (which is case marked). The distinctive semantic effect disappears between use and nonuse of definite determiner when a lexical case is used, suggesting that there is a semantically interpretable D1 and an underdetermined D2. Similarly, in Turkish, an interpretive effect comes along with the accusative case morpheme—$y(I)$ which is typically specific, and nonapplication of—$y(I)$—yields a nonspecific interpretation.

However, it fails to be a reliable marker of specificity when the accusative marker is required for formal reasons. Bangla case-particle *-ke* marks specificity, and a zero particle nonspecificity. Again, this specificity effect is suspended when the ECM (Exceptional Case Marking) requires marking of overt and distinctive case in the Romanian example, *-L-* marks definiteness when it is used as a determiner as opposed to *–un* which marks indefiniteness. When *-L-* is used in its default form, i.e., as the sole assigner of genitive case, it is free of any definiteness implication. Bayer moves away from the case and definiteness/specificity concerns and looks at the verb *tun* "do" in German which introduces an agentive semantics. However, in V(P)-topicalization, *tun* is chosen as a default form to carry φ and T, and it loses its original semantics, posing no clash with the semantics of the VP.

Bayer ties in these datasets beautifully with the title by showing that like music, which is a purely formal system and lacks intentional meaning, aptly provided by "word/*le parole*," natural language syntax gives primacy to a pure form of constraint satisfaction. If the constraint satisfaction is met by a set of semantic alternatives, the semantic system enables it. But when there are no alternatives, semantics leaves its work to be done by other extra syntactic factors or just circumvents it by underspecification or suspended specification, thus making the formal system primary, like music in the title.

In an experimental study (Chap. 11), "The Influence of Visual, Auditory, and Linguistic Cues on Children's Novel Verb Generalization," aimed at examining whether young children attend to perceptual cues over linguistic cues in novel verb learning, Narasimhan and her colleagues use the tested nonce word paradigm to study verb production in 4-year-olds. Drawing on the theory of Golinkoff and Hirsh-Pasek (2007), which holds that "children are sensitive to multiple cues in word learning," and that certain cues are weighted over others at different points in time as word learning progresses, the authors set out to determine which of three cues—visual, auditory, or linguistic—children rely on when they are asked to produce nonce verbs presented in novel sentential contexts and in conflicting cue conditions.

In a carefully setup experiment, 16 children, seven female, and nine male, between the ages of 3;5 to 4;10, were taught two verb labels—*wug* and *meek*—for two action standards associated with different properties, i.e., each of the nonce verbs had a set of visual, auditory, and linguistic features associated with it. After a training phase, the participants were presented with test items which consisted of 16 pairs of video clips in which two puppets performed action on four toys in two conditions—"simple cue" and "conflicting cue" conditions. Twelve video clips consisted of the novel test stimuli. Of these, six were "simple cue" stimuli which provided visual, auditory, or linguistic information associated with the verb, while the other six video clips presented stimuli in the three "cue-competition" conditions. "4 control" clips were also presented to the participants.

An analysis of the results revealed that in the "simple cue" condition, children were more likely to rely on perceptual—both visual and auditory—rather than on linguistic cues, with a greater preference for visual over auditory cues. In "competing" conditions too, children showed an overwhelming tendency to rely on

visual cues while generalizing a verb label to an unknown action. It appears then that different kinds of cues play different roles in influencing verb extensions. This seems to be in line with Golinkoff and Hirsch-Pasek (2007), who suggest that even when a range of cues are available, not all of them are used equally during the task of word learning. Furthermore, the strength of the association of a cue with the verb when it occurs in the "simple cue" condition does not appear to be a predictor of its preference in the "competition condition." The authors suggest that a number of factors might contribute to this. They also suggest that the over-reliance on visual cues (even as late as at age 4) could be due to the kind of linguistic context provided and the lack of temporal overlap between the sentences uttered and actions shown. While it would be worthwhile investigating what cues take precedence in later stages of vocabulary learning and in exactly what kinds of contexts, what does seem certain is that word-world mapping in the initial stages, and perhaps even later, depends on the concreteness and imageability of its referents, an idea seminal to work in vocabulary acquisition.

William Snyder's "On the Child's Role in Syntactic Change" (Chap. 12), discusses the phenomenon of "Survival versus Obsolescence" in the context of child language acquisition and language change. Using evidence from Lightfoot and Westergaard (2007) and the *do*-support in English as starting points for demonstrating why certain aspects of language survive as marginal forms while others disappear altogether, he advances a revised version of his original Grammatical Conservatism thesis with a view to offering a more robust account of this phenomenon.

In his initial version of the "Grammatical Conservatism" (GC) (2011) thesis, Snyder suggested that children made productive, spontaneous use of a new syntactic structure only after they had "<u>both</u> determined that the structure is permitted in the adult language, <u>and</u> identified the adults' grammatical basis for it." This 2011 thesis was supported by evidence gathered from a number of languages and across a range of syntactic structures. However, morpho-syntactic changes that occurred in English from Late Middle English (LME) to Early Modern English (EME) (Lightfoot and Westergaard 2007), suggest that children do not always wait for evidence from adult grammars, leading the author to revise his GC thesis.

The revised GCr attempts to accommodate children's ability to adopt a form that is not present in parental grammar while at the same time choosing, to a large extent, grammatical options used by their parents. It does so by suggesting that rather than depending on quantity of evidence before choosing an option, children rely on quality of evidence; a limited input with extremely specific features could lead to the choice of a particular grammatical option. Drawing upon the analogy of a lock and key, the author suggests that UG serves as the lock and the characteristic features in the input are the keys that help "unlock" the correct grammatical option. The use of third-person-singular *their* in a sentence like *Every doctor treated their patients* is one such example of the (extended) use of the pronoun by young children even when such a form was not prevalent in adult grammar. Drawing on examples from Germanic languages in general and Norwegian in particular, the author illustrates how syntactic forms appear to require different minimum input