MORRIS, DISTRIBUTED: AN INTRODUCTION

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This Festschrift honors Morris Halle, on the occasion of his ninetieth birthday, for his many foundational and lasting contributions to our understanding of morphology. Morris projects such a giant presence in linguistics in general and in morphology specifically that we, as his students, felt we could only attempt to honor a small, particular chapter in his linguistic life, that of a founder of the theory of Distributed Morphology. From his earliest work on Russian and English phonology, Morris has made major advances in morphology and has advised PhD students on work that has proved foundational in the field – in particular Mark Aronoff (1974) and Shelly Lieber (1980), who continue to stand at the forefront of morphological thinking (see Lieber 2010 and Aronoff & Fudeman 2011). But through the last two decades, Morris cultivated a new flowering of research in morphology. The papers in this volume are written with the deepest appreciation for his role in leading us, his students, to new discoveries and now to a rich tradition within Distributed Morphology.

While many of the particulars of the theory of Distributed Morphology grew from discussions between Morris and one of us (Marantz) starting around 1990, the seeds of the theory were of course planted in Morris's thinking, as summarized in, e.g., the Prolegomena (1973), from his International Congress of Linguists address. In Marantz's contribution to this volume, he identifies as crucial to the birth of DM a dispute over the role in the grammar of what Morris called 'abstract' morphemes, or "Q"s. What emerged from these discussions was a radically anti-lexicalist theory that joined two core assumptions: (1) syntactic approaches to word structure most importantly championed by Shelly Lieber and (2) a rejection of a phonologized set of morphological pieces stemming from "realizational" theories of morphology like those of Robert Beard (1995) and Steve Anderson (1992). Animated discussions with students have always been central to Morris's research, and the early development of Distributed Morphology was also shaped by the work of Eulàlia Bonet (1991) and Rolf Noyer (1992), who were writing dissertations at the time that Morris and Alec were arguing about Q's. Morris encourages his students to confront large, intricate sets of data in all their glorious complexity, to appreciate the devil in the details, and to attempt a full analysis, leaving no generalization unaccounted for and no exception unremarked. Eulàlia had as her task the morphophonology of Romance clitics, with a complete analysis of Catalan, while Rolf was examining Semitic agreement morphology, from both a synchronic and a diachronic perspective. The Distributed Morphology approach to the major issues in morphological theory – synchronism, allomorphy, and blocking – was developed by Morris, Alec and their students as theory was confronted with new sets of data, including those in Eulàlia's and Rolf's dissertations.

A key to Morris's success and that of his students has been his insistence on the completeness of any analysis of a phenomenon, with a circumscription of the relevant data that might strike some as involving an (over-)abundance of technical detail. Besides benefiting from Eulàlia's and Rolf's dissertation research, the theory of Distributed Morphology was built on analyses of Potawatomi and Georgian inflectional morphology, where the spur to account for these paradigms came from Marantz & Halle's need to explain how a "morphous" (morphemebased) approach to morphology improves the accounts of these data within a realization theory, arguing against Steve Anderson's A-Morphous analysis of the same facts. Morris insisted on a thoroughness in the generation of the Potawatomi paradigms well beyond what was necessary to make the theoretical point. But it was only this discipline of completeness that offered new insights into what was going on in that language and allowed Distributed Morphology to advance Algonquin studies more generally.

Morris's general style of interaction with his students most certainly also contributes to his and their success in advancing our knowledge of morphology. Some of us start working with our students by accepting as true their analyses of those important details they bring to the office; Morris often insists outright that a student's idea has to be wrong. It's up to the student, with Morris's prodding, to refine and improve his/her analysis. As all of us could testify,^I Morris's enthusiasm and generosity in his meetings with students leaves them feeling inspired and important; we've all gone eagerly back to our drawing boards from these encounters. Eventually, Morris is telling everyone about the brilliant discovery his student has made.

This volume, then, might be titled "Distributed Morphology in Progress", as much as "Distributed Morphology Today", with the hope that, once more, Morris will find our contributions interesting enough to inspire new generations of morphologists. From the first set of students in the Distributed Morphology era on, Morris's support, input, advice and exuberant enthusiasm have encouraged research, exemplified in this volume, that is converging on a theory of word structure completely embedded within a general theory of grammar. With Morris's spirit, and in his honor, these papers strikingly demonstrate the Hallean principle that a theory of Morphology is a theory of Everything, and we are delighted to present them as a tribute to our teacher, mentor and friend.

Readers will note a strong coherence among the chapters, with extensive overlap of questions, assumptions and approaches that goes beyond the mere sharing of a general theoretical framework. Whether it is the nature of phases, the notion of a morpho-syntactic feature, allomorphy and exponence, the synthetic/analytic alternation, stress assignment or syntactic agreement that is explored, each paper relies upon and highlights the tight connection between morphology and other grammatical modules at the core of Distributed Morphology. It is therefore not surprising that most papers in the volume address or touch on issues in locality, particularly locality at the phonological and semantic interfaces as potentially determined by the syntactic structure of words. Having ordered the papers in the volume counter-alphabetically to reverse the usual bias, here we would like to emphasize particular shared topics, though other arrangements might bring out a different set of resonances.

Bringing the foundational issues to the forefront, the relevance of the underlying structure for the interface between morphology and phonology is highlighted in the contributions by David Embick, Tatjana Marvin and Rolf Noyer.

Thus **David Embick** demonstrates that non-affixal morphophonological alternations (e.g., *sing/sang*), which are often thought to support affixless approaches to morphology (e.g., Anderson 1992, Aronoff 1976 or Stump 2001), show locality effects that are expected in a theory where they are analyzed as linked to (null) affixes: their effect is systematically

¹ One night, taking a break from this introduction, I called Morris to propose a solution for a problem in the Bulgarian morphophonology that we had been working on. Within the first three minutes of the conversation he demonstrated that my solution was wrong; the issues he raised became the basis for the development of the new solution, which will hopefully survive our next conversation [OM].

morphologically and phonologically localized to a hierarchical and linear position within the complex word. Thus, for instance, irregular stem allomorphy in the Italian *passato remoto* only occurs in the absence of the theme vowel, i.e., when the (null) past tense morpheme triggering the stem change is linearly adjacent to the stem (Calabrese 2012); further evidence is provided from German umlaut, Terena first-person singular nasalization, Chaha masculine object labialization and Ischian second person singular metaphony. Affixless approaches to morphology are shown to have problems with this local character of morphophonological alternations, since they do not postulate a hierarchical structure that would provide a locus for the trigger of morphophonological change.

The role of morphology for phonological analysis is elegantly demonstrated for Proto-Indo-European stress assignment by **Rolf Noyer**. By combining the hypothesis that individual morphemes may be specified for accent with the options made available by the Simplified Bracketed Grid Theory (Idsardi 1992) Noyer derives the five traditional accentuation classes of proto-Indo-European stems. In particular, the most accentually problematic stem type, the proterokinetic, is derived through a combination of accent pre-specification and the novel property of certain morphemes to render unaccentable any following syllable; the remaining four classes are derived by the more standard means.

Tatjana Marvin also examines the relevance of word structure for stress assignment in chapter 5, which reconsiders the thorny topic of English stress. Marvin argues that in order to account for the preservation of stress and vowel quality in English affixation, stress assignment mechanisms must make reference to the internal structure of derived words, contra surface-based OT accounts. She demonstrates that the behavior of "mixed suffixes" and multiple suffixation, attributed by Burzio 1994 to metrical consistency hierarchy and coincidence, respectively, is naturally explained in a phase-based approach.

Expanding on the mere fact of the relevance of syntactic hierarchy for morphophonological processes, the issues of cross-modular locality in morphology are examined in the chapters by Jonathan Bobaljik and Susi Wurmbrand, Heidi Harley and Mercedes Tubino Blanco and Alec Marantz, which all connect to the syntactic notion of a phase.

Jonathan Bobaljik and Susi Wurmbrand offer an ambitious link between the syntactic and the morphological notions of locality: the syntactic phase and the morphological cycle. Building on the assumption that a cyclic head triggers the spell-out of its sister, Bobaljik and Wurmbrand argue that the formation of a cyclic domain is suspended if the cyclic head Y depends for its interpretation on the head X taking YP as its complement. Evidence for this generalization comes from suppletion in superlatives (possible only if the corresponding comparative is also suppletive) and from QR out of embedded clauses (only possible when the tense or the mood of the clause -- i.e., the value of its highest head, is determined by the embedding head).

The nature of allomorphy is analyzed by **Heidi Harley and Mercedes Tubino Blanco**, dedicated to the arbitrary morphological classes in Hiaki (Yaqui). Examining the distribution of bound and free allomorphs of Hiaki lexical stems Harley and Tubino Blanco argue that class features are not properties of roots, but rather of Vocabulary Items, i.e., of the phonological exponents inserted in the end of the syntactic derivation. Importantly, bound forms differ in this respect from true suppletion, where the two allomorphs are not phonologically related and may belong to different morphological classes. It is furthermore shown that readjustment rules deriving bound forms from free forms are cyclically conditioned: in the verbal domain they apply to all stems and affixes closer to the root than passive and future/irrealis markers and therefore can be argued to belong to the vP (voiceP) phase.

While locality conditions on allomorphy have been the subject of many investigations, conditions on allosemy, i.e., the choice of one of the set of meanings of a particular root, have hardly been studied. In his article, **Alec Marantz** argues that allosemy is constrained by the

cycle in exactly the same way as allomorphy is. Support for this view comes from the facts usually cited as problematic for the equation of a "phase" with the domain of special meanings: Japanese nominalizations (Volpe 2005), Greek stative participles (Anagnostopoulou and Samioti 2012) and English stative participles, which are all argued to involve a semantically null v, in full parallel to the contextual allomorphy of the root over a phonologically null v in the English past tense.

Issues of locality also arise in the papers focusing on the realization of functional morphemes. Exponence is studied by Martha McGinnis, and by Karlos Arregi and Andrew Nevins, in chapter 12, while the binary vs. privative nature of features, the building blocks of such functional morphemes, is investigated by Daniel Harbour.

In her article **Martha McGinnis** examines multiple exponence and fission in Georgian number marking to argue in favor of a Distributed Morphology account over Anderson's proposal couched in the terms of A-Morphous Morphology. McGinnis attributes to syntactic competition the impossibility of having more than one number-marking suffix: the subject and a [participant] object compete for a plural number feature on T (Bejar 2003), ensuring that only the highest plural argument triggers agreement. The ostensible exception, the dative first-person plural agreement, is accounted for by assuming that in Georgian, as in a number of other languages, the apparent dative first-person plural is actually a separate person, a collective singular first-person, and as such does not compete for plural number agreement.

Vocabulary Insertion under the conditions of underspecification is examined by **Karlos Arregi and Andrew Nevins**, once again linking morphology to phonology in their detailed investigation of the Elsewhere Principle. Drawing on Basque pronominal clitics and Bulgarian definite articles, they argue that more underspecified Vocabulary Items may take precedence over more specific lexical entries on the condition that the former have a richer contextual specification. Thus in Basque, case-neutral proclitics can only be inserted in certain contexts and therefore in these contexts take precedence over case-marked enclitics, which have a less specific contextual restriction despite having a greater number of features matching the terminal node. Likewise, the realization of the Bulgarian definite clitic, argued to be sensitive to both morpho-syntactic and phonological factors, is shown to be determined by the former (specifying the context for insertion) in preference over the latter (providing the featural specification only).

A core concept shared between all modules of grammar is that of features. In chapter 8 **Daniel Harbour** sheds new light on the nature of morphosyntactic features, arguing that privative features ([F]) are not sufficient and bivalent features ([+F], [-F]) must be adopted. Diverse cross-linguistic evidence is provided in favor of this conclusion, ranging from gender in Kiowa-Tanoan to number in Bininj-Gunwok and person in Tibeto-Burman. One class of arguments comes from the analysis of number as the recursive composition of the bivalent features [±minimal] and [±bounded] -- a treatment impossible with privative features. As a result, Harbour can derive complex number specifications (unit augmented, trial, great paucal) as straightforwardly as the more familiar singular, dual and plural: for instance, trial is derived as +minimal (-minimal (-atomic (noun))). Binary features also account for the composed plural of Damana and analogous patterns within person systems, such as the composed exclusive of Limbu. Further arguments are provided by alpha exponents (realizing two covariant features at once) and a novel treatment of the morphosyntax of objects in the Kiowa-Tanoan language Tewa: by claiming that animate third person NPs are [-participant] (as opposed to inanimate NPs, which are unspecified for [±participant]), the chapter derives a variety of phenomena previously unnoted, or unexplained, within Tewa grammar (indirectobject-like encoding of animate direct objects, agreement restrictions in ditransitives, uniformity of ergative marking, and constraints on incorporation).

The final block of chapters uses functional morphemes to probe the general architecture of the grammar: the derivation of the synthetic/analytic alternation is addressed by Isabel Oltra-

Massuet and Ora Matushansky, in close connection with the post-syntactic processes studied by Eulàlia Bonet.

The derivational issues implicit in the choice between a synthetic and an analytic form form the subject of the contribution by **Isabel Oltra-Massuet**, examining Labovian variability between the three possible realizations of the Catalan past perfective. These realizations consist of a synthetic form, spoken in some varieties of Valencian, Rossellonese, and Balearic Catalan (Majorcan and Ibizan) and two analytic forms, differing in the surface form of the auxiliary historically derived from the present tense of the verb *go*. Deriving all three surface representations from the same underlying structure, Oltra-Massuet accounts for the intraspeaker free choice between the two analytic forms by appealing to a probabilistic application of an extra-linguistically conditioned impoverishment rule (cf. Adger and Smith 2005, Nevins and Parrott 2000 and).

Ora Matushansky highlights the relevance of the synthetic/analytic alternation at the interfaces in chapter 4, dealing with the derivation of synthetic comparatives and superlatives in English. Arguing against the recent proposals deriving synthetic forms by post-syntactic rules (Embick and Noyer 2001, Embick 2007), Matushansky advocates returning to Corver's (1997) head-movement analysis. Evidence against treating synthetic forms post-syntactically comes from suppletion (Bobaljik 2012) and coordinated comparatives (Jackendoff 2000), while the effect of scalarity on the availability of synthetic forms and its role in ruling them out with adverbial modification further supports building them in the narrow syntax, rather than post-syntactically.

Syntactic and post-syntactic morphological derivation forms the subject of the contribution by **Eulàlia Bonet** (chapter 10), investigating the little-known phenomenon of *lazy concord*, illustrated by gender concord in some Spanish dialects and mass concord in Asturian. While in standard Spanish the feminine definite article *la* surfaces as *el* before feminine nouns that start with a stressed [a] (e.g., *el agua* 'the water' instead of **la agua*), in some Spanish dialects the use of the masculine with this class of nouns has generalized to all prenominal adjectives (e.g., *el mismo agua* 'the same water', instead of the standard *la misma agua*). The hypothesis that gender distinctions may be lost prenominally can then be extended to the Asturian facts, where overt agreement for count-mass distinction but not for gender is neutralized in prenominal adjectives. Bonet argues that a two-step approach to concord, where postnominal concord is done in syntax while prenominal concord is post-syntactic, has advantages over proposals that have been made on parallel 'lazy agreement' between the verb and the subject (Ackema and Neeleman 2003 and Samek-Lodovici 2002).

As these short summaries show, besides elaborating and advancing the theory of Distributed Morphology, this collection also contributes to the more general body of knowledge in the area of word-level processes and their interaction with syntax, phonology and semantics: *Morris, Distributed* across the grammar. And yet, while we have all done our best to assemble work here that would develop the theory that we owe to Morris – as his students, colleagues, and friends, we have arranged "Morphemes for Morris Halle" hoping to give him pleasure.