Universal Grammar in the Reconstruction of Ancient Languages
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Introduction

*Katalin É. Kiss*

1. Goals and methods

Generative linguistics aims to describe the linguistic faculty of human individuals. The generative grammar of a language models the internal grammar of a native speaker, i.e., his/her ability to construct and understand every possible sentence of the given language, to judge the grammaticality of utterances, and to formulate intuitions about their structures. Generative linguistic theory also formulates hypotheses about how the internal grammar of human individuals is attained. Language faculty is seen as a genetically given endowment of the human species. The initial state of language faculty, called Universal Grammar, determines the class of possible languages. In the Principles and Parameters approach, Universal Grammar is a set of universal principles and a finite array of options as to how they apply. Language differences derive from particular choices of values of parameters. In the course of language acquisition, values of parameters are set on the basis of exposure to utterances of the given language.

The construction of the generative grammar of a language is a deductive process, in the course of which hypotheses are formulated concerning the structures of the language and the procedures of generating them, and the predictions of the hypotheses are compared with the actual linguistic data produced by native speakers. The non-occurrence of a predicted construction can always be an accidental gap – therefore, when testing a hypothesis, it is crucial to check with native informants if every possible construction derivable from, or allowed by, the given hypothesis is accepted by them, and every construction excluded by the given hypothesis is rejected. Starred, i.e., rejected, examples represent an indispensable element of the deductive analysis. The deductive method, involving recurring cycles of constructing a model, testing it by examining its positive and negative predictions, and then refining it, lead to a much higher degree of descriptive adequacy than can be attained by traditional grammars compiled inductively.
Ancient languages apparently resist a generative description. If the goal of generative language description is the modelling of an individual's internal grammar, then it might, indeed, seem questionable if this goal can be meaningfully pursued in the case of individuals deceased thousands of years ago. It is not immediately obvious, either, that what we have to describe in the case of an ancient language is an infinite set of sentences; in fact, we have a finite set of written data at our disposal, which seem to be manageable by an inductive analysis. The lack of informants, i.e., the impossibility of obtaining grammaticality judgments and rejected examples, also suggests that a deductive approach would be not only unnecessary but also impossible.

The inductive analysis of closed corpora has been the methodology adopted in traditional analyses of ancient languages. This methodology, however, has its limitations. What it can achieve is basically the listing and interpretation of the morphemes of a language. Thus it has been successful in identifying grammatical categories, in compiling morphological paradigms of verb conjugations and noun declinations, in distinguishing tenses, moods, cases, and agreement markers. It has also been able to establish grammatical relations, i.e., to link heads with complements, and to distinguish complements of different grammatical functions. However, there are also problems which cannot be tackled by the traditional method. An obvious difficulty is the problem of gaps, possible mistakes, and idiosyncracies in the data available. For an inductive analysis, it is often impossible to decide whether a construction unattested is an accidental gap or something excluded by the grammar. Similarly, it may be impossible to tell if an unusual piece of data is a mistake of an ancient scribe, an idiosyncracy elicited by the restrictions of versification, or a rare but perfectly grammatical construction. The greatest problem for the grammarian of a dead language is the fact that the data – whether scarce or abundant – always underdetermine grammar. This problem is particularly severe in the case of dead languages like Sumerian or Akkadian, which had to be deciphered again completely – in contrast to ancient languages which have been sustained by cultic and scholarly traditions, or which have in some sense survived in their descendant languages.

The difficulties of reconstructing the grammar of an ancient language resemble the difficulties that a child experiences when reconstructing the grammar of its mother tongue. A child acquiring its mother tongue, too, has access only to a limited – and sometimes defective – set of positive evidence (the correction of the child's mistakes by adults is by no means a necessary element of language acquisition). If the two processes are similar,
then the methodology adopted in the reconstruction of the grammar of an ancient language must also be similar to that employed by a child in the course of language acquisition. What the child does is interpret the data it has access to on the basis of the genetically coded Universal Grammar that it possesses. This is what the linguist setting out to reconstruct the grammar of a dead language must do, as well; he or she must interpret the data available as indications of how the open parameters of Universal Grammar are to be set. Naturally, a linguist is in a more difficult situation than a child because what the linguist can work with is not Universal Grammar itself but only a model of it whose correspondence to the implicit knowledge of a child is an open question. Nevertheless, hypotheses concerning Universal Grammar seem to be well-established enough to make such a project a worthwhile experiment.

The studies of this volume aim to demonstrate that descriptive problems which proved to be unsolvable for the traditional, inductive approach to ancient languages can be reduced to the interaction of regular operations and constraints of the hypothetical Universal Grammar. The proposed analyses of ancient languages as instantiations of Universal Grammar also bear on linguistic theory. In addition to confirming or refuting certain specific hypotheses, they provide clear empirical evidence of the perhaps most basic tenet of generative theory, according to which Universal Grammar is part of the genetic endowment of the human species – that is, human languages do not “develop” parallel with the development of human civilization. The languages examined in this volume were spoken several thousand years ago. The Egyptian and Sumerian texts to be analyzed can be as much as 5000 years old, and the first Akkadian records are also only slightly younger. As will become clear from the studies of this volume, the grammars of these languages do not differ in any relevant respect from the grammars of languages spoken today.

2. Predecessors

The view that ancient languages can be modelled successfully in the generative framework despite the lack of native speakers has been shared by a number of linguists ever since the nineteen sixties. Some scholars assumed that the lack of native speakers can be made up for by a corpus of adequate size and variation (Ehlich 1981), while others claimed that they had developed a native-like intuition in the language studied by them (Pillinger 1980).
It has been mainly Latin whose grammatical phenomena have been subjected to generative analyses. The first major generative study of Latin syntax was Robin Lakoff’s book on Latin complementation (1968), discussing various types of finite and non-finite complement clauses, and the licensing of various moods. In the seventies and early eighties, the period of the emergence of Government and Binding Theory, problems of Latin infinitival phrases aroused interest, which has persisted up until today. Pepicello (1977) analyzed accusative with infinitive as Subject-to-Object Raising, and his views elicited alternative proposals by Bolkenstein (1979), Pillinger (1980), and Wales (1982). Questions of accusative with infinitive constructions, for example, the source of the accusative case, kept recurring also in the proceedings of a series of International Colloquia on Latin Linguistics, edited by Pinkster (1983), Touratier (1985), Calboli (1989), and Herman (1994). Maraldi (1983), for example, identified Acl as Exceptional Case Marking, licensed by S’ deletion; however, she also noticed instances of Acl occurring in the context of a passive matrix verb. The same problem was also addressed by Calboli (1983, 1989), and recently by Cecchetto and Oniga (2002).

Areas of Latin syntax examined in the generative framework include the case system – see Binkert (1970) and Murru (1977). Maurel (1983, 1989) discussed problems of Latin relativization. Bertocchi and Casadio (1983), and Bertocchi (1989) dealt with questions of binding, particularly with the Latin se and suus, which are anaphors that can be bound not only locally but also at a long distance. Salvi (1996) and Giusti (2001) examined the Latin pronominal system from a historical perspective, as the predecessor of the Romance systems of strong, weak, and clitic pronouns and the Romance article. Basic questions of Latin syntax concerning sentence structure, word order variation, its derivation, and its discourse functions were addressed by Ostafin (1986), Salvi (1999/forthcoming), and Polo (2003). Benucci (1996) analyzed Umbrian, a close relative of Latin. Recently issues of Latin morphosyntax have gained significance, particularly in the framework of Distributed Morphology – see Embick’s derivation of the synthetic and analytic forms of the perfect (2000), and Embick and Halle’s analysis of the Latin conjugation (1999). Oniga (2004) provides a generative analysis of the major morphological and syntactic structures of Latin.

Studies of Ancient Greek in the generative literature had been sporadic up until recently. The analysis of agreeing predicative adjectives in non-finite clauses by Andrews (1971) provided important evidence for the presence of a covert subject in infinitives, and contributed to the shaping of control and
raising theory. Lightfoot (1975) devoted a whole book to the analysis of Classical Greek complementation and the Greek mood system. Interest in Classical Greek has become more intensive since Modern Greek syntax has been subjected to thorough analyses in the generative framework. The first major result of the renewed interest in Classical Greek was Morrell (1989). Taylor (1990, 1996) analyzed sentence structure, DP-structure, and clitic position in Ancient Greek, whereas Taylor (1994) dealt with the change of Ancient Greek word order from OV to VO. Philippaki-Warburton and Catsimali (1997), and Tantalou (2003) focus on problems of infinitival phrases, among them the case assigned to the subject of infinitives.

The dissertation of Garret (1990) examined various syntactic problems of Anatolian (Hittite), particularly those concerning pronominal clitics. Kiparsky (1995) called Pāṇini’s grammar of Sanskrit “the most complete generative grammar of any language yet written”. No wonder few Indologists felt the need of adopting the methodology and terminology of contemporary generative grammar. The best-known exceptions are the dissertations of Hale (1987) and Schäufele (1990). In addition to basic questions of sentence structure, word order, and discourse functions, clitic placement has been examined in a number of papers (see Hale 1990, 1991, 1993, 1996; and Schäufele 1993, 1996). The way of influence between Indo-Iranian philology and generative theory has been bidirectional; Pāṇini’s grammar has also enriched generative theory – primarily through a series of studies by Kiparsky (Kiparsky and Staal 1969; Kiparsky 1979–80, 1982, 1995).

Apart from two papers on Sumerian by Gragg, discussing the Sumerian copula (Gragg 1968), and some basic issues of Sumerian constituent structure as well as general questions of traditional philology and transformational grammar (Gragg 1973), and apart from a book on Akkadian syntax and morphology by Groneberg (1987), the only generative syntactic studies of Sumerian and Akkadian are the papers of Christian Huber (1989–90; 1996; and forthcoming) and Gábor Zólyomi (1996), whose work is also represented in the present volume.


3. The problems addressed

The studies in this volume analyze syntactic and morphosyntactic phenomena from various areas of grammar. Many of these phenomena represent old problems, inexplicable idiosyncracies for the philologies of ancient languages; others (e.g. word order variation) have not even been acknowledged as questions to be accounted for in the course of grammatical description. The analyses of these problems as instantiations of options provided by Universal Grammar shed light on previously unrecognized structures, operations, and constraints of the languages in question.

The proposed analyses also provide valuable new data and new insights for the set of hypotheses constituting Universal Grammar. The linguistic facts discussed, taken from Sumerian, an isolated language, Akkadian, an East Semitic language, Biblical Hebrew, a Northwest Semitic language, Older Egyptian and Coptic Egyptian, which represent two stages of a separate branch of the Afro-Asiatic family, and the Indo-European Sanskrit, Classical Greek, and Latin, most of which have been inaccessible to generative theory before, contribute to the understanding of basic questions of syntactic theory such as the licensing of structural case, the motivation of movement operations, the structure of coordinated phrases, the role of event structure in syntax, etc.

The studies of the volume also set forth interesting problems for further research, in addition to the issues addressed in detail. For example, the extended Sumerian verb projection, also harboring a great number of clitics at various places, seems to be more complex than any other verbal projection studied in the generative framework.

Here is a brief overview of the main empirical and theoretical problems that the chapters of this book discuss, and the kind of analyses that they propose.
3.1. Accusative with infinitive without ECM and without object control

In generative syntactic theory, in which nominative case is licensed – assigned or checked – by finite inflection, a non-finite verb can only have an overt, case-marked subject if the subject bears accusative case licensed by a prepositional complementizer or by the matrix verb. A condition of case-licensing by the matrix verb is that the infinitival phrase project no CP. As Chomsky (1981: 140) observes in a footnote, however, “the case of accusative subjects of infinitives in Greek or Latin remains more problematic”. Two papers of this volume, *The syntax of Classical Greek infinitive* by Vassilios Spyropoulos, and *Latin object and subject infinitive clauses* by Lucio Melazzo, are devoted to the theoretical and descriptive problems caused by Classical Greek and Latin accusative with infinitive constructions. As they demonstrate, both Classical Greek and Latin infinitives can have an accusative subject also in constructions in which neither of the two conditions of accusative licensing by the matrix verb is satisfied: the matrix verb is intransitive, or the infinitive phrase is in subject or adjunct position, and furthermore, there is evidence of the infinitival clause also projecting a CP – even if no visible complementizer is present. The possibility of object control, i.e., the accusative noun phrase complementing the matrix verb, and controlling a PRO subject, can also be excluded; the accusative noun phrase clearly occupies the subject position of the infinitival clause. In Classical Greek, an accusative subject can even appear in the infinitival subject position of so-called genitive with infinitive and dative with infinitive constructions, in addition to the genitive or dative matrix argument normally understood to represent the subject of the infinitive. For example:

(1) *deomai hymo:n [pro iastrous genesthai]*
   beg-I you-GEN.PL pro-ACC doctor-ACC.PL become
   ‘I beg you to become a doctor.’

Classical Greek being a pro-drop language, the pronominal subject of the infinitive is phonologically empty, but its accusative case is clearly indicated by the accusative of the predicate complement, which always agrees in case with the subject of its clause.

For the traditional approach, the appearance of the accusative case e.g. on the predicate complement in (1), categorized as a ‘genitive with infinitive’, is inexplicable. For the generative approach, the question is what licences a case-marked subject in the embedded CP in (1), and what is the source of
its accusative case. A further theoretical problem is the apparently optional alternation between an accusative subject and a controlled PRO in Greek infinitival clauses. Latin infinitival clauses sometimes even display a nominative subject/accusative subject alternation – as illustrated by (2a,b):

\[(2) \begin{align*}
\text{a. } & \textit{Dicitur eo tempore matrem \textit{Pausaniae} vixisse} \\
& \text{is.said that time mother-ACC of Pausanias to-have-lived} \\
& \text{‘Pausanias’ mother(-ACC) is said to have lived in that period.’} \\

\text{b. } & \textit{quem quidem... persequi Caesar dicitur} \\
& \text{whom in.truth to-pursue Caesar-NOM is.said} \\
& \text{‘whom Caesar(-NOM) is said to pursue’}
\end{align*}\]

Spyropoulos and Melazzo seek answers to the problems raised by Ancient Greek and Latin accusative with infinitive constructions along similar lines; they identify a head in the complementizer domain of the infinitival clause as a case licenser.

As Spyropoulos convincingly argues, the source of the accusative case of the infinitival subject in ancient Greek is the infinitival complementizer, $C_{\text{fin}}$. Greek infinitives are marked for tense, hence $C_{\text{fin}}$, agreeing with the infinitival inflection, also carries a [+Tense] feature. The [+Tense] feature of $C_{\text{fin}}$ can also have a parasitic [Agr] feature bundle associated with it. If the overt DP or pro subject of the infinitive cannot establish a checking relation either with Inflection (because it is [+Tense] but [-Agr]), or with a matrix controller (e.g. because of an intervening CP projection), it is the [Agr] feature bundle of $C_{\text{fin}}$ that is at hand to licence an accusative case on it.

In Latin, the infinitive phrase is often coindexed with a 3rd person singular pronoun, which leads Melazzo to the hypothesis that the infinitival CP (similar to an object that-clause) is base-generated in the complement position of a DP, with the pronoun (or an empty pro) occupying the specifier of DP. The case assigner of the infinitival subject is the FIN head of the CP-domain (the same head that is called $C_{\text{fin}}$ by Spyropoulos). Melazzo claims that the bundle of features substantiating FIN includes a specification for case, which is activated when the case of the subject cannot be licensed in the IP-layer.

Interestingly, the subject of the infinitive is in the nominative in the case of root infinitives, or those introduced by a temporal adjunct. This is accounted for by the assumption that the case-feature of FIN is [+Accusative] only if FIN is characterized as [+complement] (representing a complement to D); it is [+Nominative] otherwise.
Subject infinitive clauses complementing a D are also predicted to have an accusative subject, as in (2a) above. (2b), involving a subject infinitive clause with a nominative subject, is analyzed as a kind of subject raising. In such structures, the specifier of the DP harboring the infinitive clause is claimed to be generated empty, and to serve as a landing site for the subject of the infinitive, which thereby picks up the nominative case of the matrix subject.

3.2. The structure and the motivation of possessive constructions with an external possessor

The fact that the possessor can appear either as a determiner of the possession, or as an extracted complement, or an adjunct external to the projection of the possession is well-known from a number of languages. Since the case-ending or the preposition of an external possessor is often different from that of an internal one, the recognition of an external possession construction can be a very difficult descriptive problem. External possessors also raise theoretical questions such as what triggers the externalization of a possessor, and how an external possessor construction is derived.

Two papers of the volume are devoted to problems of the possessive construction. Gábor Zólyomi’s paper entitled *Left-dislocated possessors in Sumerian* discusses two different Sumerian constructions with a topicalized external possessor. In one of them, called the anticipatory genitive construction, the left-dislocated possessor bears the genitive case, and is coindexed with a possessive pronoun internal to the projection of the possession. The possessor and the possessive pronoun coindexed with it need not be subjacent; for instance, in one of the examples discussed, the possessor in the left periphery of the matrix clause is coindexed with a possessive pronoun in a relative clause. The lack of subjacency and the resumptive pronoun strategy are interpreted as evidence that the anticipatory genitive construction is a base-generated construction, involving no movement.

In the other possessive construction with a left-dislocated possessor, the so-called external possession construction, the left-dislocated possessor, though copied by a possessive pronoun in the projection of the possession, is not in the genitive case but bears the same syntactic case as the possession itself. This construction can be used in the case of an inalienable possession. Interestingly, the verb agrees with the external possessor instead of the head of the possessive construction.
The external possession construction is often masked by various surface phenomena. On the one hand, the identical syntactic cases of the possessor and the possessum can be realized by different morphological cases – given that some adverbial cases may be supplemented by the dative case on noun phrases with a human referent. On the other hand, when the external possessor is identical with the topic of the previous sentence, it is phonologically empty, in which case it can only be reconstructed from a verbal prefix agreeing with it. Thus, discovering the underlying syntactic structure of sentences of this type also solves philological, interpretational problems of Sumerian.

Zólyomi derives the properties observed of the external possession construction as follows: The possessor bears the same case as the possession because they represent the same argument of the verb, forming a kind of an appositive construction. The external possession construction is restricted to cases of inalienable possession because the condition of such an appositive construction is the referential non-distinctness of its members.

Barbara Egedi’s paper entitled Genitive constructions in Coptic compares two possessive constructions of Coptic, examining how they are structured, and in what way their structures determine their distributions. As Egedi demonstrates, both possessive constructions involve a ‘possession, genitive marker, possessor’ string; however, in pattern A, the genitive marker of the possessor is a genitive case-ending, while in pattern B it is a preposition; furthermore, in pattern A the adjacency of the possession and the possessor is obligatory, while in pattern B, it is optional. The choice between pattern A and pattern B depends on the syntactic properties of the possession. The case-marked possessor of pattern A is used if the possession has a mere definite article. If the possession is indefinite, or if it has a demonstrative definite determiner, or is modified by an adjective, the prepositional possessor of pattern B must be used.

So as to derive the attested properties of pattern A, Egedi generates the genitive-marked possessor in the specifier of the possession NP, as an alternative to the indefinite article. The NP is claimed to be subsumed by a PossP, with the N raised to Poss, and then to Num, and with the possessor raised to Spec,PossP. The possessor has a weak [+def] feature, which triggers no overt possessor movement to the DP domain, but ensures that the D head be realized as a default definite determiner – thereby also excluding the possibility of a demonstrative determiner in D. That is:
In pattern B, on the other hand, the possessor is generated as a PP adjunct right-joined to the possession noun phrase, where it can also be subjected to extraposition. As an adjunct, it does not interact with the [+/-definitene] feature of the possession; so it is predicted to be compatible with any type of determiner.

### 3.3. Word order variation

Word order variation has been interpreted by traditional philology of Classical Greek and Latin roots as a freedom of word order, that is, a phenomenon of language which is not regulated by rules, hence falls outside the realm of grammar. The Pāṇinian approach to Classical Sanskrit – though essentially generative in its spirit – also shares this assumption of traditional philology; it does not have anything to say about the word order of the Sanskrit sentence. Generative theory, on the other hand, has always had doubts about the existence of genuinely free word order languages. Evidence of subject–object asymmetries in English led to the hypothesis that the subject is universally more prominent than the constituent subsuming the verb and the object, hence it is always realized external to the V+O or O+V complex. The apparent freedom of word order in a language is the result of reordering rules.

Brendan Gillon and Benjamins Shaer’s paper entitled *Classical Sanskrit, ‘wild trees’, and the properties of free word order languages* argues...
that the underlying constituent order in the Classical Sanskrit sentence is genuinely free; at the same time, subconstituents displaced to the left and right periphery also provide evidence of movement. That is, Gillon and Shaer challenge both Sanskrit philologists and generative syntacticians. They show to Sanskrititologists that the generation of word order, that is, the linearization of the verb and its complements, is a grammatical question no matter how flexible the linearization rules be. Furthermore, Sanskrit sentences with discontinuous constituents clearly display patterns of movement licensed by Universal Grammar, constrained by Subjacency, to landing sites on the left and right periphery of the sentence. Constituents affected by movement to the peripheries appear to be associated with particular discourse functions, however, in Gillon and Shaer’s view, the syntactic and the information-packaging systems of grammar are autonomous, hence it is legitimate to examine the former with no regard to the latter.

The basic new claim that Gillon and Shaer confront generative syntacticians with is the assumption of a genuinely free underlying order of major constituents in the Sanskrit sentence. Reviving and modifying the so-called ‘wild tree’ theory of Staal (1967), they claim that the Classical Sanskrit clause is generated in one step, with all the major constituents merged into an unordered flat tree. They raise the possibility that this unordered flat tree might represent a universal underlying structure. In this view, articulating constituents in a binary branching hierarchy is a further step licensed – but not enforced – by Universal Grammar, which English does, and Sanskrit does not, adopt. Structures in which the verb and all its complements are sisters to each other have also been argued for before – see e.g. Bresnan (1982), Hale (1983), É. Kiss (1987), etc. The Gillon-Shaer theory is more radical than previous proposals in that it does not even assume a fixed position for the head in the initial tree.

In current main-stream generative theory, word order variation that is not elicited by morphological or scope requirements is seen to be motivated by discourse considerations. The two main clues of identifying discourse functions are prosody, which cannot be investigated in the case of dead languages at all, and semantic interpretation, which cannot be reconstructed with full certainty, either. Chiara Polo and Giampaolo Salvi focus on the methodological questions of discovering discourse-motivated reordering operations in a dead language, and also prove that surface variation in Latin word order can be reduced to an invariant underlying order, and to topicalization and focussing rules also known from other languages.
In her paper entitled *Latin word order in generative perspective: An explanatory proposal within the sentence domain*, Chiara Polo introduces an ingenious method of reconstructing the missing semantic and prosodic judgments of Latin native speakers. She chooses a Latin text, *Cena Trimalchionis* by Petronius, which describes an event involving characters, situations, and happenings that are also familiar to the modern reader, and she identifies discourse functions in its sentences on the basis of the Italian translation. Polo’s hypothesis is that the Italian translator has interpreted the series of events described in the Latin text the same way as the ancient author and the ancient readers did, and has formulated the corresponding sentences of the Italian translation so as to convey the same discourse functions, by means of the same discourse-motivated reordering rules.

As a first step of the comparison of Latin and Italian, Polo establishes the unmarked word orders of the two languages. 70% of the 823 Latin sentences examined are SOV, and 77% of the corresponding Italian sentences are SVO. The statistical analysis is supplemented with a qualitative examination of the sentences, which shows that neutral imports are mapped into an (S)OV structure in 90% of the cases in Latin, while they are mapped invariably into an (S)VO structure in Italian – so these prevailing patterns are assumed to represent the basic word orders. It is the 30% of Latin sentences with a word order other than SOV which – or a subset of which – are expected to be derived by reordering rules targeting constituents specified as [+contrastive focus], [+emphasis], [+topic], or [+heavy]. The carriers of these features are recognized on the basis of the context, and on the basis of the Italian translations. Polo hypothesizes that constituents in non-basic positions marked for these features occupy the same peripheral positions that are licensed by Universal Grammar in present-day Italian. The reordering rules identified include right- and left-dislocation, lefthand and righthand focalization, and heavy-NP shift, in addition to various types of V-fronting, e.g. V-to-Foc and V-to-C movement.

Giampaolo Salvi’s paper entitled ‘Some firm points on Latin word order: the left periphery’ aims to identify the left-peripheral structural positions that serve as landing sites of the movement rules described in Polo’s paper. Salvi relies on a very complex array of distributional evidence, which he interprets and evaluates on the basis of assumptions of Universal Grammar.

Salvi demonstrates the methodology of identifying left-peripheral structural positions on material from Medieval Romance, a descendant of the Latin language. In Medieval Romance two preverbal slots with different properties can be distinguished: a clause-initial P1 position, and an imme-
diately preverbal P2 slot. A direct object in P1 does, a direct object in P2 does not, trigger clitic doubling. If the preverbal constituent occupies P1, the clitics are adjoined to the V. If, on the other hand, the preverbal constituent is in P2, the clitics are adjoined to the constituent in P2. P1 is typically interpreted as a topic or a frame adverbial, whereas P2 is usually a wh-phrase or a focus, even if it can also be a topic. (Salvi raises the possibility that P2 in fact corresponds to two positions, a topic slot and a focus slot, which can be filled alternatively.)

Some facts of Latin suggest that Latin sentence structure instantiates a version of the sentence structure that can be reconstructed for Medieval Romance. That is, it appears that the Latin sentence contains a focus projection (FP) and a topic projection (TopP) on top of IP. The filler of Spec,TopP/P1 can be doubled by a clause-internal pronoun, and cannot support a clitic. The position of the clitics (the Wackernagel position) is to be found after the constituent in Spec,FP/P2, or if no FP is projected, after the first constituent of IP. At the same time, not all Latin sentences seem to observe the distributional restrictions and correlations described above. For example, the left-peripheral constituent in the following example both has a pronominal double, like a constituent in Spec,TopP/P1, and is immediately followed by the pronominal double, like a constituent in Spec,FP/P2.

(4) *sed urbana plebes, ea vero praeceps erat de multis causis*

but urban populace it in.truth precipitate was for many.ABL reasons

‘But the city populace in particular acted with desperation for many reasons’

Salvi, attempting to assimilate the structure in (4) to the general pattern, takes a closer look at the pronoun in it. As is well-known from the comparative analyses of pronominals, e.g. from Cardinaletti and Starke (1995), pronouns occur in two or three versions in a language: they can be strong, or weak, and some languages also have clitic pronouns. Whether or not strong and weak pronouns differ in form, they have different distributions and different syntactic properties. Strong pronouns function as contrastive topics, new topics, or foci. Only anaphoric pronouns are weak. In various Romance languages descending from Latin, strong and weak pronouns have different forms. This difference must have had its origin in Latin. That is, both universal considerations and historical facts suggest that Latin must also have distinguished strong and weak pronouns, even if they appeared identical in the written language. Thus a pronoun like *ea* could, in principle,
represent either a weak or a strong form. The _ea_ in (4) must be strong, because it supports the enclitic _vero_.

In view of these, the structure in (4) does not contradict the hypothesized sentence structure any more; the pronoun doubling the topic constituent is a strong pronoun occupying Spec,IP, hence it is not subject to the constraints on weak pronoun placement.

The left periphery of embedded clauses is somewhat more complex than the \_[TopP...FP...IP VP...\_] structure identified in main sentences; an embedded clause also contains a clause-initial relative WH-element, or a pre- or post-topic complementizer. In order to provide place for these constituents, Salvi supplements his left periphery-model along the lines proposed by Rizzi (1997). In Rizzi’s theory, the complementizer domain of the sentence has three layers, to be occupied by a relative WH-element, a topic, and a focus, respectively. The complementizer can appear in the head position of any of these projections. (In fact, in Latin it has to be ensured that the complementizer precede the filler of Spec,FP, i.e., it occupy the head of the projection harboring the relative WH-phrase or that harboring the topic.) In embedded clauses the complementizer also provides an additional target for weak pronoun placement.

Lisa Lai-Shen Cheng, Aniko Lipták, and Chris Reintges’s paper entitled *The nominal cleft construction in Coptic Egyptian* analyzes a focussing device of Coptic which is also known from many present-day languages of the world. Its discourse function being clear, the investigation aims to establish how the parameters involved in the formation of the construction are to be set so that the restrictions attested fall out. These are the following: (i) The cleft constituent is a DP in the left periphery of the sentence. (ii) The backgrounded proposition is represented by a relative clause whose relative pronominal element is coindexed with the cleft constituent. In subject relatives the relative pronoun is empty, otherwise it is a resumptive pronoun in situ. (iii) The element linking the cleft constituent and the backgrounded proposition is a deictic pronoun agreeing in number and gender with the cleft constituent.

The authors claim that the Coptic nominal cleft construction is to be derived from a small clause, with the cleft constituent functioning as its subject, and the relative clause functioning as its predicate. This explains why the cleft constituent cannot be anything but a DP. The relative clause has a relative operator in situ, represented by a resumptive pronoun. The authors adopt an analysis in which the pronominal operator undergoes movement to Spec,CP in narrow syntax; at PF, however, the lower copy of
the operator-variable chain is spelled out. Subject relatives, on the other hand, need not move since they are local to the C position also when left in situ. They can remain empty because the adjacent relative complementizer in C allows them to remain empty – as is also attested in many other languages. The deictic element copying the number and gender features of the cleft constituent is generated in the head position of the small clause (AgrP) in which the cleft construction originates. It functions there as an agreement clitic that overtly marks the subject-predicate relation between the clefted NP and the relative clause.

The focus interpretation of the cleft constituent is a consequence of the fact that the small clause constituted by the cleft constituent, the deictic copula, and the relative clause is embedded under a focus projection. The head of the focus phrase has an uninterpretable focus feature, which attracts the subject of the small clause to Spec,FocP.

3.4. Morphosyntactically motivated word order variation

Two papers of the volume, The correlation between word order alternations, grammatical agreement and event semantics in Older Egyptian by Chris H. Reintges, and VSO and Left-conjunct Agreement: Biblical Hebrew versus Modern Hebrew by Edit Doron, deal with VSO-SVO word order variations. Both of the studies derive the variation from a lexical idiosyncracy: the lack or presence of an EPP feature on a functional category extending the verb phrase. Both of them also relate the variation to subject-verb agreement, linking VSO to the lack of agreement, and SOV to the presence of it. However, whereas in Reintges’s theory, it is agreement that determines SVO order (SVO being a consequence of the EPP feature of Agreement), in Doron’s approach it is the other way round; it is the SVO order (triggered by an optional EPP feature of Tense) that elicits agreement. Reintges argues that in Older Egyptian, the VSO-SVO word order variation is not random but is linked to the type of the eventuality; sentences describing an event have a VSO word order, whereas those expressing a state are SVO. This distribution of preverbal and postverbal subjects might recall a theory elaborated by Kratzer (1995), Maleczki (1999), and others, according to which sentences with an event variable can have a spatiotemporal expression (whether spelled out or unarticulated) in their external argument position, which allows the subject to remain in the VP. Sentences describing a state, which lack an event variable, on the other hand, can only have
their subject externalized. This explanation, however, would not exclude the possibility of an SVO order in eventive sentences, which is not attested in Older Egyptian. Furthermore, the subject in VSO sentences is shown by Reintges to occupy Spec,IP, the position of the external argument. The explanation to be proposed must also account for further curious correlations. Namely, in stative, SVO sentences, the verb bears a personal inflection, which is underspecified in some cases, but is always spelled out. In eventive, VSO sentences, on the other hand, the V is supplied with an agreement element which is always specified for person, number, and gender when present, but is missing if the subject is represented by a lexical noun phrase.

In Older Egyptian, the eventive or stative nature of a sentence is determined by the choice of the verbal paradigm; it is not a consequence of the lexical meaning of verbs. No matter if their primary meaning is eventive or stative, verbs can appear both in the eventive and in the stative paradigm, expressing slightly different eventualities in the two cases. Superficially, the two paradigms display inflectional systems of a similar kind. As Reintges shows, however, the apparent agreement markers of the eventive paradigm are enclitic pronouns; that is why they are not spelled out in the presence of a lexical subject. In the stative paradigm, on the other hand, the verb is truly inflected; its agreement suffix (often underspecified) is spelled out in the presence of either a pronominal or a lexical subject.

With these issues clarified, the scene is set for the explanation of the VSO-SVO variation. Reintges derives both word orders from a canonical vP. The VSO order of eventive sentences can arise either as a result of V-to-T movement, or as a result of (V+T) movement to a functional head in the complementizer domain.

\[
\begin{align*}
(5) & \quad \text{a. } [\text{TP } V+T [\text{vP } SU [\ldots (V) \ldots DO \ldots ]]] \\
& \quad \text{b. } [\text{FP } V+T [\text{TP } SU [\text{T'} (V+T) [\text{vP } (SU) [\ldots V \ldots DO \ldots ]]]]]
\end{align*}
\]

In structure (5a), sentential adverbs, negation, and shifted objects precede the subject; in (5b), on the other hand, they follow it. (5a) represents the unmarked word order; (5b) arises by V movement to a functional head with information structure (topic or focus) content.

In stative SVO sentences both the V and the subject precede TP, but they do not reach the CP domain. In fact, no CP is projected — as is clear from the fact that stative sentences can occur in Exceptional Case Marking constructions. The SVO order of stative sentences is the result of V-to-Agr
movement, and subject movement to Spec,AgrSP. That is, the word order difference between eventive and stative sentences is eventually reduced to the presence of an AgrP projection with an EPP feature in the latter.

Edit Doron demonstrates in her paper that the seemingly identical VSO sentences of Biblical Hebrew and Modern Hebrew represent different structures; Biblical Hebrew sentences have the structure in (5a), whereas Modern Hebrew sentences display the structure in (5b). This difference is derived from the assumption that in Biblical Hebrew, the Tense head does not have an intrinsic EPP feature (although it can be supplied with an EPP feature optionally, which yields an SVO sentence). In Modern Hebrew, on the other hand, EPP is a lexical property of Tense.

In Biblical Hebrew, the lack of the attraction of the subject to Spec,TP also affects the Agree relation between the subject and the verb. This becomes evident in the case of a conjoined subject of the following type:

\[
\text{(6)}
\]

If T has an EPP feature (as is always the case in Modern Hebrew and can also happen in Biblical Hebrew), it is the whole conjoined noun phrase (the highlighted DP) that is subjected to movement to Spec,TP and agreement with V+T – owing to constraints on movement. If, on the other hand, T does not have an EPP feature (as is usually the case in Biblical Hebrew), T can agree with the minimal D constituent closest to it which allows the derivation to converge. That is, the VSO sentences of Biblical Hebrew display left-conjunct agreement; for example, in the equivalent of 'And lifted David and the people with him their voice', the verb is in the singular.

In a few VSO sentences of the Bible, we attest full agreement between the verb and a conjoined subject noun phrase following it. As Doron demonstrates, these sentences all represent structure (5b); the verb has been raised to a functional projection above TP, while the postverbal subject still occupies Spec,TP.
3.5. The structure of coordinated phrases

Emanuele Lanzetta and Lucio Melazzo’s paper entitled *A particular coordination structure of Indo-European flavor* aims to account for the various, often unexpected positions of the conjunction in coordinated constructions of ancient Indo-European languages, among them Hittite, Ancient Greek, Latin, and Vedic Sanskrit.

As is well-known, the conjunction in Latin coordinated phrases consisting of two conjuncts is cliticized to the second conjunct (terra marique ‘by land by sea-and’), or to both conjuncts (remque prolemque ‘wealth-ACC-and issue-ACC-and’). However, the two conjunctions of a coordinated expression can also appear side by side, between the two coordinated nominals, as in the following Ancient Greek example:

(7) αρό kratos te ka ὀμῶν
    from head-GEN-and and shoulders-GEN
    ‘from (his) head and shoulders’

Surprisingly, the conjunction may also appear cliticized after the first conjunct – e.g. in the following Vedic Sanskrit example:

(8) devébhyaś ca pitřihya
    Gods-DAT-and fathers-DAT
    ‘to the gods and the fathers’

This example seemingly contradicts not only the Latin examples cited above, but also what we attest in present-day Indo-European languages. A conjunction cliticized to the first conjunct is sharply ungrammatical – as illustrated by the English example *He left and. He didn’t even say good-bye* (cf. Munn 1992).

On the basis of this seemingly contradictory array of facts, a traditional, inductive description cannot but conclude that anything goes; the conjunction(s) can stand anywhere in the coordinated phrase except in initial position – which is not true. (For example, no ‘XP and XP XP’ order is attested.) If, on the other hand, the binary branching conjunction theory following from the principles of Universal Grammar, formulated in somewhat different versions by Munn (1992) and Kayne (1994), is used as the framework of the analysis, all the facts attested can be derived, and no unattested possibilities are predicted. In this framework, coordinated phrases are assigned the following universal structure:
If \& is an enclitic, Y, the nominal constituting the second conjunct is left-adjointed to it via head movement.

This is the underlying structure of coordinated phrases containing two conjunctions according to Lanzetta and Melazzo – with \&1P occupying the specifier of \&2P.

In this structure both X and Y undergo head movement to \&1 and \&2, respectively – unless e.g. \&2 is not enclitic, as happens in (7). In this framework, the source of the seemingly idiosyncratic example in (8) is a version of structure (10), in which the 2nd conjunction (\&2) is phonetically null.

The benefits of deriving the coordination possibilities of ancient Indo-European languages from the binary branching hypotheses of Universal Grammar are mutual: not only seemingly idiosyncratic facts of a number of languages receive a principled explanation, but also a speculative hypothesis of Universal Grammar receives empirical support; ancient Indo-European languages realize possibilities that are derivable from the Munn-Kayne theory but have not been attested so far.

3.6. The function of the D-stem of the Semitic verb

In his paper entitled *Complex predicate structure and pluralized events in Akkadian*, Christian Huber examines the seemingly contradictory functions
associated with a particular verb-stem, and manages to reduce the apparent idiosyncracy to the interaction of argument structure, event structure, and quantification.

The Akkadian verb has a triconsonantal root, which participates in various fixed morphological templates called stems. One of these stems, the so-called D-stem, seems to have different functions depending on whether the verb is unaccusative, transitive, or unergative. In the case of unaccusative verbs, the D-stem derives a transitive verb from the basic G-stem; thus the D-stem of the Akkadian equivalent of 'grow' means 'make bigger'. In the case of transitive and unergative verbs, on the other hand, the D-stem adds no argument; thus the D-stems of the Akkadian equivalents of the transitive 'open' or the unergative 'whisper' also mean 'open' and 'whisper', respectively. Huber aims to clarify in what respect the D-stem of a transitive or an unergative verb is different from the G-stem of the same verb, and whether or not the D-stems of unaccusatives and transitives/unergatives are derived in the same way.

As for the former question, Huber observes that the use of the D-stem is often triggered by the presence of a plural argument or adjunct. Thus whereas in the Akkadian equivalent of 'I opened a canal' the V occurs in the G-stem, in the the equivalent of 'I opened canals' the D-stem is used. In some sentences, e.g. in the equivalent of 'I enlarged the garden of the palace'; or, The wall which R(oyal) N(ame)1, RN2, RN3, RN4, and RN5 had built...’, the use of the D-stem is somehow related to the extended nature of the process described. Assuming the theoretical framework of Pustejovsky (1991), in which events fall into states, processes, and transitions, Huber claims that all these sentences express a plurality of transitions. The multiplicity of transitions can mean a series of independent transitions, as in the case of 'I opened canals'. In another type, the plurality of transitions is a recursive series, with the output of one transition serving as input for the next transition. Sentences such as 'I enlarged the garden of the palace' belong to this type. Finally, the plural event can consist of proto-events (proto-transitions) which constitute a single transition in their totality, yielding a mass-noun-like interpretation of the count noun. This type is represented by sentences like 'The wall which R(oyal) N(ame)1, RN2, RN3, RN4, and RN5 had built...’

Huber concludes that the D-stem supplies the verb phrase with a functional projection, a NumP, whose head serves to pluralize events. The reason why the D-stem also adds an external argument to unaccusative verbs; more precisely, why it extends the unaccusative VP into a vP projection,
must be that the Num head involved in D-stems can only merge with a vP. Thus the interpretation of the D-stem of the Akkadian verb as a NumP projection subsuming a vP accounts for both the seemingly idiosyncratic effect of the D-stem on argument structure, and the sometimes delicate difference between the interpretations of the G-stem and D-stem of one and the same transitive or unergative verb. Huber’s analyses can also be extended to similar facts of related languages. For example, the corresponding stems of Arabic and Hebrew verbs can have an ‘intensive’ interpretation. Huber analyzes such sentences (meaning, for example, ‘x bit y (fiercely or repeatedly)’) as expressing cumulative affectedness, with either a series of transitions predicated of the same entity, or the output of one transition serving as input for the next transition.

4. New insights gained from a historical perspective

Most studies in this volume intend to provide a synchronic analysis of a particular stage of the language examined – however, the stages they analyze typically represent an intermediate state of the given language with not only its previous state but also its subsequent states documented. This fact makes it possible from time to time for the reader to catch a glimpse of the triggers and the process of language change.

For example, when Chiara Polo finds in her analysis of Latin word order that only 90% of the unmarked, neutral sentences of the Latin text examined have an SOV word order; 10% of them are SVO, it is clear in view of the later development of Latin that the neutral SVO sentences forecast the basic SVO word order of its daughter languages. As Polo observes, the postverbal objects in these sentences are non-prototypical objects, ranked high in the animacy, humanity and definiteness scale. Such objects were presumably targets of rightward Topicalization, rightward Focalization, or Heavy NP-shift performed on an SOV base – but the discourse motivation for their movement was weak, therefore they could be interpreted as arguments in situ when attested by a new generation of speakers acquiring their mother tongue.

Annamaria Bartolotta’s paper, entitled IE *weid- as a root with dual subcategorization features in the Homeric poems: A Minimalist approach, calls attention to a shift in the history of Greek, identified as a shift from the active-stative language type to the nominative-accusative type.
The problem that Bartolotta aims to analyze is the following: even though the Greek perfect \((w)\text{o}i\text{da}\) ‘I see (with the mind’s eye)’ and the aorist \((w)\text{e}i\text{don}\) ‘I saw’ are verb forms derived from the same root \(*\text{weid}-\) ‘to see’, associated with the same theta-grid consisting of an experiencer and a theme, they select different cases for their theme argument. The aorist form takes an accusative object, whereas the perfect form occurs both with an accusative and a genitive object. The genitive appears to be the older variant; in Iliad there are 23 occurrences of it, with only three in Odyssey. Bartolotta wants to answer two questions: why one and the same verb had its theme argument marked with different cases in different tenses at one stage of the language; and why the genitive marking of the theme of the perfect verb form eventually disappeared.

As for the first question, Bartolotta demonstrates that the Indo-European \(*\text{weid}-\) stem underwent a meaning-split; perceptive vision, i.e., simple eyesight, came to be differentiated from intentional vision, i.e., internal acquisition, thinking. The different tense forms were likely to elicit one or the other of the two meanings of the verb; the [-stative] aorist form elicited the ‘perceptive sight’ interpretation, whereas the [+stative] perfect form evoked the ‘intentional vision’ meaning.

In the early Greek represented by Iliad, the aorist \((w)\text{e}i\text{don},\) denoting perception, always takes an accusative object because in that language variant verbs expressing immediate contact with their object take an accusative object. The object of the perfect \((w)\text{o}i\text{da}\), meaning ‘see with the mind’, on the other hand, is in the genitive because in that period Greek verbs denoting mediated contact with their object take a genitive object.

The process in the course of which the genetive marking of the object of \((w)\text{o}i\text{da}\) ‘see with the mind’ gradually gave way to accusative marking is claimed by Bartolotta to be a manifestation of Greek developing from the active-stative system of Pre-Indo-European to a nominative-accusative system. This typology, developed in Indo-European linguistics (cf. Lehmann 1993), is recast by Bartolotta in a generative terminology. In her formulation, the change from the active-stative system to the nominative-accusative system brought about the following major changes: The semantic-lexical relationship between the verb and its complements typical of the active-stative type, with the NP matching the verb in its \([+/-\text{stative}]\) feature, became a structural relationship of the nominative-accusative type. Inherent case assignment coupled by theta-role assignment gave way to structural case assignment with no theta-role assignment involved. In the active-stative system, the object is assigned a theta-role and case in situ; in the
nominative-accusative type, on the other hand, it has to move for case. In the active-stative type, aspect-marking plays a major role, whereas nominative-accusative languages are tense-marking languages (with the aspectual system incorporated into the tense system). The different case-marking of objects affected in different ways by the activity denoted by the verb is characteristic of active-stative languages. The loss of the genitive marking of the object of (w)óida is evidence of the loss of the theta-related case system, and the emergence of the structural cases typical of nominative-accusative languages.

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References

Andrews, Avery D.

Benucci, F.

Bertocchi, A.

Bertocchi, A. and C. Casadio
Binkert, P. J.  

Bolkenstein, Machtelt  
1979  Subject-to-object raising in Latin, Lingua 49: 15–34.

Bresnan, Joan  

Calboli, Gualtiero  

Calboli, Gualtiero (ed.)  
1989  Subordination and Other Topics in Latin. Amsterdam: John Benjamins.

Cardinaletti, Anna and Michal Starke  

Cecchetto, Carlo and Renato Oniga  

DeCaen, Vincent J. J.  

Doron, Edit  

Ehlich, K.  

Embick, David  

Embick, David and Morris Halle  
1999  The Latin conjugation. [Unpublished Ms., MIT.]

Garrett, A.  

Giusti, Giuliana  
Gragg, Gene B.

Groneberg, Brigitte R. M.

Hale, Kenneth

Hale, Mark

Herman, József (ed.)

Holmstedt, Robert

Huber, Christian

Kayne, Richard S.

Kiparsky, Paul

Kiparsky, Paul and J. F. Staal

Kiss, Katalin É.

Kratzer, Angelika

Lakoff, Robin

Lehmann, W. P.

Lightfoot, David

Maleczki, Mátra

Maraldi, Mirka

Maurel, J.-P.
Maurel, J.-P.

Morrell, K. S.

Munn, Alan

Murru, F.

Oniga, Renato

Ostafin, David Mark

Pepicello, William

Philippaki-Warburton, I. – G. Catsimali

Pillinger, O. Stephen

Pinkster, Harm (ed.)

Polo, Chiara

Pustejovsky, J.

Reintges, Chris H.

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1998 Mapping information structure to syntactic structure: One syntax for

2000 The licensing of gaps and resumptive pronouns in Older Egyptian
Relatives. In *Research in Afroasiatic Grammar. Papers from the
Third Conference on Afroasiatic Languages, Sophia Antipolis, 1996,*
(Current Issues in Linguistic Theory 202), Jacqueline Lecarme, Jean
Lowenstamm and Ur Shlonsky (eds.), 243–262. Amsterdam: John
Benjamins.

2001 Aspects of the morphosyntax of subjects and objects in Coptic Egyptian.
In *Linguistics in the Netherlands 2001,* H. Broekhuis and T. van

2003 Syntactic conditions on special inflection in Coptic interrogatives. In
*Research in Afroasiatic Grammar II. Papers from the Fifth Confer-
ence on Afroasiatic Languages, Paris, June 2000,* Jacqueline Lec-
carme (ed.), 363–408. (Current Issues in Linguistic Theory 241.)
Amsterdam: John Benjamins.

Rizzi, Luigi

1997 The fine structure of the left periphery. In *Elements of Grammar,*

Salvi, Giampaolo

1996 *From Latin weak pronouns to Romance clitics.* (Linguistica Series C
Relationes, 9.) Budapest: Research Institute for Linguistics of the
Hungarian Academy of Sciences.

forthc. *La formazione della struttura di frase romanza. Ordine delle parole
e cliti dal latino alle lingue romanzhe antiche.* [Habilitation disserta-

Schäufele, Steven

1990 Free word-order syntax: The challenge from Vedic Sanskrit to con-
temporary syntactic theory. [Ph.D. dissertation, University of Illinois
at Urbana-Champaign.]

1993 The Vedic clause-initial string and Universal Grammar. *Studies in

1996 Now that we’re all here, where do we sit? Phonological ordering in
the Vedic clause-initial string. In *Approaching Second. Second Posi-
tion Clitics and Related Phenomena,* Aaron L. Halpern and Arnold

Tantalou, Niki

2003 Infinitives with overt subjects in Classical Greek. *Studies in Greek

Taylor, Ann

1990 Clitics and configurationality in Ancient Greek. [Unpublished Ph.D.
dissertation, University of Pennsylvania.]
Taylor, Ann

Touratier, Christian (ed.)

Wales, M. L.

Zólyomi, Gábor
The correlation between word order alternations, grammatical agreement and event semantics in Older Egyptian

Chris H. Reintges

1. Introduction

In current research on word order typology, the systematic differences between subject and verb-initial languages are derived from a single parameter of variation, viz. the active or inactive status of the ‘Extended Projection Principle’ (EPP). SVO languages like English have a positive setting for the EPP. As a result, the highest inflectional node projects an extra specifier position into which the subject is merged. By contrast, VSO languages like Modern Irish have a negative setting for the EPP. The highest inflectional node does not project a specifier position for the subject, which is therefore licensed in a lower syntactic position (see Alexiadou & Anagnostopoulou 1998 and McCloskey 2001 for representative studies).

From a comparative perspective, languages that display both VSO and SVO patterns are of particular interest as they provide us with some insight into the workings of the EPP and subject licensing. Older Egyptian is such a language. On the surface, it meets the syntactic profile of Greenberg’s (1966) Sixth Universal, according to which ‘all languages with a dominant VSO order have SVO as an alternative’ (p. 79). Compare the verb-initial sentence in (1a) with the subject-initial sentence in (1b), which both contain the epistemic verb ḫ ‘to learn (about).’

(1) a. The dominant VSO clausal pattern

\[ \text{j. } \text{拊 } \text{Pjpj } \text{pn } \text{mwt-f} \]

learn\textsc{ev} Pepi DEM:SM mother-3SM

\[ n \text{ } \chi m \text{ } \text{Pjpj } \text{pn } \text{mwt-f} \text{ } \text{f} \text{d} t \text{ } \text{sfp-t} \]

NEG ignore\textsc{ev} Pepi DEM:SM mother-3SM white.crown splendid-SF

‘This (King) Pepi will recognize his mother. This (King) Pepi will not ignore his mother, the splendid white crown.’

(Pyramid Texts 910a/P)
b. The SVO alternative

\[ n\text{-ntt} \quad NN \quad pn \quad r\chi(-w) \quad rn \quad n(j) \quad w\text{hs}-w \ (\ldots) \]

since NN DEM:SM learn-3M STAT name LINK(-SM) fowler-PM

'Since this NN (the male deceased) knows (by learning) the names of the fowlers (...)'.

(Coffin Texts VI 22o/B1Bo)

The contrast between verb-initial and subject-initial word order does not reflect discourse-configurationality, where the variable position of the subject is related to its topic or focus role. Rather, VSO and SVO structures are associated with different aspectual viewpoints from which a given situation is presented. The VSO clause in (1a) above has an event-related interpretation, describing the acquisition of some knowledge, while the SVO ‘alternative’ in (1b) above has a state-related interpretation, describing the possession of some knowledge through learning. Apart from word order, Older Egyptian employs two morphologically distinct finite verb conjugations, the Eventive and the Stative, to formally distinguish event- and state-denoting verbs that are derived from the same root. The Eventive-Stative alternation that yields minimal pairs like \( j.r\chi \) ‘learn about’ and \( r\chi(-w) \) ‘know (through learning)’ is fully productive in various lexical classes of transitive, unergative and unaccusative verbs.

Older Egyptian thus represents the typologically marked case of a language where a stative-resultative verb form cannot be derivationally related to a non-stative base form, but where the members of the opposition, stative and eventive, are encoded by different types of inflectional paradigms (Nedjalkov & Jaxontov 1988: 29). The aim of this study is to clarify the complex relation between word order alternations, subject-verb agreement, and event semantics. I will argue that the aspectual properties of verbs are not specified at a lexical, but rather at a syntactic level. To assume an event- or state-related interpretation, the subject and the verb must appear in a particular hierarchical relation with one another. On the other hand, the eventive or the stative interpretation of the main verb has a morphological correlate in the finite verb inflection. I will show that grammatical agreement in the traditional sense is only represented by the Stative verbal paradigm, while the Eventive conjugation lacks agreement proper. In the Stative, the presence of agreement excludes tense- and aspect morphology, while the corresponding Eventive is compatible with the full range of Older Egyptian tense-aspect-mood and voice marking. I will also provide a configurational analysis of Eventive VSO and Stative SVO sentences. What I want to show in particular is that VSO order does not correspond to a single
syntactic structure. Rather, there is syntactic variation without morphological variation that has its roots in different subject positions and targets of verb movement.

The organisation of the paper is as follows. Section 2 examines the semantic differences between Eventive and Stative sentences. Section 3 addresses the categorial status of the concord-marking ending on Eventive and Stative verb forms. Section 4 discusses the different routes by which verb-initial surface order can be arrived at. The SVO alternative, by contrast, corresponds to a single syntactic derivation which involves verb movement and subject raising to the head and the specifier position of the subject agreement phrase. Section 5 summarises the main findings of this paper.

2. The aspectual nature of paradigmatic complexity

Finite verb inflection in Older Egyptian has a portmanteau character in that it registers not only a particular constellation of subject and verb, but also provides aspectual information about the type of situation that is described. Before examining the gradual modification of lexical meaning by means of finite verb inflection, I will first provide some background information on situation aspect and verb classification.

2.1. Theoretical background

Situation aspect (or Aktionsart) refers to a typology of verbal predicates. A verbal predicate may denote a more dynamic situation that involves some kind of change or alternatively, a more static situation that requires an external agent for change. Predicates of the former type are referred to as ‘eventive predicates’ or simply ‘events’ and predicates of the latter type as ‘stative predicates’ or ‘states’. As many researchers have pointed out, the meaning differences between event-describing and state-describing sentences appear to be gradual rather than clear-cut in actual language use (see, among various others, Comrie 1976; Mourelatos 1981; Smith 1991; Rothstein 2004). Nevertheless, it seems possible to distinguish between eventive and stative predicates on the basis of their internal temporal structure. The temporal schema for state sentences is represented in figure 1 below, which formalises the intuition that states do not change for the time they last (e.g. John loves Mary). They have an internal temporal structure and simply consist of an interval in time. The initial and final endpoints (given in
Parentheses are therefore not part of the internal temporal structure of the state eventuality itself (Smith 1991: 32 (30); Rothstein 2004: 14–6). (I and F represent the initial and final endpoints of the relevant eventuality.)

Figure 1. The homogenous temporal structure of states

All non-stative situations constitute a natural class of events. While it requires no special effort to remain in a state, eventive situations can only be maintained if they are subject to ‘a continuing input of energy’ (Comrie 1976: 49). The occurrence of an event involves some condition when the event begins, is terminated and replaced by another condition. The stage property of events is particularly clear in accomplishment verbs like *write* (e.g. Mary wrote the letter), which are [+dynamic], [+telic], and include in their semantic description a culmination point. The culmination point makes it possible to distinguish between successive stages in the development of an accomplishment event, viz. a preparatory phase, which designates the event in progress and which reaches but does not include the culmination point, and the resultant state, which designates what the outcome of the event’s termination is. The initial and final endpoints are an integral part of the internal temporal structure of accomplishment events. See figure 2 below for further illustration (Smith 1991: 32; Kamp & Reyle 1993: 558 (5.104); Rothstein 2004: 21–2).

Figure 2. The tripartite structure of accomplishment events

In short, events are heterogeneous eventualities that necessarily involve change and thus have internal temporal structure. By contrast, states have no internal dynamism and consist of an undifferentiated period of time without internal structure. In the rich philosophical and linguistic literature on event ontology, more elaborate systems of verb classification have been
advocated, although it is generally acknowledged that the contrast between motion and stasis, event and states, marks a core distinction in the aspectual domain (see Bach 1986; Comrie 1976; Mourelatos 1981; Smith 1991; Kamp & Reyle 1993; Rothstein 2004 for representative studies that go back to Vendler’s 1967 classic article).  

2.2. The aspectual and thematic dimension of the Eventive-Stative alternation

This section examines the interaction between lexical semantics and aspectual viewpoint in the derivation of verbal meaning. The following description of the Eventive-Stative opposition is based on a simple taxonomy of verbal classes, in which valency information is considered apart from argument meanings. Following Grimshaw (1990) and related research, argument structure itself does not encode thematic roles like AGENT, PATIENT or THEME, since it only represents the argument-licensing capacity of a predicate without further specifying any semantic information about its arguments, except for their relative prominence. The Eventive-Stative alternation in Older Egyptian shows quite clearly that the eventuality of the verbal and the thematic content of its arguments are not part of its lexical-semantic frame, but are primarily determined by the morpho-syntax. The systematic differences in meaning between Eventive-inflected and Stative-inflected verb forms will be examined for different lexical classes of transitive-active, unergative and unaccusative verbs.

2.2.1. Transitive-active verbs

As exemplified by the Eventive-Stative pairs in (2)-(3), transitive-active Statices in Older Egyptian can take objects and complement clauses. Stative formation can therefore not be equated with an argument structure changing operation that eliminates the AGENT theta-role and creates an unaccusative verb from a transitive base verb.  

(2) DP OBJECTS

a. Eventive verb form

\[ jw \, r\chi-n(-j) \, fik? \, nb \, ft? \, n(-j) \, c\!n\!w \quad \text{AUX learn-PERF-1SEV magic every secret LINK(-SM) residence} \]

'I learned about every secret magic of the residence.'

(Urkunden I 143: 2)
b. Stative verb form
\[ jw \ y\chi\text{-}k(j) \ h\chi\bar{y} \ nb \ [CP \ y\chi \ n-f \]
AUX learn-1SSTAT every secret be.glorious(-PTCP:SM) for-3SM
\[ m \ c\chi\tau\text{-}n\bar{\epsilon}r \]
in necropolis
'I know (by learning) every magic on behalf of which one becomes glorious in the necropolis.' (Urkunden I 263: 14)

(3) CP COMPLEMENTS

a. Eventive verb form
\[ j.m\text{-}r-n(-j) \ [CP \ nd\text{i}\text{-}k \ jrt-k \ m-\bar{\iota} \ jr \]
wish-PERF-1SEV save-2SM EV eye-2SM from-arm make(-PTCP:SM)
\[ r-k \]
against-2SM
'I have come to wish (that) you save your eye from the one who acts against you.' (Ancient Hymn Da/12)

b. Stative verb form
\[ j.m\text{-}r-k(j) \ [CP \ nd\text{i}\text{-}k \ jrt-k \ m-\bar{\iota} \ jr \]
wish-1STAT save-2SM EV eye-2SM from-arm make(-PTCP:SM)
\[ n-k \]
for-2SM
'I have the wish to save your eye from the one who acts for you.' (Coffin Texts VI 220j/L2Li)

The Eventive-Stative alternation is fully productive with verbs of creation like \textit{ms(.i) ‘to give birth’} and verbs of putting into a spatial configuration like \textit{qrs ‘to bury’}, as seen in (4) and (5) below. According to Levin & Rappaport-Hovav (1995: 247–8), members of both classes qualify as accomplishment verbs, whose event structure comprises a process and a resultant state component. Associating accomplishment verbs with a given aspectual viewpoint highlights either the process or the resultative meaning of the selected accomplishment verb. Thus, the Perfect viewpoint of the Eventive clause in (4a) asserts the successful completion of the birth-giving event of the deceased pharaoh, while the resultant state (the new-born state) is contextually implied. This contrasts with the Stative viewpoint in (4b), which places the resultant state of some creational act into the center of attention, without further specifying its internal development.
(4) VERBS OF CREATION

a. Eventive verb form
   \[ms-n\ nww\ Mरज-न(j)-र\ ह\ द'र-t-f\ \ j?bt\]
   give.birth-PERF_EV ocean Meri-ni-Re on hand-3SM left
   ‘The ocean has born (King) Meri-ni-Re on his left hand.’
   (Pyramid Texts 1701a/M)

b. Stative verb form
   \[j(w)r-kw\ fd(-w)\ ms-kw\ pdw\]
   conceive-1STAT lower.sky give.birth-1STAT upper.sky
   ‘I have conceived the lower. I have born the upper sky.’
   (Coffin Texts IV 51: e-f/B3L)

As noted by Nedjalkov & Jaxontov (1988: 24–25), transitive-active statives may assume a possessive sense, with the subject being interpreted as the possessor and the direct object as the possessed item. An appropriate semantic paraphrase of the Stative VPs \[j(w)r-kw\ fd(-w)\] and \[ms-kw\ pdw\] in (11b) above would therefore be something like ‘I am the begetter of the lower sky’ and ‘I am the mother of the upper sky’, respectively. In a similar vein, stativized epistemic and desiderative verbs, such as \[रच\ ‘to learn’ and \[mr(.i)\ ‘to wish’ convey a possessive interpretation insofar as the result of some intellectual activity is the possession of some kind of knowledge or the maintenance of some psychological state.

It generally appears, then, that the Eventive-Stative opposition has a differential function, encoding alternations in the subject’s relation to the eventuality denoted by the verbal root. In transitive-active Eventive clauses, the verbal action is construed as principally affecting the referent of a non-subject argument (typically the direct object), while the subject is interpreted as the AGENT, i.e. the entity that performs some event or activity. In the corresponding Stative, on the other hand, the subject is interpreted non-agentively as the AFFECTEE, i.e. the entity on which the consequences of some previous action has a positive or negative impact. To clarify this point, consider the following Eventive-Stative pair, where the Perfect \[qrs-n(-j)\ ‘I have buried’ in (5a) and the corresponding Stative \[qrs-k(j)\ ‘I had buried’ in (5b) below describe what is objectively the same situation; yet both variants differ with respect to the locus of the action’s principal effects. In (5b), the burial of the courtier is presented from the Stative point of view, because it has a lasting effect on the first person singular subject in the impressive rewards allotted to him by the king.
If a transitive verb inflects in both inflectional paradigms, then the selection of the Stative depends on whether the subject has a referent upon which the principal effects of the action at hands devolve, while the Eventive is selected in the default case of non-affected subject-agents. In a sense, then, the Eventive may be thought of as an ‘effective’ and the Stative an ‘affective’ conjugation pattern.\(^\text{5}\)

2.2.2. Unergative verbs

When associated with the Eventive viewpoint, unergative verbs of bodily expression like βίτ.(j) ‘to cheer’ make direct reference to the physical expression of a particular emotion, as in (6a), while the concomitant mental state is denoted by the Stative variant, as in (6b) below. Moreover, an Eventive subject is conceptualised as a volitional agent that exerts control over the bodily process that is described. A Stative subject, on the other hand, denotes the EXPERIENCER of the associated state of mind.
(6) UNERGATIVE VERBS OF BODILY EXPRESSION

a. Eventive verb form
   \( h\bar{\imath}-w-f \quad m \quad \chi sf-k \)
   cheer-PROS-3SM\(_{EV}\) about meet(-INF)-2SM
   ‘He will exult about meeting you.’ (Pyramid Texts 656a/T)

b. Stative verb form
   \( Nwt \quad j.\bar{\imath}sf-\ell-t(\bar{i}) \quad m \quad \chi sf \quad Nfr-k?-Rf \)
   Nüt cheer-INTENS/REPET-3F\(_{STAT}\) about meet(-INF) Nefer-ka-Re
   ‘(The goddess) Nüt is very exited about meeting (King) Nefer-ka-Re.’
   (Pyramid Texts 1426a/N)

The exact classification of verbs like \textit{sit}, \textit{stand} and \textit{lie} has raised some controversy in the literature. Hoekstra & Mulder (1990) include such verbs of spatial configuration in the class of (unaccusative) copular verbs, although members of this class in Dutch appear in constructions displaying unergative syntax. To make sense of the variable unergative-unaccusative behaviour, Levin & Rappaport-Hovav (1995: 126–130) propose to distinguish between three types of non-causative meanings associated with a specific spatial configuration. The first two non-causative meanings are the ‘maintain position’ and the ‘assume position’ sense, both of which are agentive. The third meaning is non-agentive and describes the position of the subject with respect to a particular location. In Older Egyptian verbs of spatial configuration, the agentive ‘maintain position’ and the ‘assume position’ sense are both encoded by the Eventive conjugation pattern, as shown in (7a), and the non-agentive ‘simple position’ sense by the corresponding Stative, as shown in (7b) below.

(7) VERBS OF SPATIAL CONFIGURATION

a. Eventive verb form (Agentive ‘assume position’ sense)
   \( fims \quad Nfr-k?-Rf \quad jr \quad rmn-k \quad \bar{f}r \)
   sit\(_{EV}\) Nefer-ka-Re at shoulder-2SM Horus
   ‘(King) Nefer-ka-Re will sit down besides you, Horus.’
   (Pyramid Texts 2056a/N)

b. Stative verb form (Non-agentive ‘simple position’ sense)
   \( j.fims-t(\bar{j}) \quad \bar{f}r \quad nst \quad jt-k \quad Gb \quad m-\chi nt \quad jttrt \)
   sit-2SS\(_{STAT}\) on throne father-2SM Geb in-front.of sanctuary
   ‘You are seated on the throne of your father Geb in front of the sanctuary.’
   (Pyramid Texts 1992b/N)
The Eventive-Stative opposition also applies to verbs of inherently directed motion like h?(.i) ‘to descend’ and jj ‘to come’. These motion verbs specify an achieved endpoint or attained location and may therefore be classified as achievement verbs (Levin & Rappaport-Hovav 1995: 58; Talmy 1985: 72). Their telic character is particularly clear in motion verbs like h?(.i) ‘to descend’ that incorporate into their meaning a notion of path. A directional phrase that indicates endpoint inherent to the verb’s meaning is obligatorily present in both the Eventive and the Stative variant.

(8) VERBS OF INHERENTLY DIRECTED MOTION [+PATH]

a. Eventive verb form

\[ jj\text{-}n(-j) \quad m\text{j}n \quad m \quad nfwt(-j) \]

\[ \text{come-PERF-}1\text{S} \text{EV today from city-1S} \]

\[ h?\text{-}n-j \quad m \quad sp?t(-j) \]

\[ \text{descend-PERF-}1\text{S} \text{EV from district-1S} \]

‘I have come today from my city, I have descended from my district’

(Urkunden I 121: 11–12)

b. Stative verb form

\[ jw \quad h?\text{-}k(j) \quad r \quad ?bd^2w \quad cr \quad Rs \]

\[ \text{AUX descend-1S} \text{STAT to Abydos under Res} \]

‘I descended to Abydos with Res.’

(Stele Metropolitan Museum NY no. 65.107: 4)

Verbs of inherently directed motion like jj ‘to go’ and jw ‘to come’ incorporate into their semantics a deictic orientation towards the speaker. The location argument does not have to be overt, but can be semantically implied, as seen in (9a–b) below.

(9) VERBS OF INHERENTLY DIRECTED MOTION [+DEICTIC CENTER]

a. Eventive verb form

\[ jj\text{-}n(-j) \quad \$rq(-w) \quad m\text{-}\$(-j) \]

\[ \text{come-PERF-1S} \text{EV accomplish-PASS1} \text{EV through-arm-1S} \]

‘I returned (after) (it) (the work) had been accomplished.’

(Urkunden I 220: 7)

b. Stative verb form

\[ m\text{-}k \quad w(j) \quad bs\text{-}kj \quad jj\text{-}kj \]

\[ \text{INTERJ-2SM me instal-1S} \text{STAT come-1S} \text{STAT} \]

‘Look, I am installed, I have arrived.’

(Pyramid Texts/Neith 831 [pl. 32])
Aspectual choice involves the up- or downgrading of a particular meaning component in that class of verbs. The Perfect viewpoint asserts attainment of a particular goal, but leaves the movement and path component of *verbs of inherently directed motion* intact. This does not seem to be the case in the corresponding Stative, where the motion and displacement sense has been blurred. Rather, when used statively, *verbs of inherently directed motion* assume a locative sense and describe the appearance of some discourse participant on the scene related to or identified with the speaker (Levin & Rappaport-Hovav 1995: 241–242).

2.2.3. *Unaccusative verbs*

When considered in isolation, the evidence presented in the previous section might lead one to conclude that the Stative is simply the unaccusative alternant of an unergative verb. On that view, the non-agentive reading of Stative subjects would be readily explained. There are, however, two reason for dismissing an unaccusative analysis of the Stative. Firstly, the occurrence of transitive-active Statives cannot be accounted for. Secondly, *bona fide* unaccusative verbs fully participate in the Eventive-Stative alternation, where it overtly marks the inchoative-stative contrast. As shown in (10) and (11) below, the Eventive variant of adjectival verbs of quality, size, and colour describes a change of state, while the corresponding Stative indicates the target state is encoded by the Stative alternant (Levin & Rappaport-Hovav 1995: 159–162; Doron 2003: 61–62).

(10) *ADJECTIVAL VERBS*

a. *Eventive verb form*

\[
\begin{align*}
\chi &- n-f & m & ?\chi t, \\
\text{be.glorious-PERF-3SM}_{EV} & & \text{in horizon} \\
\delta & d-n-f & m & D^3 dwt \\
\text{be.enduring-PERF-3SM}_{EV} & & \text{in Djedût} \\
\end{align*}
\]

'He has become glorious in the horizon, he has become enduring in Djedût (the necropolis of Heliopolis).’ (Pyramid Texts 350c/T)
b. **Stative verb form**

\[
\text{be} \text{- glorious} \ -2s_{\text{STAT}} \ \text{in} \ \text{horizon}
\]

\[
\text{be} \text{- enduring} \ -2s_{\text{STAT}} \ \text{in} \ \text{Djedût}
\]

‘You are glorious in the horizon, you are enduring in Djedût.’

(Pyramid Texts 1261b/N)

(11) a. **Eventive verb form**

\[
\text{be} \text{- great} \ - \text{PERF-1S}_{\text{EV}} \ \text{in} \ \text{yesterday} \ \text{among} \ \text{great} \text{- one-PM}
\]

‘I have become great among the great ones yesterday.’

(Coffin Texts II 268e/B9C)

b. **Stative verb form**

\[
\text{be} \text{- green} \ -2s_{\text{STAT}} \ \text{be} \text{- great} \ -2s_{\text{STAT}} \ \text{in} \ \text{name} \ -2\text{SM} \ \text{DEM:SM}
\]

‘You are green and great in this your name Great-Green (i.e. the Mediterranean Sea).’

(Pyramid Texts 628c/P)

The inchoative-stative alternation can also be found in various types of copular verbs, such as **verbs of appearance** like χρτ ‘to happen, emerge’ and **verbs of existence** like wnn ‘to be’. Again, the Eventive form has an inchoative sense, denoting the coming into existence of a particular entity, while the corresponding Stative describes the existence of that entity at a particular location. The location argument need not be overt, but may be contextually implied (Levin & Rappaport-Hovav 1995: 120–121).

(12) **VERBS OF APPEARANCE**

a. **Eventive form**

\[
\text{NEG see-3SM}_{\text{EV}} \ \text{exist-} \text{- PERF-1S}_{\text{EV}} \ \text{with} \ \text{face-3SM}
\]

‘He (the god Nun) did not see with his own eyes (how) I came into existence.’

(Coffin Texts I 334c/B2L)

b. **Stative form**

\[
\text{see-} \text{- PERF}_{\text{EV}} \ \text{me} \ \text{Nun} \ \text{come.into.existence-1S}_{\text{STAT}}
\]

‘(The god) Nun saw me (already) existing.’

(Coffin Texts I 334a/B2L)
(13) VERBS OF EXISTENCE

a. Eventive form

\[
\text{wn } Tjtj \ m \ wrwt-k
\]
exist\textsubscript{EV} Teti in greatness-2SM

\[
\text{wn-n } Tjtj \ m \ wrwt-k
\]
exist-IMPERF\textsubscript{EV} Teti in greatness-2SM

'(King) Teti existed in your greatness. (King) Teti continues to exist in your greatness.'
(Pyramid Texts 719/T)

b. Stative form

\[
\text{wn-k(j) } \ r-f \ m \ jw-f \ 5?-f
\]
exist-1\textsubscript{STAT} PCL-3SM in come-3SM\textsubscript{EV} be.great-3SM\textsubscript{EV}

'I had, indeed, become one who gets bigger (whenever) he comes.'
(Stela British Museum 146: 4 [575])

Unlike verbs of existence and appearance, the verb corresponding to English die does not require a location argument (either overt or covert) for its semantic completeness. Older Egyptian mwt 'to die' behaves like a verb of entity-specific change of state, with the Eventive-inchoative variant describing the process of dying and the Stative the resultant dead state.

(14) VERBS OF ENTITY-SPECIFIC CHANGE OF STATE

a. Eventive form

\[
\text{mr-w-f } \ mwt-f, \ swt \ mwt-f
\]
\text{wish-PROS-3SM\textsubscript{EV} die-3SM\textsubscript{EV} he die-3SM\textsubscript{EV}}

'If he wishes that he dies, he will die.'
(Pyramid Texts 155d/W)

b. Stative form

\[
\text{jǐm } \ Nhīb-k?\-w \ m \ mtwt \ Hjw \ mwt-tj
\]
burn\textsubscript{EV} Nekheb-kau in semen Hiu-serpent die-3F\textsubscript{STAT}

'(The god) Nekheb-kau burns the semen of the Hiu-serpent dead.'
(Pyramid Texts/Neith 717 [pl. 27])

To conclude, the Eventive-Stative alternation displays a broad distribution across various lexical classes of transitive, unergative and unaccusative verbs. The semantic interpretation of verbal predicates is compositionally derived from the basic lexical meaning of the root morpheme and the eventive or stative viewpoint inherent to the selected inflectional paradigm. The possibility of having transitive-based statives in Older Egyptian is unexpected under any account that assigns to Stative-inflected verbs an unaccu-
sative syntax. The selection of the Eventive or the Stative conjugation sets not only a basic parameter for the eventuality described in a particular sentence, but also defines the theta-role of the most prominent argument that is realized as the surface subject.

3. Two types of agreement

The focus of this section is on the morphological and categorial properties of person, gender and number endings on Eventive- and Stative-inflected verb forms. In recent work on Semitic and Celtic linguistics, two different approaches have been taken to what has been called the ‘Affix Identification Problem’ (Fassi Fehri 1988). In one strand of research, concord-marking personal inflections have been analysed in terms of grammatical agreement (see McCloskey & Hale 1984 for Modern Irish; Stump 1984, 1989 for Breton; Borer 1981, 1995; and Shlonsky 1997 for Modern Hebrew; and Benmamoun 2000 for Modern Standard Arabic). In another strand of research, the concord-marking affixes on verbal stems have been identified with incorporated subject pronouns that have been removed from their argument position and integrated into the verbal stem (see Anderson 1982, Doron 1988 for Breton and Fassi Fehri 1988, 1993 for Modern Standard Arabic). It is often difficult to find the relevant evidence to support either the agreement or the pronoun incorporation analysis, since both grammatical agreement and pronominal elements are characterised by the same set of nominal functional features. Therefore, they cannot be distinguished with respect to their syntactic category, but rather with respect to their role in syntax (Ritter 1995).

3.1. The paradigm structure of the Eventive and the Stative conjugation

Older Egyptian has two exclusively suffixal conjugation patterns for finite verb forms, which are called the Eventive and the Stative on the basis of their primary grammatical meaning. The complete inflectional paradigms of both verb conjugations are represented in table 1. (The triconsonantal verb $sd^m$ ‘to hear’ has been chosen to illustrate a typical paradigm).
Table 1. The paradigms of the Eventive and the Stative conjugation

<table>
<thead>
<tr>
<th></th>
<th>EVENTIVE</th>
<th>STATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>sd³m(-j), sd³m-j</td>
<td>sd³m-k, sd³m-kj, sd³m-kw</td>
</tr>
<tr>
<td>2SM</td>
<td>sd³m-k</td>
<td>sd³m-tj, sd³m-č(j)</td>
</tr>
<tr>
<td>2SF</td>
<td>sd³m-č, sd³m-čn</td>
<td>sd³m-tj, sd³m-č(j)</td>
</tr>
<tr>
<td>3SM</td>
<td>sd³m-f</td>
<td>sd³m-w, sd³m-јj</td>
</tr>
<tr>
<td>3SF</td>
<td>sd³m-s</td>
<td>sd³m-tj, sd³m-č(j)</td>
</tr>
<tr>
<td>1P</td>
<td>sd³m-n</td>
<td>sd³m-wn, sd³m-wnj, sd³m-wjn</td>
</tr>
<tr>
<td>2P</td>
<td>sd³m-čn</td>
<td>sd³m-tjwn, sd³m-tjwnj</td>
</tr>
<tr>
<td>3PM</td>
<td>sd³m-sn</td>
<td>sd³m-w, sd³m-јj</td>
</tr>
<tr>
<td>3PF</td>
<td>sd³m-sn</td>
<td>sd³m-tj</td>
</tr>
<tr>
<td>2D</td>
<td>sd³m-čnj, sd³m-čny</td>
<td>sd³m-tjwnj</td>
</tr>
<tr>
<td>3DM</td>
<td>sd³m-sny</td>
<td>sd³m-wjj, sd³m-wj</td>
</tr>
<tr>
<td>3DF</td>
<td>sd³m-sny</td>
<td>sd³m-tjj, sd³m-tj</td>
</tr>
<tr>
<td>DP subject</td>
<td>sd³m DP</td>
<td>DP_{mas} sd³m-јj, sd³m-w,</td>
</tr>
</tbody>
</table>

As we can see from the left-hand column of table 1, Eventive-inflected verbs may appear in two distinct forms: a synthetic form containing a concord-marking personal affix and a 'bare' analytic form. The selection of either form is dependent on the (pro)nominal status of subject: synthetic forms can only appear in the absence of a subject DP. By contrast, no such alternations apply to the Stative conjugation in the right-hand column of table 1, where the same form occurs with nominal or pronominal subjects. On the other hand, there is an exponent of every person, gender and number combination in the Eventive paradigm, while two or more paradigmatic cells share one exponent in the corresponding Stative paradigm. For instance, the third person masculine inflection -w and its variant -јj are not specified for grammatical number, while the second person dual and plural marker -тjwn(·y) is not differentiated with respect to grammatical gender. The inflectional ending -tj is even more radically underspecified, realising second person singular as well as third person singular and plural feminine.

On the face of it, the paradigmatic split of the verbal inflectional system looks like another instance of the familiar asymmetry between 'rich' and 'poor' agreement as found in Modern Standard Arabic (see, among various others, Mohammad 1990; Fassi Fehri 1993; Ouhalla 1994; Aoun, Benmamoun...
Chris H. Reintges

& Sportiche 1994; and Benmamoun 2000). I will argue, however, that we are dealing with an agreement asymmetry of a rather different kind. The personal inflections on Eventive verb forms do not instantiate subject-verb agreement at all, but represent enclitic subject pronouns that correspond to an argument position. By contrast, grammatical agreement proper is only instantiated by the featurally less coherent Stative paradigm.

3.2. An agreement analysis of the Stative paradigm

This section argues against the commonly held view in Egyptological linguistics that Stative inflections represent incorporated subject pronouns (see Allen 1984: 6 §11 and 384 §564 and Schenkel 1997: 199 for representative views). The first argument concerns the role of locality in distinguishing between pronoun incorporation and grammatical agreement. The second argument relates to the limited distribution of pro-drop.

3.2.1. Locality

Older Egyptian has ‘Exceptional Case Marking’ (ECM) constructions with finite complement clauses. The ECM complement is compatible with both Eventive and Stative-inflected verb forms. Two examples of Stative ECM constructions are shown in (15a–b) below. That the embedded subject is, indeed, exceptionally accusative-case marked by the matrix VP is disclosed when the lexical DP is replaced by the corresponding pronoun, since the direct object pronoun sw ‘him’ rather than the corresponding nominative subject pronoun -f ‘he’ is selected.

(15) ECM CONSTRUCTIONS WITH EMBEDDED STATIVES

a. ECM subject = DP

\[ gm-n(-j) \ [_{AGSSP} hiq? \ Y?m \ fm(-w) \ r-f \ r \ t? \ ğmfi ] \]

find-PERF-1SEV ruler Yam leave-3STAT PCL-3SM to land Libyan

‘I found (that) the ruler of Yam had departed to the land of the Libyan.’

(Urkunden I 125: 15–16)

b. ECM subject = direct object pronoun

\[ gm-n-f \ [_{AGSSP} sw \ d-jj \ fir \ gs-f \ m \ Gfist ] \]

find-PERF-3SMEV him place-3STAT on side-3SM in Gazelle-ville

‘He (Geb) found him (Osiris) placed on his side in Gazelle-ville.’

(Pyramid Texts 1033b/P)
In view of the fact that the ECM complement does not exceed the domain of the subject agreement phrase AGRSP, it is hard to see how the co-occurrence of ECM subjects and Stative verb forms could be reconciled with the traditional pronoun incorporation analysis of Stative inflections, given that there would be two subjects for which only a single theta-role and structural case would be available. If we were to assume that these personal inflections are incorporated pronouns, we would expect them to conform to the general principles of the Binding Theory of Chomsky (1981). In other words, they should be free in their governing category. In the above examples, the purported subject pronoun is bound within its governing category (i.e. the subject agreement phrase AGRSP) by either a referring expression or another pronoun. The grammaticality of (15a–b) above vis-à-vis the Binding Theory is expected under an agreement analysis of the Stative paradigm. On this analysis, Stative inflections redundantly express the person and gender features of the preverbal subject, but do not occupy a separate structural position (Bresnan & Mchombo 1987: 752ff). As pointed out by the reviewer, a clitic-doubling account might save the traditional pronoun incorporation analysis. Such a clitic-doubling analysis would, however, be at odds with the limited distribution of null subjects, as we will see next.

3.2.2. Partial pro-drop

Although locality considerations argue against a pronoun incorporation analysis of the Older Egyptian Stative, the intuition behind this analysis seems to be correct, namely that Stative endings have anaphoric properties. Compare example (16a) below, in which the first person singular Statives pr-\(kj\) ‘I have come forth’ and \(w\)\(\text{b}-kj\) ‘I am pure’ appear without a subject pronoun with example (16b) below, in which the third person masculine Stative \(jj(-w)\) ‘has arrived’ is construed with the third person singular masculine pronoun -\(f\) ‘he’ to the right of the complementizer \(wnt\) ‘that’.

(16) ANAPHORIC AGREEMENT

a. First person singular Statives

\[
\begin{align*}
\text{pr-}k\text{j} & \quad \text{r-}j & \quad w\text{b-}k\text{j} \\
\text{come.forth-}1s_{\text{STAT}} & \quad \text{PCL-}1s & \quad \text{be.pure-}1s_{\text{STAT}} \\
\text{‘I have come forth pure.’} & \quad \text{(Coffin Texts VI 136o/M22C)}
\end{align*}
\]
In the longstanding research tradition on the null subject parameter, the licensing of covert subject pronouns (small pro's) has been related to the amount of featural information encoded by verbal inflection. That is, grammatical agreement has to be specified beyond a certain threshold to recover the referential content of the null subject (see Borer 1981, 1986; Rizzi 1982, 1986; Huang 1984; Jaeggli & Safir 1989; and much subsequent research). The availability of pro-drop in the various paradigmatic cells of the Stative conjugation is exemplified in (17) below.

(17) THE PRO-DROP PARADIGM OF THE STATIVE

1S  a. pro jj-k(j) m fjt r /m j
   come-1STAT in peace to Upper Egypt
   ‘I have arrived in Upper Egypt in peace.’
   (stela Leiden V88: 10 [pl.10])

b. m-k w(j) jj-k(j)
   INTERJ-2SM me come-1STAT
   ‘Look, I have arrived.’
   (Coffin Texts V 78a/T1C)

c. pro tft-tj xft Rj pr-f m j?bt
   stand-2STAT before Re come-3MSTAT from east
   ‘You are standing in front of Re (when) he comes from the East.’
   (Pyramid Texts 743b/T)

d. cwt tft-t(j) hir-t(j) r-f
   you:SM stand.up-2STAT be.far away-2STAT from-3SM
   ‘You are standing far away from him.’
   (Pyramid Texts 251c/W)

3SM e. m sw j-jj
   INTERJ him come-3MSTAT
   ‘Look, he (the deceased king) has arrived.’
   (Pyramid Texts 1495a/P)

3SF f. wnt-s sr-tj n-k r-s
   COMP-3SF foretell-3FSTAT to-2SM about-3SF
   ‘(To inform you) that she (the deceased female) has foretold about herself to you.’
   (Coffin Texts I 140g/B3Bo)