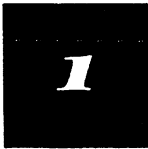


ACTES
DU XV^e CONGRÈS
INTERNATIONAL
DES LINGUISTES

QUÉBEC, UNIVERSITÉ LAVAL
9-14 AOÛT 1992

Les langues menacées



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André Crochetière,
Jean-Claude Boulanger
et Conrad Ouelton
Editors

Endangered Languages

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A FRAMEWORK FOR DESCRIPTIVE GRAMMARS

B. Comrie, W. Croft, C. Lehmann, & D. Zaefferer

Universities of Southern California, Michigan, Bielefeld, Munich

1. INTRODUCTION

What is the motivation for having descriptive grammars? There are at least three valid answers to this question. First, good description is one of the bases of all good linguistics. This is not to deny that there is also feedback from other aspects of linguistics, in particular linguistic theory, to descriptive linguistics, but simply to emphasize the importance of the link from good description to good theorizing. Second, the recognition of the importance of cross-linguistic variation requires the availability of good descriptions. It is unlikely that the linguist interested in cross-linguistic variation will be thoroughly competent in each of the languages needed for investigation, and reliance must therefore be placed on good secondary sources, namely descriptive grammars. While the importance of cross-linguistic variation has long been recognized within certain approaches to language, for instance linguistic typology, this importance is now widely recognized among the most diverse approaches, including mainstream formal grammar. Third, the phenomenon of endangered languages, in particular those that no longer have longterm viability as living systems of communication, urgently requires documentation of these languages, an important aspect of human cultural diversity.

What are the constraints that must be placed on a good descriptive grammar, especially in relation to our answers to the first question above? Clearly a descriptive grammar must be accurate; we will have nothing further to say about this. In addition—and here we have specific proposals to offer—a descriptive grammar must present material in an accessible manner, for instance by avoiding idiosyncratic terminology (except, of course, for idiosyncratic facts). Thus, where essentially the same phenomenon is found across a large number of languages, the same term should be used for it. While this may seem obvious, only too many descriptive grammars have violated this requirement, often trying to present the language in question as being as idiosyncratic as possible. We would go even further, and say that a good descriptive grammar should follow standardized and a standardized framework. This framework must be sufficiently constrained to permit cross-linguistic comparability. Equally, it must be sufficiently flexible to allow for the actual range of cross-linguistic variation. The resolution of the tension between constrainedness and flexibility is the hallmark of a good descriptive framework.

In the remainder of this section, we will contrast two attempts to solve this problem: an early attempt, Comrie & Smith (1977), and project on which we are currently working.⁽¹⁾ The main characteristics of the 1977 version are as follows. First, the questionnaire it presents is in book form, thus being essentially committed

to the linear format of a printed text (although there is considerable hierarchical structure as an organizing principle of the framework); while this essential linearity can to some extent be overcome by cross-references, extensive use of cross-references makes use of the framework (or of a grammar written according to the framework) cumbersome. Second, also following from the nature of a book, the framework is immutable: it cannot take advantage of advances in our understanding of various phenomena, other than by printing a new version of the questionnaire (and of each grammar written according to the framework). Third, there is a conceptual flaw in this early version, quite independent of its implementation as a book, namely a failure to delimit carefully form (morphology–syntax) and function (semantics–pragmatics). For instance, §1.1.2 deals with subordination, and includes a subsection, §1.1.2.4.2.1, on time clauses; however, it is by no means universally true cross-linguistically that time clauses are subordinate. This could be avoided by more carefully distinguishing such formal categories as subordination from such functional categories as temporal reference. Despite these disadvantages, the framework of Comrie & Smith (1977), to our knowledge the first attempt at a comprehensive descriptive framework of this kind, has inspired a substantial volume of descriptive work, in particular about twenty descriptive grammars in the series Croom Helm Descriptive Grammars (formerly *Lingua Descriptive Studies*).

We are currently working on a longterm project to devise a better framework for descriptive grammars; this new framework differs from the earlier version in being computer implemented, and in clearly delineating form and function.

Computer implementation means that this new framework will avoid the problems of linearity and immutability. At present, we are working within the environment of Hypercard (for the Macintosh). This environment enables new insights into language to be incorporated readily into the overall framework, and allows existing descriptions within the framework to be updated to take account of such changes. Essentially, the basic framework will be centrally controlled, to ensure continuing comparability of descriptions. We are anxious to avoid certain possible misconceptions of this approach to implementing descriptive grammars. A grammar written according to this framework can be regarded as a grammar with loose pages, so that one can easily go from one to the other without being tied to any fixed linear order. We do not deny the importance of good prose descriptions in descriptive grammars, indeed we continue to regard the prose description as the most important part of a descriptive grammar. A linguist compiling a descriptive grammar according to this method would still be free to use this description as the basis for a conventionally published descriptive grammar (or part of a grammar); needless to say, individual grammars compiled within the framework would remain the intellectual property of their authors. As a final practical consideration, we note that the increasing power–size ratio of computers makes it plausible that the fieldworker could take the system to the field and work on the grammar there.

As noted above, a major characteristic of the framework on which we are currently working is the clear delineation of form and function. The basic structure of the framework is elaborated in section 2 below.

2. FORMAL AND FUNCTIONAL FRAMEWORKS

The minimal unit of description is a single use of a construction or morpheme of the language. These descriptions can be subsumed under more general categories of morphemes or constructions (e.g. a description of English may have a general category of Auxiliary in addition to descriptions of the individual modal auxiliaries and their uses). A schematic description of the component elements of the construction must be provided. Through this description, links can be made to the descriptions of the elements of the construction, for example a link from an

intransitive clause to a subject noun phrase (and conversely, the construction in question can be linked to still larger constructions of which it is an element). Constituency of the construction will be represented in the schematic description, while word order, dependency, and other grammatical information will be described elsewhere.

The primary organizing principle of the framework is the strict separation of the description of linguistic form from the description of linguistic function. Thus, there are two separate descriptive frameworks, for function and for form. Each framework is structured by a series of parameters for which the fieldworker may select values for each construction. The logical structure of the parameters is the same as is found in "attribute-value" or "feature-value" descriptions. These parameters are intended to be used for organizing the grammatical description, so that it will be possible to examine the description in terms of both its formal and functional structure.(2) The parameters are NOT substitutes for a prose description of the form and use of a construction. The prose description is still primary.(3)

We will provide a substantial number of values for the parameters. These values will use terms that will be standardized in the system (on-line definitions with examples will be provided). The terms, and the definitions for them, will follow de facto established usage from traditional grammar, typology, and field description as much as possible. However, in some cases we have had to choose between competing terms, resolve inconsistent definitions, or disambiguate terms (for instance, we distinguish 'referential', the specific indefinite, from 'referentive', usually also called 'referential', the semantic role found in 'talk ABOUT the war').

While the terms that we provide as standard terminology attempt to cover as broad a range of formal and functional categories as possible, we cannot expect to make every distinction that might be found in the world's languages. For this reason, we will allow the fieldworker to create his/her own values for a parameter if the desired distinction is lacking. However, new parameters cannot be added by the fieldworker, in order to retain the overall organization of the descriptive frameworks. The system will not allow logically inconsistent combinations of values, e.g. 'volitional' and 'inanimate'. This constraint applies to the functional framework only, since a language may combine arbitrary grammatical values in a single morpheme (e.g. 1st person subject and irrealis mood).(4)

The parameters are not organized hierarchically. This is another means by which flexibility in the organization of the system is provided. If anything, this may render the system too flexible in its organization, a response to the excessive rigidity of previous descriptive frameworks. In order to counteract this, "maps" of the formal and functional frameworks will be provided, along with other navigational aids for viewing the grammatical description.

2.1. Functional parameters

Constructing the functional framework is obviously quite an ambitious task. However, it is made simpler by beginning with the functional parameters required only for the characterization of the standard values of the formal categories, in a broad sense (see below for the relation between formal and functional categories). While this leads to a somewhat ad hoc initial list, it covers a wide range of phenomena, and a general picture of functional organization emerges. A summary of the functional organization is given by the following list of functional parameters, loosely organized in a hierarchical fashion:

I. Speech acts

- A. Speech event : speech act participants, respect level, respect locus, social situation
- B. Linguistic interaction: epistemic commitment, deontic force, attitude

- C. Discourse structure: topicality, focus, emphasis, current relevance, genre
- II. Propositional Acts
 - A. Major propositional acts: propositional act
 - B. Minor propositional acts
 - 1. Classification: sex, animacy, size, evaluation
 - 2. Instantiation: boundedness (individuation), internal structure, intentional phase, temporal phase
 - 3. Quantification: cardinality
 - 4. Specification: determination, reference tracking, alternative selection
 - 5. Situating (in space, time, quantity/scale): situating dimension, deictic location, deictic-dimensional, reference point, reference-present, extendedness, distance
 - 6. Grounding (epistemic): hypotheticality, evidence
- III. Concept Type: entity type, relationality, gradability, permanence, stativity
- IV. Conceptual Domains: domain
- V. Relations
 - A. Relations between things: inherence, relationship (relation type)
 - B. Relations between things and eventualities: semantic role type, participant (semantic role), volitionality, affectedness
 - C. Relations between eventualities: chaining type, event relation

Space permits only a cursory examination of the functional organization. There are five general realms of functional description. The first two realms of functional parameters pertain to the organization and expression of information in discourse. The speech act realm outlines conversational interaction. The speech event involves the participants, their social status with respect to each other, and the type of social situation in which the conversational interaction takes place. The latter parameter currently has values 'formal' and 'familiar', but can and should be expanded to include any type of social situation, such as 'at home', 'in a classroom', 'on the street', etc. The linguistic interaction characterizes what sorts of acts the interlocutors are performing, construed broadly to include epistemic, deontic, and evaluative speech as well as the traditional illocutionary forces (declarative—the "neutral" form—interrogative, imperative, exclamative, all defined functionally). The discourse structure parameters range from a global characterization of the genre (which, like social situation, can be used to make refined distinctions) to a more local description of information status.

The realm of propositional acts describes how information is structured and presented in discourse. The major propositional acts are reference, predication, and modification. The "minor propositional acts" (Croft 1990) represent conceptual processes that are applied to both concepts referred to (prototypically, objects) and predicated concepts (prototypically, actions). Classification is applied basically to referring expressions (except for the positive/negative evaluation parameter). Instantiation includes partition and aggregation—other means for defining units. It is now well known that boundedness applies both to events in time and objects in space (or some other domain defining a boundary to an object). In addition to partitives of objects, events can be partitioned into temporal or "intentional" phases (desire, intention, attempt, execution; cf. Bybee's (1985) "agent-oriented modality"). Quantification is a straightforward description of the cardinality of units.

Specification is a complex function which involves how the concept is determined (e.g. unique, specific, universal, free-choice (any), or no choice (none)); tracking reference across a discourse through identity of reference or different reference, or overlap; and selecting alternative tokens from a set of tokens described by the same label ('the first, last, best, worst, next, previous, same, other

book'). An object or event can be situated in space or time, or on a scale defined by some other property, such as height as in 'Mary is taller than Susan'. Languages have complex means for representing location, direction and distance in space, requiring several parameters; and some of those parameters carry over into the description of location in time and other one-dimensional scales. Finally, the term "grounding" is borrowed from Langacker (1991) to describe how an object or event is situated in a "possible world" or "mental space", real or hypothetical, and the evidential status the information has in the speaker's beliefs.

The remaining three realms of functional description characterize concepts themselves. The heading 'concept type' refers to what is often called an 'ontological', 'topological' or 'image-schematic' classification of concepts. These are grouped into two "summary values", that is, values that subsume several other values): 'things' are objects, object parts, substances, and groups, while 'eventualities' are properties, qualities, relations, transitions (change-of-state), activities and events (which involve causation and more than one participant). This basic ontological classification is supplemented by parameters of relationality, stativity, gradability, and permanence, in order to accommodate alternative construals of the ontological categories (for instance, an activity such as 'walk' is construed as a state in the progressive construction 'be walking'). This classification of concepts more or less cross-cuts the classification by domain of experience, which is the second realm. Here a fine-grained division of concepts into approximately 170 domains is provided, including such domains as '(human) body part' (head, foot), 'tools' (hammer, axe), 'color' (red, blue), 'numerals' (two, thirteen), 'change-posture' (sit down, stand up), 'disposal' (drop, throw away), 'attentive perception' (watch, observe), 'obtaining' (grab, steal), and 'reaction to authority' (obey, refuse). These are grouped into summary domains such as living thing, physical object, possession, mental states/processes, etc.

Lastly, there are several parameters that describe the relationships between concepts. These are grouped by the type of concepts that are linked by a relation: thing-thing, thing-eventuality, eventuality-eventuality. Each type of relation has a single parameter indicating a detailed range of semantic relations (relationship, participant/semantic role, and event relation, respectively), and additional parameters that vary partly independently of the basic set of relations, such as inference, volitionality, and affectedness.

2.2. Formal parameters

The formal parameters differ in one significant respect from the functional parameters: linguistic form is for the most part language-specific, while linguistic function is taken here to be more or less universal, or at least much more easily comparable across languages. The provision of standard labels or terminology for the characterization of grammatical form requires some degree of comparability between languages, so that we can be assured that the use of the term 'Present Tense' or 'Adjective' is coherent across languages.(5) The way we have chosen to do so is in the tradition of typological analysis: a standard term can be used for a language-specific form if among its functions is a "prototypical" function that is specified by the system. For instance, the term Present Tense can be used only for a form that includes among its functions that of time reference to the time of the speech event, and the term Adjective can be used only for a category that includes among its members at least some of the prototypical adjectives as described by Dixon (1977)—property concepts indicating color, dimensionality, and age—in their use as modifiers of a (prototypical) noun. Once the label Present Tense or Adjective has been chosen to describe a language-specific formal category, then the label can be used for the same category in any of its functions—for example, the use of the Russian Present Tense in Perfective verb forms for future time reference.

Of course, if the fieldworker believes that the category does not exist in their language, e.g. Adjective, then s/he need not use that label; or if the fieldworker believes that there is a grammatical category in their language not described by any of the standard labels, then s/he may create a new term in the way described above. In general, we have not tried to establish standard terms and definitions for every grammatical category known to us, but only for ones that are found across language groups, or might be found in more than one language group. Since there are a number of different ways in which formal categories are defined, the remainder of this section will be devoted to explaining how these parameters are defined.

There are three parameters that do describe "pure" linguistic form, without any necessary reference to a functional prototype:

Order(Element1,Element2): Rigid, Preferred, Free

Obligatoriness(Element): Obligatory, Optional

Expression(Element): Root, Stem, Particle (morphologically unbound uninflected [nonroot] element), Proclitic, Enclitic, Clitic [= Proclitic + Enclitic], Prefix, Suffix, Infix, Affix [= Prefix + Suffix + Infix], Reduplication, Consonant Alternation,, Vowel Alternation, Tone Change, Stress Shift [if necessary], Internal Change [= Consonant Gradation + Ablaut + Tone Change + Stress Shift], Nonstem [= Internal Change + Affix + Clitic + Particle + Reduplication]

As mentioned above, the schematic description of constructions does not implicitly indicate word order, because the possibilities and constraints (especially in a "free" word order language) are too complex for simple notation, and it is expected that the fieldworker will explain the word order of the construction in the prose description. However, for the purpose of searching through the grammar to examine at least some elementary word order facts, we have included a word order parameter. The expression parameter indicates the type of morpheme, in morphophonemic terms. We leave the values here undefined except in a broad sort of way, because the currently funded portion of the project does not include (morpho)phonological description. (Note the use of the summary values Clitic, Affix, Internal Change, and Nonstem.)

All of the remaining definitions of values on formal parameters describe grammatical categories and relations, and so involve the use of functional prototypes. The simplest cases of defining functional prototypes are found in most inflectional categories, which usually have a single functional parameter corresponding to them. An example is the parameter of Number, matched closely by the functional parameter of cardinality:

NUMBER

Singular (SG)

entity type = object
cardinality = 1

Dual (DU)

entity type = object
cardinality = 2

Paucal (PAU)

entity type = object
cardinality = few

Plural (PL)

entity type = object
cardinality = maximum

Nonsingular (NSG) = DU+PL
(use only if a plural >2 exists)

Nonplural (NPL) = SG+DU

Singulative (SGT)

Stem: entity type = group

Output: entity type = object

Collective (COLL)

Stem: entity type = object

Output: entity-type = group

Note also that some categories (Singulative and Collective) require functional prototypes both for the stem and the resulting form.(6)

Some formal values are defined based on other formal values, which in turn are defined by functional prototypes. In the simplest case, a value is defined as the complement of its sister value(s):

OBVIATION

Proximate (PRX)

topicality = high

reference-tracking = same

Obviative (OBV)

complement of PRX

In other cases, prototypes make reference to other formal values—that is, functional prototypes of other formal values. The example here is of the construct form of a noun, prototypically found as the form of the head noun in a genitive or possessive construction (commonly found in Semitic languages):

NOUN FORM

Construct state (CONST)

Expression(CONST) = Nonroot

In construction with: N prototype

Controlling: NP prototype

Case = GEN

prop-act = modification

Of course, all formal values ultimately are grounded in functional prototypes.

The most difficult definitions are those for syntactic categories and grammatical relations. Again, functional prototypes are used. For grammatical relations, we provide a skeletal characterization of a complete situation type in which the grammatical relation would be most likely to be found. This is illustrated here with a definition of the oblique Comitative case, using the situation of accompaniment of an agent of a motion event:

CASE/GRAMMATICAL RELATION

Comitative (COM) (dependent on the verb)

sem-role = accompaniment

Controlling unit: propositional act = reference

domain = motion

entity type = activity

Controlled unit: propositional act = reference

domain = human

entity type = object

Example: 'Mark went to the market with Jack.'

The lexical syntactic categories use functional definitions based on the domain, entity type, and propositional act for which the lexical category is used prototypically. We illustrate this with the example of Adjective discussed above:

Adjective (Adj)

propositional act = modification

domain = color/dimension/age

entity type = quality

In construction with Head Category = N, Role(Adj) = Adjunct

The nonlexical syntactic categories are defined in terms of the lexical categories. The phrasal categories consist of constituents containing a head of that category and all of its dependents. The distributional categories include various nonheaded constructions with similar distributional properties, which in turn are based on the propositional acts. These are: clauses of the relevant type plus subordinator; headless phrases; pro-forms; and coordinate and appositive structures.

Lexical	Phrasal	Similar distribution
V	VCl	Cl (clause) (cf. predication)
N	NP	Nl (nominal) (cf. referring expression)
Adj	AdjP	Adjl (adjectival) (cf. attributive modification)
Adv	AdvP	Advl (adverbial) (cf. adjunct modification)
Num	NumP	—
Qnt	QntP	—
Det	DetP	—
Adp	AdpP	— (can fill any propositional act)

The overall organization of the formal framework is as follows:

I. Syntactic/Morphological Structure

Order(Element1,Element2), Expression(Element),
Obligatoriness(Element)

II. Inflectional Categories

A. Nominal/Pronominal

Person, Deixis, Number, Gender, Definiteness, Obviation, Size,
Affect, Pronoun Type, Noun Form

B. Verbal

Directional, Voice, Directness, Tense, Aspect, Mood, Polarity,
Volitionality, Transitivity, Logophoricity, Verb Form

C. Adjectival/Numeral

Degree, Intensification, Numeral Type

D. Clause-Level Categories

Switch Reference, Pragmatic Role, Emphasis, Politeness

III. Derivational Categories

Nominalization, Verbalization

IV. Syntactic Categories

Syntactic Categories, Syntactic Level, Head Category

V. Grammatical Relations

Role(Element), Case/Grammatical Relations, Nexus, Possession Type

3. ILLUSTRATION: SPACE IN YUCATEC MAYA

3.1. Formal perspective

3.1.1. Nominal constructions

A simple nominal (NI) in Yucatec Mayan (YM) has the syntactic structure shown in (1) and illustrated in (2):

- (1) [(Adj) N]_{NI}
 (2) *nohoch áaktun* 'big cavern'
 big cavern

A noun phrase (NP) may be formed from this by optionally preposing the definite article, which in turn triggers a deictic clitic at the end of the phrase, as represented in (3) and exemplified in (4):

- (3) [(le) NI]_{NP} ... (-Deictic_clitic)
 (4) *le nohoch áaktun-o'* 'that big cavern'
 DEF big cavern-D2

3.1.2. Prepositions

YM prepositions (Prep) may be divided into primary (monomorphemic) and secondary (derived) prepositions. There are only very few primary prepositions, namely: *ti'* 'LOC', *ich* 'in', *tumen* 'by, because of'. One of these, *tumen*, could even be argued to be complex; cf. the complex prepositions with initial *t-u* below.

All derived prepositions are formed with the help of the grammatical preposition *ti'*. The base may be either a relational noun or an adverb. If the base is a noun, it is transformed into a relational adverb, i.e. a preposition, by making it a complement of *ti'*. The structure of such derived prepositions is shown in (5); a subset of them relevant for localization is enumerated in (6):

- (5) [*ti'*-Poss_clitic N_{rel}]_{Prep}
 (6) *ts'u'* 'marrow, inside' *t-u ts'u'* 'inside'
 ba'+pàach 'around+back' *t-u ba'+pàach* 'outside'
 tséel 'side' *t-u tséel* 'beside'
 nak' 'belly' *t-u nak'* 'at the side of'

In some denominal prepositions, the derivational apparatus may be dropped if the complement is third person. This is symbolized in (7); relevant forms are in (8):

- (7) [(*ti'*-Poss_clitic) N_{rel}]_{Prep}
 (8) *iknal* 'proximity' (*t-u*) *y-iknal* 'near, by, at'
 pàach 'back' (*t-u*) *pàach* 'behind'
 óok'ol 'top' (*t-u*) *y-óok'ol* 'on, over'
 áanal 'bottom' (*t-u*) *y-áanal* 'under'

If the base of the preposition to be formed is an adverb, it is rendered relational by combining it in apposition with following *ti'*, as shown in (9). Some examples are given in (10):

- (9) [Adv *ti'*]_{Prep}
 (10) *ak+táan* 'opposite+front' *ak+táan ti'* 'opposite'
 táan+chúumuk 'front+center' *táan+chúumuk ti'* 'between, among'
 táan-il 'front-ADVR' *táan-il ti'* 'in front of'
 pàach-il 'back-ADVR' *pàach-il ti'* 'behind'

3.1.3. Prepositional phrase

Trivially, a prepositional phrase (PrepP) consists of a preposition followed by a NP complement, as in (11):

- (11) [Prep (NP)]_{PrepP}

The complement NP is optional for all of the prepositions except *ich* 'in'. This parallels the case of the PossNI. Since a PossNI is possessed whether or not the possessor is present in the form of a NP, it will be assumed that a PrepP remains a PrepP even if its complement is implicit; that is, it will not be assumed that the preposition then becomes an adverb. Examples (12)–(15) illustrate each of the four

morphological types of prepositions with its complement:

- | | | | | | |
|------|----------------|---------------------|------------------|-----------|--------------------------|
| (12) | <i>t-eh</i> | <i>áaktun-o'</i> | | | |
| | LOC-DEF | cavern-D2 | | | 'at/in the cavern' |
| (13) | <i>t-u</i> | <i>ba'+páach le</i> | <i>áaktun-o'</i> | | |
| | LOC-POSS.3 | outside | DEF | cavern-D2 | 'outside the cavern' |
| (14) | (<i>t-u</i>) | <i>y-iknal le</i> | <i>áaktun-o'</i> | | |
| | LOC-POSS.3 | Ø-NEAR | DEF | cavern-D2 | 'near the cavern' |
| (15) | <i>táan-il</i> | <i>t-eh</i> | <i>áaktun-o'</i> | | |
| | front-ADVR | LOC-DEF | cavern-D2 | | 'in front of the cavern' |

3.1.4. *The verbal clause with a dependent prepositional phrase*

In a verbal clause, complements and adjuncts, including PrepPs, follow the verbal complex, as represented in (16) and illustrated in (18)–(21) below:

- (16) [Asp_aux Verbal-complex PrepP]s

3.2. The functional perspective: space construction

The functional domain of space construction is based on a spatial situation.

The constitutive components of a spatial situation are the following:

1. the deictic center;
2. the situation core with its dynamicity (i.e. rest (essive) or motion (lative));
3. the located object with its own spatial properties, which form part of the situation core;
4. other participants (especially the agent) of the situation;
5. the reference object;
6. the orientation of the situation core as to the reference object;
7. the relevant spatial (topological or dimensional) region of the reference object).

Sentence (17) illustrates most of these components of a local situation:

- (17) *Linda led (situation core) the guest (central participant=localized object) to the back of (spatial region) the institute (reference object).*

Each of these components is associated with a set of functional parameters. The following discussion will be confined to components 2, 6, and 7.

3.2.1. *Spatial regions*

In the following, we give the subdivision of the conceptual domain of spatial regions. The tables contain the relevant YM words, in the order: adverb, preposition. When the adverb is shown as '—', this means that there is no special adverb for the meaning in question. However, as noted in section 3.1.3, the syntactic function of an adverb may be fulfilled in most cases by not specifying the nominal complement of the preposition.

SR1	Topological		
SR1.1	Enclosure		
SR1.1.1	Inner		
SR1.1.1.1	Interior		
	'in'	—	<i>ich</i>
	'within'	—	<i>ich-il</i>
	'inside'	—	<i>t-u ts'u'</i>
SR1.1.1.2	Medial		
	'between, among'	<i>táan+chíuumuk</i>	<i>táan+chíuumuk</i>
SR1.1.2	Outer		
SR1.1.2.1	Exterior		

SR1.1.2.2	Circumferential		
	'outside, around'	<i>ba'+pàach</i>	<i>t-u ba'+pàach</i>
SR1.2	Distance		
SR1.2.1	Contact		
SR1.2.2	Proximity		
SR1.2.3	Farness		
	'there, LOC'	—	<i>ti'</i>
	'at, by'	—	<i>(t-u) y-iknal</i>
	'near'	<i>nàats'</i>	<i>nàats' ti'</i>
	'far'	<i>náach</i>	<i>náach ti'</i>
SR2	Dimensional		
SR2.1	Upper vs. lower side		
SR2.1.1	Superior		
	'on, above, over'	—	<i>óok'ol</i>
SR2.1.2	Inferior		
	'under'	—	<i>áanal</i>
SR2.2	Front vs. back side		
SR2.2.1	Anterior		
SR2.2.2	Posterior		
SR2.2.3	Cterior		
SR2.2.4	Uterior		
	'in front'	<i>táan-il</i>	<i>táan-il ti'</i>
	'opposite'	<i>ak+táan</i>	<i>ak+táan ti'</i>
	'behind'	<i>pàach-il</i>	<i>pàach-il ti', t-u pàach</i>
SR2.3	Left vs. right side		
SR2.3.1	Lateral		
SR2.3.2	Dextral		
SR2.3.3	Sinistral		
	'beside'	—	<i>t-u tséel</i>
	'at the side (touching)'	—	<i>t-u nak'</i>
	'right'	—	<i>t-u x-no'h</i>
	'left'	—	<i>t-u x-ts'fik</i>

A complete description would account for the deictic vs. intrinsic perspective (SR3) in the referential interpretation of some region expressions such as 'in front of' (localized object is either at the intrinsic front of the reference object or between the deictic center and the reference object).

3.2.2. *Local relations*

A local relation is the orientation of the situation core as to the reference point, combined with rest or motion, as detailed in the following classification:

LR1	Dynamicity
LR1.1	Rest (essive)
LR1.2	Motion (incl. transport) (lative)
LR2	Orientation
LR2.1	Direction away from orientation point
LR2.2	Direction towards orientation point
LR2.3	Direction past orientation point

In most languages, including YM, there is a grammatical expression of different orientations of the situation core only in dynamic situations. As a result, we get one essive and three lative local relations (r.o. = 'reference object'):

dynamicity	rest	motion		
orientation	at r.o.	to r.o. (allative)	away from r.o. (ablative)	passing by r.o. (perlative)

Examples (18)–(21) illustrate each of these four local relations in turn, with the interior of the reference object serving as the spatial region:

- (18) *le ch'o'-e' ii' ydan ich u y-ðaktun-e'*
 DEF mouse-D3 there EXIST [in POSS.3 cavern-D3]
 'the mouse is in its hole'
- (19) *le ch'o'-e' h òok ich u y-ðaktun*
 DEF mouse-D3 PAST enter(ABS.3SG) [in POSS.3 cavern]
 'the mouse went into its hole'
- (20) *le ch'o'-e' h hók ich u y-ðaktun*
 DEF mouse-D3 PAST go.out(ABS.3SG) [in POSS.3 cavern]
 'the mouse came out of its hole'
- (21) *le ch'o'-e' h mðan ich u y-ðaktun*
 DEF mouse-D3 PAST pass(ABS.3SG) [in POSS.3 cavern]
 'the mouse passed through its hole'

It is readily apparent that while the preposition changes in the English translations, it remains the same in the YM examples. In YM, the preposition expresses exclusively the relevant spatial region, never the orientation of a situation towards the reference object. The latter is always coded in the semantics and grammatical properties of the governing verb. While no existing grammar of YM mentions this property of the language, it emerges automatically from the twofold approach of our framework for descriptive grammars.

NOTES

- (1) Comrie and Croft's work is supported in part by the National Science Foundation under grants BNS-9013318 and BNS-9013095.
- (2) The organization will be particularly useful for those fieldworkers that do not have an extensive background in linguistic analysis.
- (3) We also expect the construction to be illustrated by an example. In future versions, the example can be cross-referenced to an on-line collection of texts. We have slightly revised Lehmann's (1982) conventions for interlinear morpheme glosses for examples.
- (4) When a construction is indexed for a particular formal parameter, other parameters that have been demonstrated to be associated with it typologically will be suggested to the fieldworker.
- (5) We follow the convention established by Comrie (1976) and Bybee (1985) of using capitalized terms for formal categories and lower-case terms for functional categories.
- (6) The abbreviations are also standard, to be used in interlinear glosses and in schematic descriptions of constructions.

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