First Language
Creation Conference

Berkeley, CA – 23 April 2006

Schedule

Registration	**9:00 AM**	
First Session	**9:30 AM**	
	Sai Emrys	Introduction
	Sally Caves	**"The Medium and the Internet Conlanger: Vision, Venue, and Play"**
	Jeff Burke	**"Language as Growth-in-Time"**
	John Clifford	**"Semantic Primes: aUI to Esperanto with Stops Along the Way"**
	John Quijada	**"Applying Concepts from Cognitive Linguistics to Your Conlang"**
Lunch	**1:00 PM**	
Second Session	**2:00 PM**	
	Sai Emrys	**"Non-Linear Fully 2-Dimensional Writing Systems"**
	Doug Ball	**"Conlanging and the Linear Aspects of Syntax"**
	David Peterson	**"Down with Morphemes: What Word and Paradigm Morphology Can Teach Us About Language Creation"**
	Matt Pearson	**"Case, Aspect, and Argument Structure: One Conlanger's Investigations"**
		Panel: Conlang Teaching
		Panel: Conlang Aesthetics
Conference End	**5:00 PM**	
Afterparty	**6:00 PM**	

Welcome.

This conference is the first of its kind. Hopefully it will not be the last, but rather just one step towards the outing of the once-secret "Vice"[1].

Many of us are already well familiar with the world of conlanging, and the worlds that it can create. Many, too, have at some point been surprised to realize that there *is* such a world; that we were not the only ones, after all, to have done such a work of "sub-creation"[2]. Far from it; online, one can find refuges not just for fellow language-creators, but a large array of guides, essays, conversation, and detailed descriptions of a vast array of created languages.

There are, as there always have been, a wide variety as well, with purposes including the unification of the world through one language; fleshing out a created world; integrating a sense of logic and expressive power; expressing a unique worldview through the psychological effects of language on its user; pushing the boundaries of what language itself is capable of; and many more besides. In the past, there have been conferences about several of these particular languages by their adherents (and detractors), to discuss the language as it currently exists, or as it may yet be. But there have been none, that I know of, about the creative act *itself* – to teach and discuss language creation, not as the domain of some brilliant but unique founder, but as something we can all engage in (and we do so on a daily basis, whether intentionally or not).

It is my hope that this conference, and the interviews and gatherings associated with it, will help to hasten the outing of language creation as the unique art and science that it is.

Fiat lingua!

- Sai Emrys

---

[1] John Ronald Reuel Tolkein, *A Secret Vice*
[2] Boudewjin Rempt, *Apologia pro Imaginatione*

Thanks

This conference has been greatly assisted by many people – some expectedly, most not. I would be remiss not to thank those people who have made it possible to run this conference, and who have encouraged me along the way.

- Ellen Wright - Webmaster; Flyer & Product Designer
- Katrina Storey - Flyering
- Prof. John F. Kihlstrom - for getting CogSci financial support
- Yury Sobolev - OCF hosting
- ASUC Senators Lin and Narodick - ASUC sponsorship
- Anna Fuller - organizational finances
- Sally Caves, John Quijada, John E Clifford, David Peterson, Doug Ball, Matt Pearson, Jeff Burke – for coming out to speak!
- Everyone on CONLANG, ZBB, & LJ Conlangs - ongoing support & feedback
- William Richard – audio interviews

Of course, events cost money (on the order of $1500 + $1000/day). I have been very pleasantly surprised at the generosity of both individual and institutional contributors, without whose help we would not have been able to cover the costs of running this event. Nearly two thirds of the funds (>$1400) came from individual donors and ticket sales; the rest, from the Associated Students of the University of California (ASUC) and the CogSci major.

Many thanks to the following for their financial support:

- The ASUC Senate, FiCom, Academic Opportunity Fund, and Intellectual Community Fund
- The Group Major for Cognitive Science at UC Berkeley
- Anonymous
- Doug Ball
- John Clifford
- Glenn Kempf (not attending)
- Tony Harris (not attending)
- Sarah Higley
- Matt Pearson
- Bill Welden
- Berkeley Bowl
- Jamba Juice
- Smart Alec's

To you all – thank you.

 - Sai

Miscellaneous info

Conference Video

The entire conference will be videotaped. This video will be uploaded to video.google.com and archive.org, and linked to from the conference website, **http://conlangs.berkeley.edu**. Google Video offers a convenient and fast-loading straming Flash player; archive.org offers the original, high-resolution video.

If you want a DVD version of this conference in addition, please contact Sai to request one, about a week after the conference.

T-shirts and other gear

A variety of shirts, mugs, stamps, and buttons with the conference logo and the Conlang Flag are available online. You can find links to purchase these through the website.

Feedback forms

Together with this program, you should receive a number of feedback form. Please fill these out to let the speakers and organizers know what you think of the talks and the conference itself (somewhat like the 'guestbook' in a museum). What you write will only be released in accordance with the ways you explicitly check off as allowable, so please make sure to do so (or Sai will be the only one to read it). If you wish to write your name, do so; if not, your comments will be anonymous by default. If you need more space, use the back side.

Interviews

William Richard, radio producer with UC Berkeley's KALX, will be conducting audio interviews during the conference. If you are interested in having a conversation about your language, why you began conlanging, your experience with it in larger society or academic circles, or any stories to share, please flag him down. Material recorded will be used only as you explicitly allow (you will be asked). If allowed, it will be posted online together with the conference video.

Sai will also be conducting (video) interviews, in the days preceeding the conference and possibly afterwards as well; if you are interested in being interviewed on camera, talk to him.

Press

If you are a member of the press, or intend to publish any articles about this conference, please talk to Sai.

Talks

Doug Ball: "Conlanging and the Linear Aspects of Syntax"

Abstract: This talk will look at the ideas on linearization developed in Head-driven Phrase Structure Grammar (HPSG) and related frameworks. Starting from a traditional phrase structure view, it will be shown that the separation of linear precedence and dominance relations yields some previously uncaptured generalizations. Furthermore, it provides a way to see further generalizations about the ordering of words and phrases. I will discuss three of these generalizations: ordering of information-structure functions, ordering by "weight," and ordering of arguments vis-à-vis their prominence on the thematic hierarchy. Thus, linearization offers another tool, beyond Greenbergian typology, to help conlangers design more natural language-like syntaxes for their conlangs.

Bio: Doug Ball is originally from Colorado, where he was residing when he began work on Skerre at the age of 13. This language has been his conlanging focus for close to 12 years now, though he has worked on a few other, less involved, side projects over the years. He is currently a PhD candidate in the Department of Linguistics at Stanford University, where his research has focused on matters such as noun incorporation and argument realization in the Polynesian languages, and consonant clusters in the Native American language Wichita.

Jeff Burke: "Language as Growth-in-Time"

Abstract: When we first learn foreign languages, we're often introduced to a way of thinking that's dangerous to understanding what a language actually is and how it works: questions of "why" directed at baroque inflectional or conjugational systems are answered with a curt "because it's just that way." But there's almost always a good reason why, and that why lies in the history of the language. I'll be discussing language as growth-in-time, as opposed to a static entity, and what implications this has for conlangers whose aim is naturalistic languages. In addition to sound change, I'll also cover changes driven by conceptual shifts among speakers of a language, with the development of the four-way gender distinction in Iroquoian as a paradigm case.

Bio: Jeff S. Burke is from central Indiana, and holds a BA in Music from Ball State University in Muncie, Indiana. He has worked as a sound engineer for the last five years in the Indianapolis area. Among his many interests are the Algonquian and Iroquoian language families, which he has spent more than a decade studying and lusting after in his quest to build a conlang family of his own.

Sally Caves: "The Medium and the Internet Conlanger: Vision, Venue, and Play"

Abstract: In this talk I will generally examine what we do on the Internet in the way of "playing." My term "medium" is double-edged in that I refer both to the famous medium Héléne Smith, and the media by which we we air this new activity (old, actually, but not given the means by which fellow inventors can confer and interact as we do now). How has the Internet both expanded and

closeted what we do? Why is inventing a language something outsiders associate with child's play? Why was Hildegard a "serious" conlanger but not Smith who was deemed hysterical and regressive? How have various media, combined with social attitudes, shaped the way in which we engage ourselves in this pursuit and how we (and outsiders) perceive it? With these and other questions, I can be freer in this conference of fellow conlangers to wear both my hats--as language inventor and scholar of language invention--and thus reveal what it is I think I'm doing now, what I thought I was doing before I came upon CONLANG, and where I see myself and the rest of you in these overlapping continua of play, language, art, self-expression, and system.

Bio: B.A. in English from Scripps College, 1975, Ph.D. from Berkeley in 1983, Fulbright Hays Grant to Wales; taught at the University of Geneva, Switzerland, from 1984-1986, and at the University of Rochester, NY from 1986 to present. Author of Between Languages: Old English and Early Welsh Poetry, Penn State 1993; co-editor of a volume of essays: Nothing That Is: Millennial Cinema and the Blair Witch Controversies, Wayne State, 2004; published articles on Old and Middle English, Middle Welsh, Old Norse, teratology, science and mythology, television and film studies, conlanging; book on Hildegard of Bingen's Lingua Ignota under scrutiny at Palgrave; work in progress on A Genealogy of Language Invention. Published science fiction and fantasy, and two aired teleplays (Star Trek: TNG and Star Trek: DS9). Interests: art, calligraphy, book-making, creative writing, singing, composition.

John E. Clifford: "Semantic Primes: aUI to Esperanto with Stops Along the Way"

Abstract: Semantic primes are units of meaning, presumably relatively few in number (relative to the OED anyhow), in terms of which "all" other meanings can be defined. That there must be such things has been known since defining began to be studied and they were early involved in created languages (histories always offer up typographical horrors from the 17th century, e.g., Urqhart's). We will look at how this notion plays out in a few modern created languages: aUI, in which it is of central importance, informing word construction as well as semantic; toki pona, in which the notion is not explicit but is clearly active in vocabulary choice; Lojban (and Loglan), in which the notion is rejected in favor of semantic primitives, a larger list which are still meant to allow defining everything else, but which may themselves also be defined; and Esperanto, in which the notion plays almost no role at all. We shall also look at the notion in the context of scientific linguistics, where the Natural Semantic Metalanguage (NSM) program is attempting to find the semantic primes of various languages in the hope of developing a list which works for all languages. This search is obviously an empirical one, while many created languages use an apriori (or intuitive) approach to selecting primes. These approaches as well as the limitations on techniques for forming definitions using primes are topics we take up. Along the way we will look at how vocabulary is related to meaning units, at some problems that proposed systems of primes run into, and at an emreging set of primes and definition techniques.

Bio: John E. Clifford (Parks-Clifford -- whence his sobriquets in Loglan and Lojban, pc and pycyn -- for the duration of one wife) received a BA from Michigan State, then spent a year at Princeton before settling in at UCLA for a decade. In that time he acquired an MA in Linguistics and a PhD in Philosophy (dissertation on natural language tense and tense logic). He spent 33 years in the Philosophy Department of the University of Missouri - St. Louis, teaching Logic (from Critical Thinking through Goedel), Asian Philosophy, and Philosphy of Religion , and occasionally other things that needed teaching. He was an Esperantist from his second year at Exeter, though mainly lapsed. He first worked with Loglan in 1960 (after the Scientific

American article) as a contribution to the machine translation program at RAND. When Loglan reemerged in 1975, he reupped, becoming the first editor of The Loglanist, a member of the board of The Loglan Institute and eventually Vice-President, then President. He joined the Logical Language Group in the mid-80s and has participated actively in the development of Lojban, mainly advocating more logic in keeping with his early exposure -- under Carnap and the like -- to the notion of a logically perfect language. He was involved with aUI while sabbaticating on Iowa and has recently taken up toki pona and a good old Logical Positivist examination of NSM. He is still looking for an empirically testable hypothesis that comes close to the informal proposals of Sapir and Whorf.

Sai Emrys: "Non-Linear Fully 2-Dimensional Writing Systems"

Abstract: All natural writing systems are linear; they can be arranged as a purely arbitrary sequence of symbols in a string with no loss of meaning. This talk explores the idea of non-linear writing systems - design considerations, desirable features, psychological ramifications, problems that would need to be addressed, potential implementations, and what they would have to offer that linear languages are intrinsically incapable of doing.

Bio: Sai Emrys is the sole organizer of this conference, two-time teacher of the Conlangs DE-Cal course, and founder of the LiveJournal Conlangs community. He is finishing his B.A. in Cognitive Science at UC Berkeley, and is in the midst of revising his plans for the future. Sai can converse in English, Russian, Spanish, French, American Sign Language, and Japanese, and has some rusty knowledge of Mandarin and Arabic. He is currently employed as a consultant by Medtronic Inc., working on nondisclosable international projects; former jobs have included database design, systems administration, SAT tutoring, programming, and massage therapy. He currently lives in Oakland CA with his roommate and cat, and is interested such things as wordplay, massage, empathy, music, good food, computers, neuroscience, linguistics, meditation, hiking, energy work, and (of course) in seeing how far the boundaries of language creation can be pushed - with an eye towards effecting cognitive change and empowerment.

Matt Pearson: "Case, Aspect, and Argument Structure: One Conlanger's Investigations"

Abstract: This talk explores case and agreement systems in different languages, with particular reference to the ways in which case-role assignment interacts with factors related to argument and event structure, such as animacy, definiteness and specificity, 'aktionsart' (whether the predicate is stative or dynamic, telic or atelic, etc.), and aspect (perfectivity, habituality, etc.). The talk includes both a typological and an autobiographical component: I begin by briefly illustrating how case/agreement interacts with argument and event structure in various natural languages. I then show how my own efforts at language construction have been informed by these phenomena, and how my attempts to create different kinds of case systems have broadened my understanding of the syntax and semantics of argument and event structure.

Bio: Matt Pearson is an assistant professor of linguistics at Reed College, in Portland, Oregon. He specializes in syntactic theory and cross-linguistic variation, with an emphasis on the structure of Malagasy. He has been creating artlangs, and collecting examples of artlangs from SF/F literature, for many years. While completing his PhD at UCLA, Matt was hired to design

the alien 'hive' language for the short-lived NBC show "Dark Skies", and also did dubbing and dialogue coaching for the show.

David Peterson: "Down with Morphemes: What Word and Paradigm Morphology Can Teach Us About Language Creation"

Abstract: In any introductory linguistics class, the student is taught that a morpheme is the smallest unit of meaning in a language. Thus, in a word like "cats", one combines the morpheme "cat" (meaning "cat") and the morpheme "-s" (meaning "plural") to get "cats" (meaning "more than one cat"). Under the morpheme-based account of language, meaning is merely strung together like beads on a string, and is in a one-to-one correspondence relationship with more or less fixed phonological entities (i.e., roots and affixes). Thus, to explain a language, in a morpheme- based theory, all one has to do is come up with a list of roots and affixes, and rules on how to combine them.

Whether this view of language is accurate or not is not relevant to language creation, per se. What is relevant is how useful a morpheme-based account is to language creation. In this talk I will argue that a morpheme-based account of language is detrimental to the creation of a naturalistic language. As an alternative, I will summarize the basic principles behind Word and Paradigm Morphology--a non-morpheme-based approach to linguistic analysis--and demonstrate how the insights gained from Word and Paradigm Morphology can help to create a more naturalistic conlang. After all, as the present/past tense pair "take"/"took" shows, creating a language is more complicated -- and far more interesting--than merely coming up with a list of roots and affixes.

Bio: David J. Peterson received BA's in English and Linguistics from UC Berkeley, where he discovered language creation via a class on Esperanto. Since then, he's made it a goal of his to learn more about language and linguistics in order to create more naturalistic languages. He's the author of seven or so languages (among them Zhyler and Kamakawi), and is currently a graduate student of linguistics at UCSD.

John Quijada: "Applying Concepts from Cognitive Linguistics to Your Conlang"

Abstract: A brief introduction to the basic history and premises of cognitive linguistics will be provided ("grammar as conceptualization", i.e., that grammar is merely a reflection of generic cognitive processes as applied to language). The focus of the presentation is to demonstrate the importance of understanding/applying basic concepts of cognitive linguistics to increase the "realism" and individuality of a conlang, and to help avoid inadvertently mirroring the subconscious linguistic patterns of one's native language when designing a conlang. Specific topics to be discussed and illustrated with particular focus on how they can impact the design of a conlang include (1) construal, perspective, and iconicity; (2) image schemas and spatial conceptualization; (3) prototypes and fuzzy categories; (4) conceptual metaphors; (5) frame semantics; (6) polysemy.

Bio: John Quijada is the creator of Ithkuil, a philosophical language he worked on over the course of 25 years (before any internet or any realization on his part that there were other conlangers in the world besides Tolkien, Ursula LeGuin, and Christian Vander). Ithkuil has gained a fair degree of notoriety among conlangers and others since its debut on the Web two

years ago. Ithkuil is particularly popular in Russia after being featured in a Russian-language popular science magazine article; in fact, one fan has recently completed posting of a Russian translation of the Ithkuil website. John has a degree in linguistics, speaks five languages, and has just finished co-authoring a novel with his brother exploring the philosophical implications of quantum physics and cognitive science. In addition to conlanging, he enjoys a wide range of hobbies and pastimes including travel, gourmet cooking, eclectic literature, sci-fi, classical and world music, art, art-house cinema, electronic (MIDI) music synthesis, amateur astronomy, amateur protozoology, and cats.

Conlanging and the Linear Aspects of Syntax

Doug Ball

Stanford University, Dept. of Linguistics

April 23, 2006
First Language Creation Conference

1 Introduction

Topics for this talk:

- The linearization framework from Head-driven Phrase Structure Grammar (HPSG) (Sag, Wasow, and Bender 2003) (also has been used in some versions of Lexical-Functional Grammar (LFG) (Bresnan 2001) and in Categorial Grammar, such as that proposed by Dowty (1995))

- Perhaps more importantly, some linearization generalizations found in the natural languages – grist for the syntax(es) for your own language(s)

2 Separating Out ID and LP

2.1 Traditional Phrase Structure Approach to Syntax

- Find evidence to group words in phrases and phrases into larger phrases

- Capture these patterns using recursive re-write rules such as (1)

(1)   S → NP VP
       "A clause is comprised of two phrases: a noun phrase on the left and a verb phrase on the right"

- When one looks at a larger number of English sentences, one gets the following set of phrase-structure rules:

(2)   S → NP VP
       Noun Phrase [NP] → (Det[erminer]) AP* N[oun] AP* PP*
       Verb Phrase [VP] → V[erb] NP* PP* CP
       Prepositional Phrase [PP] → P[reposition] NP
       Adjective Phrase [AP] → A[djective] (PP)
       Complementizer Phrase [CP] → C[omplementizer] S
       (Parentheses mean option, * means 0 to infinity)

- With some statement of what words belong to what class, such as in (3):

(3)   N → {bird, dog, cat, etc.}
       V → {see, throw, chase, etc.}
       Det → {the, a(n), this, that, these, those, (and few more)}
       P → {to, at, through, over, etc.}
       C → {that, if, whether, etc.}

one can generate English sentences (in tree form) such as in (4)

(4)
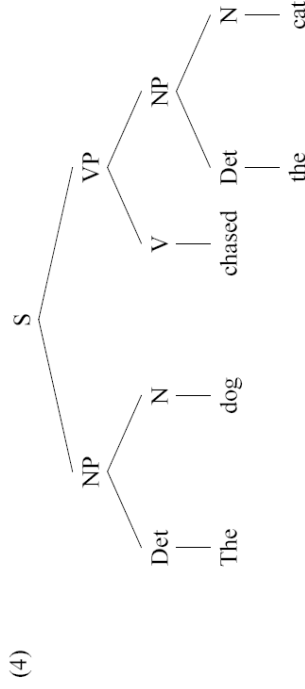
- Note that such trees encode both linear order (what comes before what in the string, as read off the bottom of the tree) and dominance (what is a daughter of a mother) at the same time

2.2 A Slightly Different View

- Gazdar and Pullum (1981) observed that rules like (5)

(5)

Rule	Example
VP → V NP PP CP	(told me with vigor that he left)
N′ → N PP CP	(assumption of mine that you forgot)
AP → A PP	(happy about it)
PP → P NP	(from the blue lagoon)

are missing two generalizations

1. The head (the central part of the phrasal category) is always at the left edge of the phrase
2. The non-head constituents appear in the same linear order in all the rules

- Their proposal: Factor out the two parts (not uncontroversial):

1. What can be acceptable daughters of a mother → Immediate Dominance (ID) Constraints
2. How the daughters are ordered → Linear Precedence (LP) Constraints

Thus, the rules in (5) can be reduced to one ID-constraint, (6):[1]

(6)   HP → **H**, YP*
"A phrase with head **H** can consist of that head plus any number of YPs"

and one LP-constraint ("≺" means precedes), (7):

(7)   **H** ≺ NP ≺ PP ≺ CP

Added Bonuses

1. The ID-constraint seems general enough that all languages probably have something like this – a universal?
2. The LP constraints need not exhaustively order everything, e.g. AP's in English:
The *proud* father
The father *proud of his son*

Thus, this provides a way to understand languages with freer word-order:
To first approximation, their linear precedence constraints are very sparse, maybe just X ≺ **H** or **H** ≺ X

So with the idea that there may be linear precedence generalizations out there, let's look at some other phenomena

---

[1]The constraint can be (and probably should be) further restricted to those YPs subcategorized for by the head, but I omit this detail and its motivation due to time.

3   Other Linear Generalizations

3.1   Information Status Ordering

What is an information status? A property of a particular constituent having to do with its position in the discourse – new information, old information, the new thing we're now going to talk about (also termed discourse function)

- For our purposes, we will deal with two, though there is likely a more nuanced classification (see Chafe 1976; Prince 1981; Gundel 1988; Lambrecht 1994; Engdahl and Vallduví 1996, among others)

Topic: What has been under discussion, discourse old (aka "theme")
Focus: New information, often contrastive (aka "rheme," "comment")

- The Linearization Generalization: Topic ≺ Focus

Basque (Isolate, Europe)

- In most constructions, verb-final
- Focus (including Wh-words) must immediately precede the verb:

(8)   *Nor* etorri zen –*Jon* etorri zen.
who come AUX   John come AUX
'Who came? John came.'   (King and Olaizola Elordi 1996, 204)

- Topic precedes Focus:

(9)   Ni-ri, Jonek   azaldu zidan.
I-DAT Jon.ERG explain AUX   (Hualde and Ortiz de Urbina 2003, 460)
'JON explained that to me.'

- Other languages like this: Hungarian (Kiss 1995), Turkish (Hoffman 1998), Warlpiri (Legate 2002)

Tzotzil (Mayan, Mexico)

- Verb-initial in canonical clauses
- All topics marked with prenominal word *a*

- The order Topic ≺ Focus occurs in non-canonical clauses, where these information statuses must be before the verb, as in (10b)

(10) a. Context:
Once there was an orphan. The orphan suffered greatly. Whatever the master's children ate, they ate first. They drank first.

b. A ti prove tzeb-e sovra ch'ak'bat.
TOP DET poor girl-ENC leftovers was.given
'It was leftovers that the poor girl was given' (Aissen 1992, 51)

3.2 Ordering by "Weight"

Units of "Weight" – definitions are a little unclear

Heavy: Either large number of words in a constituent or a complex structure

Light: Single words, maybe prosodically dependent

Medium: Neither heavy nor light – won't be further discussed

2 Linearization Generalizations

1. Heavy constituents at the end of sentences (X ≺ Heavy)

2. Light constituents appear adjacent to heads

3.2.1 Heavy At the End

(11) English
I introduced to Mary some friends that John had brought to the party.
?I introduced some friends that John had brought to the party to Mary. (Hawkins 1990, 228)

(12) Boumaa Fijian
"Neutral Order:" V-O-S
a. E rai-ca [a gone] [a qase].
3SG see-TR ART child ART old.person
'The old person saw the child.'
(Dixon 1988, 243)

b. V-S-Heavy
E tu'u-na mai [o Tui Waini'eli] [ni o ira sa-na mai 'aba-ti
3SG tell-TR here ART (title) COMP ART 3PL INCP-FUT come invade-TR
Boumaa].
(place)
'Tui Waini'eli said that they would come and invade Boumaaa.' (Dixon 1988, 243)

(13) Basque
"Neutral Order:" S-IO-O-V
a. [Ene aitak] [amari] [gona gorria] [ekarri dio].
my father:ERG mother:DAT skirt red:DET bring AUX
'My father brought mother a red skirt.' (Hualde and Ortiz de Urbina 2003, 448)

b. S-V-Heavy
[Jonek] [esan du] [Mikelek erlojua galdu duela].
(name):ERG say AUX (name):ERG watch lose AUX.COMP
'Jon said that Mikel lost the watch.' (Hualde and Ortiz de Urbina 2003, 452)

- The opposite (Heavy ≺ other) may occur in Japanese but the phenomenon in Japanese doesn't quite match what's going on above, so it might also be an information status effect

3.2.2 Light Adjacent to Heads

Dutch

- SVO in main clauses, SOV in subordinate clauses

- Get stacking of verbs (light words) at the end of the sentences, italicized, as in (14)

(14) dat ik Henk haar de nijlpaarden zag helpen voeren.
that I (name) her the hippos see-PAST help-INF feed-INF
'I saw Henk help her feed the hippos' (Rentier 1994), see also (Bresnan et al. 1982)

- Similiar things happen in Korean (Yoo 2002) and Japanese (Iida and Sells 2004), though the head-dependent relationships are more continuous in these languages

French

- Order of complements after the verb is reasonably free, as in (15)

(15) Paul   donne un livre à chacun/   donne à chacun   un livre.
(name) gives a book to everyone/ gives to everyone a book   (Abeillé and Godard 2000)
'Paul gives a book to everyone'

- Light words must be right next to the verb, italicized in (16)

(16) a.   La   course donne *soif* à Jean/ *donne à Jean   *soif*
DET race   gives thirst to (name)/ gives to (name) thirst   (Abeillé and Godard 2000)
'The race makes Jean thirsty.'

b.   Ce livre fait   *plaisir*   à Marie/*fait   à Marie *plaisir*
this book makes pleasure to (name)/ makes to Marie pleasure   (Abeillé and Godard 2000)
'This book gives pleasure to Marie.'

- Danish (Asudeh and Mikkelsen 2000) and Swedish (Toivonen 2003) also have very similar constructions

3.3   Ordering by Thematic Hierarchy Ranking

What is the thematic hierarchy? A ranking of semantic (aka thematic) roles held by the arguments of a predicate. An example (">" means outranks):

(17)   Agent > Experiencer > Patient/Theme
cf. Belletti and Rizzi 1988

- Both thematic roles and some aspects of the thematic hierarchy are problematic (Levin and Rappaport Hovav (2005, ch. 2, ch. 6) have a good discussion of the issues)

- It seems that there is some sort of prominence relationship between co-arguments, but (17) probably isn't quite the right way to understand it

- Furthermore, the ranking of recipients is controversial: are they above patient/themes or below them? Data below is similarly ambivalent (though something else very well might be going on)

The interesting generalizations

1. In languages with fixed word order, the linear order of the arguments follows the thematic hierarchy, i.e. Agt NP ≺ Pat NP

2. Agt NP ≺ Pat NP is also the more unmarked order in languages with freer word order

3. Exceptions are often cases where information status considerations come into play

The Germanic Family

- Fixed word order languages require order: Agt NP ≺ Recip NP ≺ Pat NP

(18)   Dutch – all other orders of *Jan, zijn vader*, and *het boek* ungrammatical
... dat Jan   zijn vader het boek geeft
... that (name) his father DET book gives   Paul Kiparsky, class handout
'... that Jan gives his father the book'

(19)   Swedish – all other orders of *Jan, sin far*, and *boken* ungrammatical
... att Jan   ger sin far   boken.
... that (name) gives his father book-DET
'... that Jan gives his father the book'   Paul Kiparsky, class handout

- Freer word order languages have Agt NP ≺ Recip NP ≺ Pat NP as least pragmatically marked order

(20)   German
... dass Jan   seinem Vater das   Buch gibt.
... that (name) his.DAT father DET.NEUT.ACC book gives   Paul Kiparsky, class handout
'... that Jan gives his father the book'

– All other orders of *Jan, seinem Vater*, and *das Buch* possible
– But only (20) is the contextually unmarked "neutral" word order

Seediq (Austronesian; spoken in Taiwan)

- Like many Austronesian languages, the verb form indicates that what is called the trigger.

- In Seediq, the trigger is marked by the prenominal word *ka*

- The *ka*-phrase is required to be clause-final, regardless what "voice" the verb is in, as in (21)

(21) a. Qmita huling ka Pawan.
           see.AF dog   KA (name)
           'Pawan sees a dog'   (Holmer 1996, 58)

      b. Wada=mu   qtaun ka Pawan.
           PRET.AUX=1SG.GEN see.PF KA (name)
           'Pawan was seen by me'   (Holmer 1996, 58)

- Aside from the *ka* phrase, Seediq phrases follow the thematic hierarchy generalization of Agt NP ≺ Pat NP ≺ Recip NP (note Pat and Recip flipped from Germanic)

(22) a. Pat NP ≺ Recip NP (Agt = Trigger)
           Wada mege sapah Pawan ka Awi.
           PRET.AUX give.AF house (name) KA (name)
           'Awi gave Pawan a house.'   (Holmer 1996, 79)

      b. Agt ≺ Pat NP (Recip = Trigger)
           Bniqan=mu   lukus mu   heya
           give.PRET.LF=1SG.GEN clothes 1SG.GEN 3SG.NOM
           'I gave my clothes to him'   (Holmer 1996, 79)

- Similar rigidity is found in another Austronesian language, Malagasy (Pearson 2005)

4 Typology of these phenomena

- What kinds of languages do these phenomena happen in?

Information Status Ordering

- Found in all kinds of languages; more common in languages with richer morphology
- The more analytical languages, however, seem to need "extra" words (beyond their canonical constructions) for their information structure constructions, as in English cleft sentences: *It is linear ordering that we're talking about*
- Basque-style information status ordering particularly common among verb-final languages

Heavy and Light Ordering

- Insofar as it has been cross-linguistically studied, these are found in languages of all sorts
- Light-adjacent-to-head may be absent from polysynthetic languages
- Light words very common in complex predicate constructions, where two or more predicates combine to form one predicate, as in (14) and (16)

Thematic Hierarchy Ordering

- Much more strongly felt in rigid-order languages (which tend not to have other marking)
- However, as noted above, also found as the unmarked order in freer word order languages

5 Concluding Thoughts

- All the phenomena here may not be best analyzed through linear precedence constraints; however, the linear precedence facts remain even if they are to be accounted in some other way
- In creating your syntax, beyond considering where to put the head of phrases and their dependents, you might consider including one or more of the linearization generalizations here, to add a further twist to your syntax
- Furthermore, like many of the other speakers today, I strongly encourage:
  - The use of linguistic theories to inform (but not dominate) your conlanging
  - Careful examination of primary data to see how real languages actually work

References

Abeillé, Anne, and Danièle Godard. 2000. "French Word Order and Lexical Weight." In *The Nature and Function of Syntactic Categories*, edited by Robert D. Borsley. Syntax and Semantics no. 32, 325–358. New York: Academic Press.

Aissen, Judith. 1992. "Topic and Focus in Mayan." *Language* 68:43–80.

Asudeh, Ash, and Line Hove Mikkelsen. 2000. "Incorporation in Danish: Implications for the Interfaces." In *Grammatical Interfaces in HPSG*, edited by Ronnie Cann, Claire Grover, and Philip H. Miller, 1–15. Stanford, Calif.: CSLI Publications.

Belletti, Adriana, and Luigi Rizzi. 1988. "Psych-Verbs and Θ-Theory." *Natural Language and Linguistic Theory* 6:291–352.

Bresnan, Joan. 2001. *Lexical-Functional Syntax*. Oxford: Blackwell Publishers.

Bresnan, Joan W., Ronald M. Kaplan, Stanley Peters, and Annie Zaenan. 1982. "Cross-serial Dependencies in Dutch." *Linguistic Inquiry* 13:613–635.

Chafe, Wallace L. 1976. "Giveness, contrastiveness, subject, topic, and point of view." In *Subject and Topic*, edited by Charles N. Li, 25–55. New York: Academic Press.

Dixon, R. M. W. 1988. *A Grammar of Boumaa Fijian*. Chicago: University of Chicago Press.

Dowty, David. 1995. "Toward a Minimalist Theory of Syntactic Structure." In *Discontinuous Constituency*, edited by Harry Bunt and Arthur van Horck, 11–62. Berlin and New York: Mouton de Gruyter. (based on 1990 Tilburg Conference on Syntactic Discontinuity).

Engdahl, Elisabet, and Enric Vallduví. 1996. "Information Packaging in HPSG." Edited by Claire Grover and Enric Vallduví, *Edinburgh Working Papers in Cognitive Science, Volume 12: Studies in HPSG*. University of Edinburgh, 1–32. (Also available at http://www.coli.uni-saarland.de/~tania/HPSG-slav-SS03/engdahl-vallduvi.pdf).

Gazdar, Gerald, and Geoffrey K. Pullum. 1981. "Subcategorization, Constituent Order, and the Notion "Head"." In *The Scope of Lexical Rules*, edited by M. Moortgat, H. van der Hulst, and T. Hoekstra, 107–123. Dordrecht: Foris.

Gundel, Jeanette K. 1988. "Universals of topic-comment structure." In *Studies in Syntactic Typology*, edited by Michael Hammond, Edith A. Moravcsik, and Jessica Wirth, 209–239. Amsterdam: John Benjamins.

Hawkins, John A. 1990. "A Parsing Theory of Word Order Universals." *Linguistic Inquiry* 21:223–261.

Hoffman, Beryl. 1998. "Word Order, Information Structure, and Centering in Turkish." In *Centering Theory in Discourse*, edited by Marilyn A. Walker, Aravind K. Joshi, and Ellen F. Prince, 251–272. Oxford: Clarendon Press.

Holmer, Arthur J. 1996. *A Parametric Grammar of Seediq*. Lund, Sweden: Lund University Press.

Hualde, Jose Ignacio, and Jon Ortiz de Urbina, eds. 2003. *A Grammar of Basque*. Berlin: Mouton de Gruyter.

Iida, Masayo, and Peter Sells. 2004. "Mismatches between Morphology and Syntax in Japanese Complex Predicates." Manuscript, Inxight Software, Inc. and Stanford University. To appear in *Mixed Categories and Morpho-Syntactic Mismatches*, edited by Wilhem Geuder, Irina Nikolaeva, and Andrew Spencer.

King, Alan R., and Begotxu Olaizola Elordi. 1996. *Colloquial Basque: A Complete Language Course*. London and New York: Routledge.

Kiss, Katalin É. 1995. "Discourse configurational languages: introduction." In *Discourse Configurational Languages*, edited by Katalin É. Kiss, 3–27. Oxford: Oxford University Press.

Lambrecht, Knud. 1994. *Information Structure and Sentence Form: Topic, Focus and the Mental Representation of Discourse Referents*. Cambridge, UK: Cambridge University Press.

Legate, Julie. 2002. "Microparametric Non-Configurationality: The Case of Warlpiri." Invited talk, Department of Linguistics Colloquia Series, University of Wisconsin. Madison. (Available at http://www.ling.ude1.edu/jlegate/madison.pdf).

Levin, Beth, and Malka Rappaport Hovav. 2005. *Argument Realization*. Cambridge, UK: Cambridge University Press.

Pearson, Matthew. 2005. "The Malagasy Subject/Topic as an A'-Element." *Natural Language and Linguistic Theory* 23:381–457.

Prince, Ellen F. 1981. "Towards a taxonomy of given-new information." In *Radical Pragmatics*, edited by Peter Cole, 223–256. New York: Academic Press. (Also available at ftp://babel.ling.upenn.edu/papers/faculty/ellen_prince/givennew.pdf).

Rentier, Gerrit M. 1994. "Dutch Cross Serial Dependencies in HPSG." *Proceedings of COLING 94*. Kyoto, Japan, 818—822.

Sag, Ivan A., Thomas Wasow, and Emily M. Bender. 2003. *Syntactic Theory: A Formal Introduction*. 2nd Edition. Stanford, Calif.: CSLI Publications.

Toivonen, Ida. 2003. *Non-Projecting Words: A Case Study of Swedish Verbal Particles*. Dordrecht: Kluwer.

Yoo, Eun-Jung. 2002. "Case Marking in Korean Auxiliary Verb Constructions." Edited by Jong-Bok Kim and Stephen Wechsler, *Proceedings of the Ninth International Conference on Head-driven Phrase Structure Grammar, Kyung—Hee University, Seoul*. CSLI Publications, 413–438. http://cslipublications.stanford.edu/HPSG/3/.

Central Mountain Family Sound Correspondences

(See attached sheets for phoneme charts)

J. S. Burke (rtoennis@yahoo.com)

Proto-Central-Mountain	Hlholamelo	Qapakwonaq
Consonants		
p	^{h}k, ^{h}t, ^{h}š, h, 0	p, p^y, p^w, p^{yw}, f, f^y, h, h^y
t	^{h}t, ^{h}č, ^{h}θ, ^{h}λ	t, t^y, t^w, t^{yw}, č, s, s^y
k	^{h}k, ^{h}č, x, h	k, k^y, k^w, k^{yw}, h, h^y, š, s, s^y, č
m	m, m̲, n	m, m^y, m^w, m^{yw}, n, m̥, m̥^{y}, m̥^{w}, m̥^{yw}
n	n, n^y, n̲, n̲^{y}, m, l	n, n^y, n^w, n^{yw}, m, n̥, n̥^{y}, n̥^{w}, n̥^{yw}
s	^{h}s, ^{h}š, ^{h}λ, 0	s, s^y, š, č, h, h^y
š	^{h}š, ^{h}s, x, h, 0	š, s^y, s, č, h, h^y
h	h, ^{h}š, x, 0	h, s, h^y, 0
Vowels		
i	ə, u, 0	e, ʊ, 0
e	$^{(n)}$l, ^{h}ɬ, $^{(n)}$ʌ, $^{(n)}$ʟ, ^{h}λ, m, u, ɐ, 0	w, ʊ, a, ɯ, 0
o	ə, u, ɐ, 0	e, ʊ, a, 0
u	$^{(n)}$l, ^{h}ɬ, $^{(n)}$ʌ, $^{(n)}$ʟ, ^{h}λ, ə, 0	y, e, ɥ, 0
a	ə, 0	e, 0
i˙	ə˙	e˙
e˙	$^{(n)}$l, ^{h}ɬ, $^{(n)}$ʌ, $^{(n)}$ʟ, ^{h}λ, m, u˙	w, ʊ˙, ɯ
o˙	u	ʊ
u˙	$^{(n)}$l, ^{h}ɬ, $^{(n)}$ʌ, $^{(n)}$ʟ, ^{h}λ, ə˙	y, e˙, ɥ
a˙	ɐ	a
i:	ə:	e:
e:	$^{(n)}$l, ^{h}ɬ, $^{(n)}$ʌ, $^{(n)}$ʟ, ^{h}λ, m, u:	w, ʊ:, ɯ
o:	u˙, u:	ʊ˙, ʊ:
u:	$^{(n)}$l, ^{h}ɬ, $^{(n)}$ʌ, $^{(n)}$ʟ, ^{h}λ, ə:	y, e:, ɥ
a:	ɐ˙, ɐ:	a˙, a:

Hlholamelo/Qapakwonaq   N̲o̲y̲a̲h̲t̲o̲w̲a̲

Consonants

Hlholamelo/Qapakwonaq	Noyahtowa
p	p,ht,t,0
p^y	š,0
p^w	p,0
p^{yw}	š,0
$^{(h)}$t	ht,t,s,ƛ,hƛ
t^y	š,s
t^w	ht,t,s,ƛ,hƛ
t^{yw}	š,s
$^{(h)}$k	hk,k,x,0
k^w	hk,k,x,0
k^y	ni,n
k^{yw}	ni,n
m	m,n
m^w	m,n
m^y	ni,n
m^{yw}	ni,n
n	n,m
n^y	ni,n
n^w	n,m
n^{yw}	ni,n
m̲	Ɛm
n̲	Ɛn
n̲^{y}	Ɛn,Ɛni
m̵	Ɛm, ƐmƐ
m̵^{y}	Ɛn,Ɛni,ƐnƐ
m̵^{w}	Ɛm, ƐmƐ
m̵^{yw}	Ɛn,Ɛni,ƐnƐ
n̵	Ɛn,ƐnƐ
n̵^{y}	Ɛn, Ɛni
n̵^{w}	Ɛn,ƐnƐ
n̵^{yw}	Ɛn,Ɛni
f	f,v,x,0
f^y	x,š,0
^{h}θ	s,x
s	s,š,x
s^y	š,x
š	š,x
x	x,0
h	h,x,0
h^y	š,s,x,0
w	w,v,0
y	y,0

ꭩ	ɞ,ɞˑ,ɞː
ȳ	i,iˑ,iː
(h)č	š,s,x
l	l
ⁿl	nl,l
ʰɬ	ɬ,x,ƛ,hƛ
ʌ	l
ⁿʌ	nl,l
L	l
ⁿ**L**	nl,l
ʰƛ	ƛ,hƛ

Vowels

e	ɞ,e,i,æ
a	ʉ,ü
ʊ	e,i
ə	ɞ,e,i,æ
ɞ	e,ʉ,i,ü
u	e,ʉ,i,ü
eˑ	ɞˑ,eˑ,iˑ,æˑ
aˑ	ʉˑ,üˑ
ʊˑ	eˑ,iˑ
əˑ	ɞˑ,eˑ,iˑ,æˑ
ɞˑ	eˑ,ʉˑ,iˑ,üˑ
uˑ	eˑ,ʉˑ,iˑ,üˑ
eː	ɞː,eː,iː,æː
aː	ʉː,üː
ʊː	eː,iː
əː	ɞː,eː,iː,æː
ɞː	eː,ʉː,iː,üː
uː	eː,ʉː,iː,üː

From Late Old Classical to Classical Noyahtowa, the long and mid-length vowels contract to high-pitched and mid-pitched vowels, respectively, with short vowels assuming the role of low-pitch. Thus, the <:> and <ˑ> vowel-length diacritics directly above actually refer vowel pitch instead of length.

PCM Proto-Central-Mountain
Hlh Hlholamelo
Q Qapakwonaq
N Noyahtowa
ˑ mid-length vowel
: long vowel
Short vowels are unmarked
R rounded
U unrounded
( ) optional
C^{ʔ} glottalized
C^{h} aspirated
^{h}C preaspirated
^{n}C prenasalized
C^{y} palatalized
C^{w} labialized
+ voiced
- voiceless

The orthography is based on the North American Phonetic Alphabet (APA).
Each phoneme's language or stage of origin is indicated by color:

Primordial PCM (original phoneme)
Late PCM
Hlh
Q
Hlh & Q (both independently)
N

Vowels:

	Front	Central	Back
High	U i R ü	R ʉ	R u
			R ʊ
Mid	U e	U ə	R o
Low	U æ	U ɐ	U a

Consonants:

	Bilabial	Interdental	Dental	Palatal	Velar	Glottal
Stop	- p p$^?$ p^h p^w p^y p^{yw}		- $^{(h)}$t t$^?$ t^h t^y t^{hy} t^w t^{yw}		- $^{(h)}$k k$^?$ k^h k^w k^y k^{yw} g^y(+)	
Nasal	+ m m$^?$ m^w m^y m^{yw}		+ n n$^?$ n^y n^w n^{yw}	+ ñ		
Long Nasal	+ m̲		+ n̲ n^y			
Syllabic Nasal	+ ~~m~~ ~~m~~^{y} ~~m~~^{w} ~~m~~^{yw}		+ ~~n~~ ~~n~~^{y} ~~n~~^{w} ~~n~~^{yw}			
Fricative	- f f^y v(+)	- $^{(h)}$θ	- $^{(h)}$s s$^?$ s^y	- $^{(h)}$š š$^?$	- x	- h h^y
Semivowel	+ w			+ y		
Syllabic Semivowel	+ ~~w~~			+ ~~y~~		
Affricate			- c	- $^{(h)}$č	- ǩ	
Lateral Approximant			+ l ^{n}l	+ ʎ ^{n}ʎ	+ ʟ ^{n}ʟ	
Lateral Fricative			- $^{(h)}$ɬ			
Lateral Affricate			- $^{(h)}$ƛ			

The syllabic semivowels are phonetically sequences of semivowel + schwa (ə); they are treated as unitary sounds, both because they behave as such and because the schwa occurs nowhere in Qapakwonaq outside of these sequences.

1

MOHAWK (AKWESASNE)

	DEN/ALV	POSTALV/PALATAL	VELAR	GLOTTAL
STOP	T		K	?
NASAL	N			
FRICATIVE	S			h
AFFRICATE		J		
LIQUID	L			
SEMIVOWEL		Y	W	

THE BILABIALS P & M APPEAR IN SOME RECENT LOANWORDS FROM
IE LANGUAGES, BUT ARE ALIEN TO THE HISTORICAL PHONOLOGY

	FRONT	CENTRAL	BACK
High	I		U
MID	e	V	O
Low		A	

THERE IS A MID-HIGH FRONT VOWEL
OF EXTREMELY LIMITED DISTRIBUTION
IN ADDITION TO THESE

V & U ARE NASALIZED

LENGTH (:), LIKE STRESS, IS PROSODIC

CONSONANT CLUSTERS

TT KT ?T ST HT TK KK ?K
SK HK ?J HJ TS KS ?S SS
HS Th Kh Sh Nh Lh Wh ?N
SN HN ?L SL HL NL ?Y JY
SY HY NY LY ?W SW HW KW

2
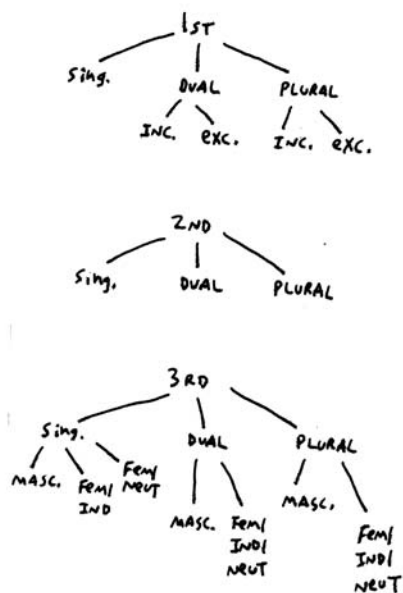
Akwesasne Mohawk
PRONOMINAL SYSTEM

PRONOMINAL PREFIX ELEMENTS

Singular elements

1ST PERSON: -k-
2ND PERSON: -s-
3RD PERSON
  MASC: -LA-
  FEM/IND: -Ye-
  FEM/NEUT: -kA-

NON-Singular elements

INCLUSIVE: -Te-
EXCLUSIVE: -YA-
DUAL: -Ni-
PLURAL
  1ST/2ND PERSON: -WA-
  3RD PERSON: -Ti-
RECIPROCAL: -(A)TAT-

3

AKWESASNE MOHAWK PRONOMINAL PREFIXES

INTRANSITIVE SUBJECT — 1ST PERSON

Sing. K(e)—

DUAL INC. TeN(i)—

DUAL exc. YAKeN(i)—

PLURAL INC. Tew(A)—

PLURAL exc. YAKW(A)—

INTRANSITIVE SUBJECT — 2ND PERSON

Sing. (h)S(e)—

DUAL SeN(i)—

PLURAL Sew(A)—

4

INTRANSITIVE SUBJECT — 3RD PERSON

MASC. Sing. (h)L(A)—

MASC. DUAL (h)N(i)—

MASC. Pl. LATi— / LU(N)—

Fem./IND. Sing. Ye— / YU— / YAK(AW)—

Fem./Neut. Sing. KA— / W— / Y(AW)—

Fem./IND./ Neut. DUAL KeN(i)—

Fem./IND./ Neut. Pl. KoTi— / KU(N)—

INTRANSITIVE OBJECT — 1ST PERSON

(The objective prefixes consist of the subjective prefixes plus an object marker.)

Sing. WAK—

DUAL INC. WATeNi—

DUAL exc. wAYAKeNi—

PLURAL INC. wATewA—

PLURAL exc. WAYAKWA—

5

INTRANSITIVE OBJECT —
2ND PERSON

Sing. (h)SA—

DUAL SeNA—

PLURAL SewA—

INTRANSITIVE OBJECT —
3RD PERSON

MASC. Sing.	Lo—
FEM./ IND.	YAKO—
FEM./ NEUT.	YO—
MASC. DUAL/PL.	LOTi—
FEM./IND./ NEUT.	YOTi—

6

TRANSITIVE — 1ST PERSON AGENT

Agent ↓	—PATIENT—			3 MASC. Sing.	3 FEM/IND Sing. + 3 MASC/FEM/ IND/NEUT/NON- Sing.	3 FEM/ NEUT Sing.
	2 Sing.	2 Dual	2 Plural			
Sing.	Ko—	KeNi—	KWA—	Li—	khe—	K—
DUAL	KeNi—	KeNi—	KWA—	(h)SA-KeNi—	YAKhi—	YAKeNi—
PLURAL	KWA—	KWA—	KWA—	(h)SA-KWA—	YAKhi—	YAKWA—

TRANSITIVE — 2ND PERSON AGENT

Agent ↓	—PATIENT—			3 MASC. Sing.	3 FEM/IND Sing + 3 MASC/FEM/ IND/NEUT NON-Sing.	3 FEM NEUT Sing.
	1 Sing.	1 Dual	1 PL.			
Sing.	(h)Sek—	(h)SKeNi—	(h)SKWA—	TS—	(h)Se—	(h)S—
DUAL	(h)SKeNi—	(h)SKeNi—	(h)SKWA—	Tsi-SeNi—	YeTsi—	(h)SeNi—
PLURAL	(h)SKWA—	(h)SKWA—	(h)SKWA—	Tsi-SewA—	YeTsi—	(h)SewA—

TRANSITIVE - 3RD PERSON AGENT

7

Agent ↓ \ —PATIENT—	1 Sing.	1 Dual	1 Plural	2 Sing.	2 Dual	2 Plural
3 MASC. sing.	LAK-	(h)SU-keni-	(h)SUKWA-	(h)YA-	(h)TSi-seni-	(h)TSisewa-
3 FEM/IND sing. + 3 MASC/FEM IND/NEUT NON-sing.	YUK-	Yukhi-	Yukhi-	Yesa-	Yetsi-	Yetsi-
3 FEM/NEUT sing.	WAK-	YUKeni-	YUKWA-	SA-	seni-	sewa-

TRANSITIVE — 3RD PERSON ON 3RD PERSON (NON-REFLEXIVE)

Agent ↓ \ —PATIENT—	3 MASC. sing.	3 FEM/IND sing.	3 FEM/NEUT sing.	3 MASC/FEM IND/NEUT NON-sing.
3 MASC sing.	Lo-	(h)SAKO-	LA-	(h)SAKO-
3 FEM/IND sing. + 3 MASC/FEM IND/NEUT NON-sing.	Luwa-	YuTAT-	KUWA-	LUWATi- (MASC.) KUWATi- (FEM/IND/NEUT)
3 FEM/NEUT sing.	Lo-	YAKO-	Yo-	YAKO-

8

EVOLUTION OF IROQUOIAN GENDER
(PROTO IROQUOIAN → MOHAWK)
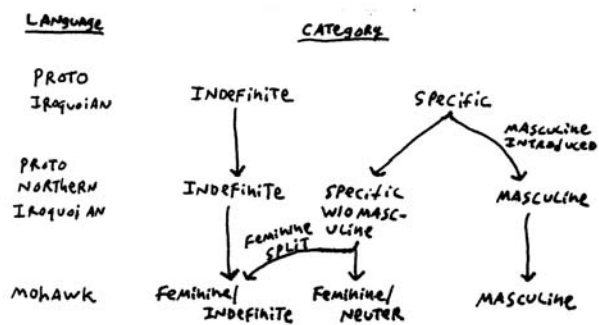
Down with Morphemes!

What Word and Paradigm Morphology
Can Teach Us about Language Creation

David J. Peterson
UCSD Linguistics
1st Language Creation Conference

The Purpose of This Talk

- To introduce and explain two competing theories of morphology.
- To illustrate the consequences each theory has on *naturalistic* language creation.
- To show how Word and Paradigm Morphology can aid the construction of a naturalistic language.

2

Outline

I.   What's Morphology?
II. Problems with Item and Arrangement
III. The Alternative
IV. WP and Conlanging
V.   Summary

3

I. What's Morphology?

- Traditionally, the term "morphology" refers to the study of "morphemes".

- But…what's a morpheme?

4

I. What's Morphology?

- A morpheme is a piece of phonological information that has a conventionalized meaning arbitrarily associated with it.

- ❖ "cat" (meaning = CAT, num. = singular)
- ❖ "cats" (meaning = CAT, num. = plural)

- ❖ *Therefore*: cat = CAT and -s = plural.

5

I. What's Morphology?

- Morphemes are of two types: free and bound. Morphemes that can occur on their own are free morphemes, and those that can't (e.g., affixes) are bound morphemes.

- So, given our example, "cat" is a free morpheme, and the plural suffix "-s" is a bound morpheme.

6

I. What's Morphology?

- The study of morphemes, then (the various affixes and roots of a language), is morphology.

- What exactly do these morphemes or affixes do for a language?

7

I. What's Morphology?

- Traditionally, there are two distinct branches of morphology, illustrated below using the English suffix "-er".

- ❖ wicked (adj.) + -er = wickeder (adj.)
- ❖ speak (v.) + -er = speaker (n.)

- Though the suffix has the same sound, it's performing two different functions in these two examples.

8

I. What's Morphology?

- The "-er" that changes "wicked" to "wickeder" is a part of what's known as the inflectional morphology of English.

- Inflectional morphology deals with changes that don't affect the lexical category of a the word they apply to (e.g., pluralization, tense on verbs, noun case, and adjectival comparison).

9

I. What's Morphology?

- The "-er" that changes "speak" to "speaker" is a part of what's known as the derivational morphology of English.

- Derivational morphology deals with morphemes that change the lexical category of the word they are added to.

- Since "-er" changes "speak", a verb, to "speaker", a noun, we can say it *derives* the noun "speaker" from the verb "speak".

10

I. What's Morphology?

- This traditional view of morphology presented thus far is known as Item and Arrangement Morphology (IA).

- The basic idea behind IA is that meaning is achieved by stringing morphemes together, and combining their meanings.

❖ *in- escape -able -ity* = "inescapability"

11

I. What's Morphology?

- A question to think about: Is language really this simple?

12

Outline

I.   What's Morphology?
II.   Problems with Item and Arrangement
III. The Alternative
IV. WP and Conlanging
V.   Summary

13

II. Problems with IA

- For the time being, let's pretend that language *is* that simple.

- Meaning in language is nothing more than the combination of meaningful bits (i.e., morphemes) and the meanings associated with those bits.

14

II. Problems with IA

- First, there are some theoretical problems…

❖ "fish" = FISH, singular
❖ "fish" = FISH, plural

- Where's the plural morpheme?

❖ "fish"-Ø, where "-Ø" = plural.

- How do we know it's a suffix?

15

II. Problems with IA

- And further theoretical problems…

❖ "take" = present tense
❖ "took" = past tense

- How do you add something to "take" to cause its vowel to change?

❖ "took" = "take"-Ø (where "-Ø" also causes the vowel to change from [e] to [ʊ])

16

II. Problems with IA

- And even more theoretical problems…

❖ "berry" = a free morpheme
❖ "blueberry" = a compound
❖ "cranberry" = ?

- If we accept that "cranberry" is "cran-" plus "berry", what does "cran-" mean? "Rasp-"? "Boysen-"? "Huckle-"?

17

II. Problems with IA

- But enough with theory. Let's get to conlanging!

18

II. Problems with IA

- Question: What's the goal of a language creator?

- IA Answer: To create all the morphemes of their conlang.

19

II. Problems with IA

- What does a language that takes IA seriously look like?

- Presenting Megdevi!

20

II. Problems with IA

- Megdevi was my first language. It has prefixes, suffixes, infixes, and circumfixes. For example…

❖ Plural: -æʒ
❖ Accusative: -m
❖ Adverbial: -ɪtsi
❖ Present Tense: -i
❖ Past Tense: -u

21

II. Problems with IA

❖ Future Tense: -a
❖ Conditional/Subjunctive: -o
❖ Imperative: -ə
❖ Perfect: -ɪ-
❖ Transitive: tra-
❖ Intransitive: dʒə-
❖ Passive: -is
❖ Inchoative: -ʊll-

22

II. Problems with IA

❖ Feminine: meg-
❖ Young: vi-
❖ Soon-to-be: θo-
❖ Relative by Marriage: tri-
❖ Masculine: dev-
❖ Negative: di-
❖ Direct Opposite: zo-
❖ Former: ʃajn-

23

II. Problems with IA

❖ Wrongly: ʃpæ-
❖ Outward Movement: tʃe-
❖ Movement Below: rak-
❖ Inward Movement: læ-
❖ Movement Above: kæl-
❖ Dispersal: kre-
❖ Ancient: glɪdɛ-
❖ Inceptive: ʔɛtse-

24

II. Problems with IA

❖ Multiple of X: -ax
❖ Worthy of: -ahen
❖ Container of: -otsʊm
❖ Small Part of: -osk
❖ Collective: -udʒ
❖ Leader of: -ælɛf
❖ Augmentative: -ɛks
❖ Pejorative: -ɛx

25

II. Problems with IA

- And there are *many* more.

26

II. Problems with IA

- There are two main problems with creating a language in this way:

1. The result is completely unnatural.

2. The language is indestructible.

27

II. Problems with IA

● So what's the alternative?

28

Outline

I. What's Morphology?
II. Problems with Item and Arrangement
III. The Alternative
IV. WP and Conlanging
V. Summary

29

III. The Alternative

● Enter Word and Paradigm Morphology (WP)!

● Formal assumptions:
1. Morphemes don't exist.
2. Whole word forms are stored in the lexicon.
3. Word forms arrange themselves into paradigms.
4. The parameters of a given paradigm are language-specific.

30

III. The Alternative

● What's a WP analysis look like?

● Here's a partial conjugation of a regular Spanish verb (in IPA):

koser "to sew"	Singular	Plural
1st Person	koso	kosemos
3rd Person	kose	kosen

31

III. The Alternative

● Now here's a partial conjugation of an irregular Spanish verb:

konoser "to know"	Singular	Plural
1st Person	konosko	konosemos
3rd Person	konose	konosen

32

III. The Alternative

● In analyzing these forms, we can note two patterns:

➢ 1sg: -o; 1plu: -emos; 3sg: -e; 3plu: -en
➢ 1sg: -ko; 1plu: -emos; 3sg: -e; 3plu: -en

● The difference between the two is the presence or absence of a /k/ in the first person singular.

33

III. The Alternative

● In order to capture these generalizations without listing morphemes, I'll use Bochner's Lexical Relatedness Morphology (LRM).

● In LRM, a word form is associated with other word forms in a given paradigm, such that one can be used to predict the others.

34

III. The Alternative

$$
\text{I.} \left\{ \begin{matrix} Xo \\ V \\ Z, 1sg. \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xemos \\ V \\ Z, 1plu. \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xe \\ V \\ Z, 3sg. \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xen \\ V \\ Z, 3pl. \end{matrix} \right\}
$$

$$
\text{II.} \left\{ \begin{matrix} Xsko \\ V \\ Z, 1sg. \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xsemos \\ V \\ Z, 1plu. \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xse \\ V \\ Z, 3sg. \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xsen \\ V \\ Z, 3pl. \end{matrix} \right\}
$$

35

III. The Alternative

● Formally, this isn't much of an improvement. A morpheme-based analysis can also tell you what suffixes you're going to get.

● But what about some difficult data...?

36

III. The Alternative

- Tundra Nenets is a Uralic language whose nouns have seven cases and three numbers (singular, dual and plural).

- To follow: A list of nouns' nominative singular and accusative plural forms. *Can you predict the accusative plural?*

37

III. The Alternative

	Nom. Sg.	Acc. Plu.
❖ *woman:*	nje	nje
❖ *lake:*	to	to
❖ *swan:*	xoxopɛji	xoxopɛji
❖ *arm:*	ŋguda	ŋgudji
❖ *forest:*	pɛdara	pɛdarji
❖ *tree:*	pja	pji
❖ *land:*	ja	jo

38

III. The Alternative

	Nom. Sg.	Acc. Plu.
❖ *wave:*	xamba	xamb
❖ *big:*	ŋgarka	ŋgarkɨ
❖ *day:*	xalja	xalɨ
❖ *goose:*	jabto	jabtu
❖ *fungus:*	tɨdako	tɨdaku
❖ *fox:*	noxo	nosji
❖ *ax:*	xan	xano

39

III. The Alternative

	Nom. Sg.	Acc. Plu.
❖ *cloud:*	tjir	tjirji
❖ *ʔ:*	jun	junje
❖ *tundra:*	wiʔ	wiŋgo
❖ *hut:*	mjaʔ	mjado
❖ *ʔʔ:*	tju	tjusje
❖ *paper:*	padarʔ	padro
❖ *boat:*	ŋgano	ŋganu

40

III. The Alternative

- *Why* would a language *do* this?!

- It turns out it's useful to know both the nominative singular and the accusative plural forms.

- Nominative singular determines class membership, and accusative plural is used to form the genitive plural.

41

III. The Alternative

	Acc. Plu.	Gen. Plu.
❖ *wave:*	xamb	xambʔ
❖ *big:*	ŋgarkɨ	ŋgarkɨʔ
❖ *day:*	xalɨ	xalɨʔ
❖ *goose:*	jabtu	jabtuʔ
❖ *fungus:*	tɨdaku	tɨdakuʔ
❖ *fox:*	nosji	nosjiʔ
❖ *ax:*	xano	xanoʔ

42

III. The Alternative

- We can account for the genitive plural with a simple relational rule:

$$\left\{ \begin{matrix} X \\ N \\ Z, \text{Acc. Plu.} \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Xʔ \\ N \\ Z, \text{Gen. Plu.} \end{matrix} \right\}$$

- The accusative plurals can be accounted for with similar rules, which would determine the different classes of Tundra Nenets.

43

III. The Alternative

- An IA account, on the other hand:

1. Would have to posit *several* different accusative plural morphemes (/-u/, /-o/, etc.), as well as nominative singular morphemes (e.g., /ja/ to /jo/).

2. Would make it so that the accusative plural was *included* in the genitive plural.

44

III. The Alternative

- The WP analysis simply notes the relationship between inflected word forms.

- Thus, it's not a problem that the accusative plural form is used to construct the genitive plural.

- No problem for which suffixes are added: each word is already a part of a paradigm.

45

III. The Alternative

- So how can a WP framework help a conlanger create a naturalistic conlang that's more naturalistic?

46

Outline

I. What's Morphology?
II. Problems with Item and Arrangement
III. The Alternative
IV. WP and Conlanging
V. Summary

47

IV. WP and Conlanging

- Question: What's the goal of a language creator?

- WP Answer: To create the parameters that define the various paradigms of a conlang, and then to fill the resulting paradigms.

48

IV. WP and Conlanging

- There is nothing about a paradigm that mandates that the form of a given cell be composed of a stem and an affix.

- Cells can be filled by single-word expressions (suppletive or non-suppletive), or even multi-word expressions.

49

IV. WP and Conlanging

- Example 1: Skerre, by Doug Ball.

siwihes, "spying"		
Obj. Markers	Singular	Plural
1st Person	ewihesina	ewihesino
2nd Person	ewihesi:na	ewihesi:ra
3rd Person	ewihesi:sa	ewihesi:te
Transitive	ewihesin	

50

IV. WP and Conlanging

- A morpheme-based account would look something like this:

wihes = spy; si- = infinitive; e- = past		
Obj. Markers	Singular	Plural
1st Person	-ina	-ino
2nd Person	-i:na	-i:ra
3rd Person	-i:sa	-i:te
Transitive	-in	

51

IV. WP and Conlanging

- But consider the following…

sijare, "visitation"		
Obj. Markers	Singular	Plural
1st Person	ejarena	ejareno
2nd Person	ejare:na	ejare:ra
3rd Person	ejare:sa	ejare:te
Null	ejaren	

52

IV. WP and Conlanging

- The question for an IA account: Where are the morphemes?

- You could say there are, for example, two versions of each suffix: /-ina/ is added to C-final stems; /-na/ to V-final stems. Long vowel suffixes would have to have the form /-i:na/ and /-:na/.

53

IV. WP and Conlanging

- A partial WP analysis would look like this:

I.
$$\begin{Bmatrix} XVna \\ V \\ 1st.Sg.Obj. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} XV:na \\ V \\ 2nd.Sg.Obj. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} XV:sa \\ V \\ 3rd.Sg.Obj. \end{Bmatrix}$$

II.
$$\begin{Bmatrix} XCina \\ V \\ 1st.Sg.Obj. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} XCi:na \\ V \\ 2nd.Sg.Obj. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} XCi:sa \\ V \\ 3rd.Sg.Obj. \end{Bmatrix}$$

54

IV. WP and Conlanging

- In words, you might state the pattern as follows:

  To mark an object on a verb of Skerre, you add a suffix appropriate to the person and number of the object. Additionally, the vowel preceding the second and third person suffixes will be long. For C-final verb roots, an epenthetic /i/ is inserted.

- The focus is on how to fill the cells of the verbal paradigm.

55

IV. WP and Conlanging

- Ever noticed how hard it is to emulate something like this:

  ❖ receive > reception > receptive
  ❖ corrode > corrosion > corrosive
  ❖ propose > proposition > *proposive
  ❖ excite > *excition > *excitive
  ❖ respond > *responsion > responsive
  ❖ *ovate > ovation > *ovative

56

IV. WP and Conlanging

- Previously, patterns like this have been accounted for either by ad-hoc stipulations (e.g., -ose Latinate verbs don't take -ive), or via the blocking principle.

- Notice, though, that "potable" doesn't block "drinkable", and that both "edible" and "eatable" can exist.

57

IV. WP and Conlanging

- An alternative might be to propose that words participate in *derivational* paradigms, as well as inflectional.

- By knowing one or more words in a derivational paradigm, one can tell which variants work, and which don't.

58

IV. WP and Conlanging

- <u>Example 2</u>: Kelenala Sign Language (KNSL), by me.

- In KNSL, there's a regular pattern whereby nouns that refer to the object of a transitive verb can be derived simply by changing the handshape of the corresponding verb.

  Note: The following examples have been transcribed using SLIPA.

59

IV. WP and Conlanging

Verb	Noun
❖ cook: $[Ë^{u<b(s)}]s^h$	$[K^{u<b(s)}]s^h$ = meal
❖ tie: $[Ë^{u\#v(s)}]m^h<V:||$	$[K^{u\#v(s)}]m^h<V:||$ = knot
❖ sing: $[Ë^{u(s)}]uXl$	$[K^{u(s)}]uXl$ = song
❖ think: $[Ë^{u(s)}]\underline{sf}BDsf$	$[K^{u(s)}]\underline{sf}BDsf$ = thought
❖ smell: $[Ë^{u(s)}]nXY$	$[K^{u(s)}]nXY$ = scent
❖ eat: $[Ë^{u(t)}]YXu:||$	$[K^{u(t)}]YXu:||$ = fork
❖ food: $[T^{u(t)}]\underline{mt}BDmt$	

60

IV. WP and Conlanging

- A separate multi-word expression is used to derive instruments from verbs, regardless of transitivity.

Verb	Noun
❖ cook: $[Ë^{u<b(s)}]s^h$ +	$[K^{u<b(a)}]sh^h$ = stove
❖ sing: $[Ë^{u(s)}]uXl$ +	$[K^{u<b(a)}]sh^h$ = mic
❖ see: $[Ë^{u(s)}]syXY$ +	$[K^{u<b(a)}]sh^h$ = glasses
❖ eat: $[Ë^{u(t)}]YXu:||$ +	$[K^{u<b(a)}]sh^h$ = *

61

IV. WP and Conlanging

- WP can capture these facts as follows:

I. $\left\{ \begin{matrix} [Ë]X \\ V, tr. \\ Z \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} [K]X \\ N \\ Obj.\ of\ Z \end{matrix} \right\}$

II. $\left\{ \begin{matrix} [Ë]X \\ V, tr. \\ Z \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} [K]X \\ N \\ Instr.\ of\ Z \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} Y \\ N \\ Obj.\ of\ Z \end{matrix} \right\}$

62

IV. WP and Conlanging

III. $\left\{ \begin{matrix} X \\ V \\ Z \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} X\ [K^{u<b(a)}]sh^h \\ N \\ Instr.\ of\ Z \end{matrix} \right\}$

IV. $\left\{ \begin{matrix} X \\ V, tr. \\ Z \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} [K]X \\ N \\ Obj.\ of\ Z \end{matrix} \right\} \Leftrightarrow \left\{ \begin{matrix} X\ [K^{u<b(a)}]sh^h \\ N \\ Instr.\ of\ Z \end{matrix} \right\}$

63

IV. WP and Conlanging

- Another thing that natural languages do (as shown with Tundra Nenets) is reuse useful forms.

- ❖ Usual: write > wrote > written
- ❖ Unusual: break > broke > broken

- ❖ Where "broken" is "broke" + /-en/.

64

IV. WP and Conlanging

- Example 3: Gweydr, by me.

- Gweydr has a healthy number of noun cases, and some of these nouns use a "fronted stem" in certain cells in their noun case paradigm.

65

IV. WP and Conlanging

- Here's a partial paradigm for a regular noun:

tews "nut"	Singular	Plural
Nominative	tews	tewsiks
Instrumental	tætews	tætewsiks

66

IV. WP and Conlanging

- Now here's a partial paradigm for one class of irregular nouns:

faj "three"	Singular	Plural
Nominative	faj	fæj
Instrumental	tafaj	tæfæj

67

IV. WP and Conlanging

- Now here's a partial paradigm for a different irregular noun class:

kam "storm"	Singular	Plural
Nominative	kam	kæm
Instrumental	tækæm	tækæmiks

68

IV. WP and Conlanging

- In WP, there are just a few patterns to state, and the conlanger only needs to decide which nouns are going to fall into which classes.

- First, I'll show you the overarching generalizations (which are simple), then the individual classes.

69

IV. WP and Conlanging

- The general plural patterns:

I.
$$\begin{Bmatrix} X \\ N \\ Singular \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} Xiks \\ N \\ Plural \end{Bmatrix}$$

II.
$$\begin{Bmatrix} XaY \\ N \\ Singular \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} XæY \\ N \\ Plural \end{Bmatrix}$$

70

IV. WP and Conlanging

- The general case pattern:

$$\begin{Bmatrix} X \\ N \\ Nom. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} tæX \\ N \\ Instr. \end{Bmatrix}$$

71

IV. WP and Conlanging

- The class patterns:

Regulars

I.
$$\begin{Bmatrix} X \\ N \\ Nom.Sg. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} Xiks \\ N \\ Nom.Plu. \end{Bmatrix}$$

II.
$$\begin{Bmatrix} X \\ N \\ Nom. \end{Bmatrix} \Leftrightarrow \begin{Bmatrix} tæX \\ N \\ Instr. \end{Bmatrix}$$

72

IV. WP and Conlanging

- The class patterns continued:

Irregular Class A

$$\text{I.} \quad \left\{\begin{matrix} X\alpha Y \\ N \\ \text{Nom.Sg.} \end{matrix}\right\} \Leftrightarrow \left\{\begin{matrix} X\text{æ}Y \\ N \\ \text{Nom.Plu.} \end{matrix}\right\}$$

$$\text{II.} \quad \left\{\begin{matrix} X \\ N \\ \text{Nom.} \end{matrix}\right\} \Leftrightarrow \left\{\begin{matrix} \text{tæX} \\ N \\ \text{Instr.} \end{matrix}\right\}$$

73

IV. WP and Conlanging

- The class patterns continued[2]:

Irregular Class B

$$\text{I.} \quad \left\{\begin{matrix} X\alpha Y \\ N \\ \text{Nom.Sg.} \end{matrix}\right\} \Leftrightarrow \left\{\begin{matrix} X\text{æ}Y \\ N \\ \text{Nom.Plu.} \end{matrix}\right\}$$

$$\text{II.} \quad \left\{\begin{matrix} X \\ N \\ \text{Nom.Plu.} \end{matrix}\right\} \Leftrightarrow \left\{\begin{matrix} \text{tæX} \\ N \\ \text{Instr.Sg.} \end{matrix}\right\} \Leftrightarrow \left\{\begin{matrix} \text{tæXiks} \\ N \\ \text{Instr.Plu.} \end{matrix}\right\}$$

74

IV. WP and Conlanging

- By using a WP-style framework, it's simpler to create principled irregularity.

- Note that the difference between classes is not which affixes are used, but what case pattern is used.

75

Outline

I.   What's Morphology?
II. Problems with Item and Arrangement
III. The Alternative
IV. WP and Conlanging
V.   Summary

76

V. Summary

- General IA and WP models have been introduced.

- It's been *suggested* that a WP model like Bochner's is more suitable for analyzing natural language than a morpheme-based model.

77

V. Summary

- In terms of creating a naturalistic conlang, it's been suggested that the goal is not to create a list of morphemes.

- Instead, the work of creating such a language is to create paradigms, and then to fill them.

78

V. Summary

- The result is that the forms themselves (affixes, etc.) aren't morphologically interesting.

- Instead, the patterns of relatedness between word forms within paradigms is where all the action's at.

79

For Further Reading

- Ackerman, Farrell & John Moore. 2001. *Proto-properties and Grammatical Encoding: a correspondence theory of argument selection.* Stanford: Stanford Monographs in Linguistics.
- Anderson, Stephen R. 1992. *Amorphous Morphology.* Cambridge: Cambridge University Press.
- Aronoff, Mark. 1994. *Morphology by itself.* Cambridge, MA: MIT Press.
- Blevins, James P. 2004. *Word based-morphology.* Available for download from http://www.cus.cam.ac.uk/~jpb39/drafts/wbm.pdf.
- Bochner, Harry. 1993. *Simplicity in generative morphology.* Berlin: Mouton de Gruyter.
- Bybee, Joan. 1985. *Morphology: a study of the relation between meaning and form.* Amsterdam: John Benjamins.
- Chomsky, Noam. 1965. *Aspects of the theory of syntax.* Cambridge, MA: MIT Press.
- Hockett, Charles F. 1954. *Two models of grammatical description.* Word 10: 210-34.
- Matthews, Peter H. 1991. *Morphology.* Cambridge: Cambridge University Press.
- Stump, Gregory T. 2001. *Inflectional morphology: a theory of paradigm structure.*

80

Down with Morphemes!
David J. Peterson, FLCC 2006

<u>Definitions</u>

The definition to some of the words used in this talk are provided here. Those words that are appear on the screen highlighted in orange will have definitions below.

- <u>Affix:</u> A bit of phonological material which attaches to another bit. For example, a suffix attaches to the end of a word, and can't be used on its own.

- <u>Blocking Principle:</u> The idea that the presence of a non-derived word (e.g., "brought") will block an otherwise regularly derived word (e.g., "bringed").

- <u>Bound Morpheme:</u> A morpheme which must be attached to some other morpheme in order to be used. Plural /-s/, for example, can't be used by itself in a sentence (e.g., "S went to the store" [i.e., some unidentified plural entity went to the store]).

- <u>Derivational Morphology:</u> The set of morphemes in a language which change the lexical category of the words with which they are associated. In English, for example, the /-er/ that turns "write" into "writer" is a derivational morpheme.

- <u>Free Morpheme:</u> A morpheme which can be used in an utterance independent of any other morpheme. For example, "dog" is a word that can be used by itself in a sentence. Plural /-s/, on the other hand, can't be used by itself; it must attach to a noun.

- <u>Handshape:</u> The grammatical shape of the hand in a given sign in a signed language (somewhat analogous to tone).

- <u>Inflectional Morphology:</u> The set of morphemes in a language that don't change the lexical category of the words with which they are associated. In a given language, this morphology is associated with tense on verbs, number and case on nouns, and agreement markers.

- <u>Item and Arrangement Morphology (IA):</u> The theory that holds that there is a one-to-one correspondence between phonological form and meaning. It views language as a list of morphemes with rules on how they combine.

- <u>Lexical Category:</u> Words are grouped into lexical categories, such as the following: noun, verb, adposition (prepositions and postpositions), adjective, adverb, etc.

- <u>Lexical Relatedness Morphology (LRM):</u> A formal instantiation of WP created by Harry Bochner. It holds that fully inflected words are stored in the lexicon, and that patterns of relatedness are derived therefrom. It also assumes that there is no formal difference between derivation and inflection.

- <u>Lexicon:</u> An abstract notion of where word forms are stored in the brain.

Down with Morphemes!
David J. Peterson, FLCC 2006

• <u>Morpheme:</u> An arbitrary association between meaning and a bit of phonological material. For example, in "dogs", there's a morpheme /dog/ which means, well, "dog", and a morpheme /-s/ which means "plural". Morphemes are divided into free morphemes and bound morphemes.

• <u>Morphology:</u> (1) The study of morphemes (an IA definition). (2) The study of the systematic relationship between word forms (a WP definition).

• <u>Paradigm:</u> Kind of like a table in which all the possible inflected (or derived) forms of a word are stored.

• <u>Parameter:</u> The information which a given language will encode grammatically in its paradigms. For example, "dual" isn't a parameter of pronouns for English (we'd just say, "you two", "them two", "us two", etc.), but it is for Hawaiian, which has separate dual pronouns (*lāua*, "they two"), distinct from both the singular (*ia*, "s/he/it") and plural (*lākou*, "they [more than two]"). [<u>Note:</u> This definition of parameter is specific to this talk.]

• <u>Relational Rule:</u> This type of rule is used in Lexical Relatedness Morphology. All the rules do is say that two or more words that are related systematically show a particular type of phonological relationship. Inherent in this rule is that if a listener hears one form, they will be able to infer the other. In the example below, any noun that has a phonological form X and a meaning Z will become a verb meaning "to become Z" if you take the form X and add an /o/ to the end:

$$\left\{ \begin{bmatrix} X \\ N \\ Z \end{bmatrix} \Leftrightarrow \begin{bmatrix} Xo \\ V \\ tobecomeZ \end{bmatrix} \right\}$$

• <u>Root:</u> The part of a word that's left when all the affixes are stripped off. So the root of a word like "antidisestablishmentarianism" is "establish".

• <u>Suppletion:</u> The use of a morphophonologically unrelated word to fill a given cell of a paradigm. For example, the past tense of "go" in English is "went"—a form totally unrelated to "go", "goes" and "going".

• <u>Transitive Verb:</u> A verb that has a subject and an object (e.g., "throw").

• <u>Word and Paradigm Morphology (WP):</u> The theory that holds that *all* word forms are stored in the lexicon as paradigms. From these paradigms, a speaker can pull away patterns of relatedness between word forms that allows them to generalize to words they've never heard before.

• <u>Word Form:</u> A whole, fully inflected word. "Dog", "dogs", "doggy", "dogged", "dogging", and "dogginess" are all word forms.

BACKGROUND INFORMATION ON COGNITIVE LINGUISTICS

History

Cognitive linguistics arose during the 1970s essentially as a reaction to three things:
(1) dissatisfaction with the existing linguistics paradigm of the time, Noam Chomsky's "generative grammar" due to the inability of generative grammar to provide explanations for an increasing number of problem examples and observations about language, especially when it was applied to non-Indo-European languages; (2) the failed attempts by Chomskian-trained linguists to create a "generative semantics", i.e., the attempt to extend Chomsky's theory of generative grammar into the realm of semantics; and (3) the pioneering work on human categorization done by a psychologist named Eleanor Rosch, whose evidence strongly suggested that the subconscious human mind creates categories in ways previously unsuspected, although work by the philosopher Ludwig Wittgenstein had foreshadowed Rosch's findings, e.g., Wittgenstein's classic analysis of the German word "spiel" (English "game").

The first linguists to formally pursue a new non-Chomskian approach to linguistics were Charles Fillmore at UC Berkeley and Ronald Langacker at UC San Diego. Langacker, a former Chomskian, finally became so fed up with all the "exceptions" that had to be made in generative grammar the more he explored the subtleties of language, that he finally concluded Chomsky's theories must simply be wrong. Rather than try to "fix" generative grammar, he instead decided to sit down and re-think linguistics from scratch, irrespective of any theory, with the following guiding principles: that language is a direct reflection of the workings of the human mind, and that any theory of grammar and semantics must be consistent with the way the human mind functions and the human brain physically manifests the processes of thinking and conceptualization. He began publishing a series of papers on his new ideas in the 1970s, closely followed by George Lakoff, Leonard Talmy, Gilles Fauconnier, Fillmore and others. Langacker eventual encapsulated all his ideas in the monumental two-volume work *Foundations of Cognitive Grammar*, published in 1987 and 1991. It is generally perceived that the publication of this work, along with Lakoff and Johnson's *Metaphors We Live By* in 1980 and Lakoff's *Women, Fire, and Dangerous Things* in 1987, established cognitive linguistics on a solid academic footing which has now led to the generally worldwide acceptance of the new paradigm as nearly co-equal with (and in many universities now surpassing) Chomsky's generative grammar.

While cognitive linguistics was originally defined in terms of a rebellion against Chomsky's theories, in the last decade, cognitive linguistics has matured to be considered a fully autonomous linguistic paradigm in its own right. Nevertheless, for beginners, it is still convenient to introduce cognitive linguistics in comparative terms to Chomsky's theory of generative grammar.

Comparison with Chomsky's Generative Grammar

Chomsky, whose theories evolved during the late 1950s through 1970s to replace the previous structuralist and behaviorist models of language, believes the structure of language is determined by an innate, autonomous formal system of rules (analogous to the predicate calculus for those of you who've been trained in formal logic, but much more intricate and sophisticated). This formal system of rules, called "universal grammar" (UG), is inherent within the human brain at birth and is largely devoid of any association with "meaning." This UG is also independent of other human cognitive faculties, i.e., it operates on its own within the brain, independent of any other non-linguistic cognitive processes.

Cognitive linguists, on the other hand, believe the structure of language is a direct reflection of

human cognitive processes, and that there is no independent language faculty like UG in the brain. If there is, cognitive linguists generally believe it will eventually be found to be ultimately rooted in the general processes of human cognition itself (i.e., not peculiar to the phenomenon of language alone). The cognitivists believe that the grammatical structures of language are directly associated with the way people conceptualize (i.e., think about and understand) any given situation in the world. Syntax, morphology, even phonology are conceptual in nature, i.e., they are merely input and output of those cognitive processes within the human mind that govern speaking and understanding. This idea is generally encapsulated in a phrase coined by Ronald Langacker and often repeated by cognitive linguists: *grammar is conceptualization*.

The other big difference between Chomsky and the cognitivists is where knowledge of language in general comes from. Chomsky argues that infants know how to put language components together innately (because of their reliance on the UG), i.e., they do not (solely) rely on having to hear how to put words together correctly (i.e., syntax) from listening to their family and other sources such as television. Chomsky believes evidence exists to support this notion in his famous "poverty of the stimulus" argument (the one that Kirk has railed about in some of his posts in this and other threads), saying that children in general are "too good" at learning language so quickly, i.e., they don't get exposed to a sufficiently large corpus of language stimuli/data to work with to figure out so quickly how their native language works, therefore they must have an innate faculty (the UG) to subconsciously tell them about things like syntactic relations (e.g., case morphology), tenses, aspect, clause structure, grammatical transformations such as active-into-passive voice, etc.

The cognitivists, on the other hand, reject this argument entirely and do not believe in the "poverty of stimulus" argument. Cognitivists firmly believe that knowledge of language comes strictly from language use. Infants learn language by listening, observing, pattern recognition and pattern-matching, imitation and trial-and-error attempts to learn the grammatical rules of their native language. The reason Junior first says "Mommy drink" before he says "Mommy, I want a drink" is simply because the former is easier and therefore gets tried out and used first, while the more sophisticated (and "correct") structure of the latter gets learned and used later on. In other words, language gets learned just like anything else gets learned. The use of language has nothing special about it that differentiates it from other cognitive processes. Rather, the human infant uses the same store of cognitive tools and processes to learn and use language as he learns to do anything else. Cognition is cognition. Learning is learning. Pattern-recognition and matching is pattern-recognition and matching; imitation and practice is imitation and practice, whether learning your native language or learning to ride a bicycle or select and put on clothes to wear.

Focus on the Relationship Between Semantics and Syntax

Because cognitive linguists believe that grammar is conceptualization, the core area of study to date within the field of cognitive linguistics is semantics and morpho-semantics and the way these two components of language determine syntax (the way words are put together to create grammatically acceptable phrases and sentences). While cognitive linguists fully believe that the cognitive paradigm extends to more nuts-and-bolts units of language such as phonology and morphology, little work has yet been done in these areas during the brief quarter-century that the paradigm has existed. In regard to going the other direction beyond syntax into the linguistic areas of "pragmatics" and "discourse analysis," many cognitive linguists believe that these two areas of linguistics actually don't exist. Rather, as cognitive analysis of language begins to delve more deeply as time goes on, the "usage" of language in everyday contexts which is the realm of pragmatics and discourse analysis will simply be found to be based purely on the same semantically driven rules of language structure that "contextless" or "normal" language structures are based upon. In other words, while linguists "normally" study the structure of sentences like "I have to urinate" rather than the semantically equivalent colloquial version "I gotta go", the production of the two sentences by living, breathing English speakers is

nevertheless analyzable by the same kinds of semantically driven, context-filled rules, INCLUDING rules to govern the speaker's very choice of using one sentence as opposed to the other. This area of language wouldn't be touched by a Chomskian with a ten-foot pole, whereas to a cognitivist, if people say it, it's fair game for linguistic analysis. Indeed, linguistics can't be considered "complete" until linguists understand why a person chooses to say it one way as opposed to the other. Needless to say, under this view of the scope of linguistics, the science of linguistics can be considered to be almost still in its infancy.

EXAMPLES OF CONCEPTUAL METAPHORS

NORTH IS UP, SOUTH IS DOWN, EAST IS BACK, WEST IS OUT

We're moving up north.   *I'm headed down to Miami.*
They moved out to L.A.   *It's cold back in New York.*

THE FUTURE IS AHEAD, THE PAST IS BEHIND

You should plan ahead.   *Put those memories behind you.*
Looking back, I have no regrets. *You've got a great future ahead of you.*

STATES ARE SHAPES

What shape is the car in?   *He doesn't fit in.*
I'm out of shape.   *She's a square peg.*
Prison reformed me.   *Shape up!*

SEEING IS TOUCHING / EYES ARE LIMBS

I can't take my eyes off her.   *His eyes are glued to the TV.*
I can pick out every detail.   *He ran his eyes over her body.*

LOVE IS MADNESS

I'm crazy about her.   *You're driving me out of my mind.*
He always raves about you.   *I'm just wild about Harry.*

EMOTIONAL EFFECT IS PHYSICAL CONTACT

Her death hit him hard.   *I was struck by his sincerity.*
She's a knockout.   *She was touched by his remark.*
I was blown away, dude.

LIFE IS A GAMBLING GAME

I'll take my chances.   *The odds are against us.*
It's a toss-up.   *He's got an ace up his sleeve.*
He plays it close to the vest.   *Where were you when the chips were down?*

Example from Italian: A CALENDRICAL MONTH IS A COLLECTION OF OBJECTS

Quanto ne abbiamo?
(Literally: How many of them do we have?) = *What's today's date?*

Ne abbiamo cinque.
(Literally: We have five of them.) = *Today is the fifth* (i.e., of the current month).

MORE IS UP / LESS IS DOWN   GOOD IS UP / BAD IS DOWN

HAPPY IS UP / SAD IS DOWN   HEAT IS UP / COLD IS DOWN

INTIMACY IS WARMTH / LACK OF INTIMACY IS COLDNESS

She finally warmed up to him.   *He is a cold person*
I treated her very cooly.   *Those two are hot for each other.*

INTIMACY IS PROXIMITY / LACK OF INTIMACY IS DISTANCE

I feel very close to you.   *Her manner is very distant.*
We're drifting apart.   *He is very unapproachable.*

AN ARGUMENT IS A BUILDING

That supports what I'm saying.   *I have evidence that buttresses her statement.*
Your argument is crumbling.   *I'm building up evidence for my claim.*

AN ARGUMENT IS A JOURNEY

What are you driving at?   *I want to take that point a little further.*
I don't follow you.   *You've lost me.*
I'm not with you.   *That leads to the following conclusion.*

LIST OF ENGLISH CONCEPTUAL METAPHORS at:

http://cogsci.berkeley.edu/lakoff/MetaphorHome.html

SOME BOOKS ON COGNITIVE LINGUISTICS

Introductory Overviews

Croft, William and Cruse, D. Alan. *Cognitive Linguistics*, Cambridge University Press, 2004

Lee, David. *Cognitive Linguistics: An Introduction*, Oxford University Press, 2001

Taylor, John R. *Cognitive Grammar*, Oxford University Press, 2003

Conceptual Metaphor

Lakoff, George and Johnson, Mark. *Metaphors We Live By*, University of Chicago Press, 1980

Kövecses, Zoltán. *Metaphor: A Practical Introduction*, Oxford University Press, 2002

Categorization and Prototypes

Lakoff, George. *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*, University of Chicago Press, 1987

Taylor, John R. *Linguistic Categorization: Prototypes in Linguistic Theory*, 2nd ed., Oxford University Press, 1995

Mental Space Theory

Fauconnier, Gilles. *Mappings in Thought and Language*, Cambridge University Press, 1997

——. *Mental Spaces: Aspects of Meaning Construction in Natural Language*, Cambridge University Press, 1994

Additional Resources

Langacker, Ronald W. *Foundations of Cognitive Grammar* [2 Volumes], Stanford University Press, 1987, 1991

Talmy, Leonard. *Toward a Cognitive Semantics* [2 Volumes], Massachussets Institute of Technology, 2000

Skerre (A Sires i Tanko)

Doug Ball

Skerre is the language of about 4,000 inhabitants of the valleys of the eastern edge of the Western Interior Range. There are some dialectal differences between the different bands, but they are slight – mostly phonetic and lexical in nature.

The language has no known relatives (though many languages to the south are currently not well described, and some relatives of Skerre may exist there) and is reasonably different from the languages that surround it.

Skerre Orthography and Pronunciation

Skerre has not traditionally been a written language, so the following is just the conventional representation for it, as used by linguists and other scholars of the language.

Vowels

A a	Aa aa	E e	Ee ee	I i	Ii ii	O o	Oo oo
[a~ɑ]	[ɑː]	[e~ɛ]	[ɛː]	[i~ɪ]	[iː]	[o]	[oː]

Consonants

H h	K k	N n	Qu qu	R r	S s	T t	Ts ts	W w	Y y	’
[h]	[k]	[n]	[kʷ]	[ɾ]	[s]	[t]	[ts]	[w]	[j]	[ʔ]

Various allophonic processes are not represented in writing, including nasal assimilation and voicing agreement in consonant clusters. Some other sounds in Skerre occur in particular (morphophonemic) environments, and are written as digraphs. These include {sy} (=[ʃ]) and {tsy} (= [tʃ])

Stress is usually on the penultimate vowel, though it can be on the final vowel, if that vowel is long.

A Bit on Skerre Morphology and Syntax

Skerre is mildly agglutinative, morphologically, and only has a few bits of non-concatentative morphology. One such instance is reduplication, shown below in (1).

(1)

Singular	Plural	Gloss
keriyos	keekeriyos	'man'
wika	wiiwika	'daughter'
yere	yeeyere	'dog'
srahin	sraarahin	'hunter'

Skerre is a bit unusual in that a large portion of the affixes are prefixes, with only a small set of suffixes. As in many languages, there is substantially more morphology on verbs, though many nouns are nominalizations of verbs. Examples of both these properties will be shown in the following.

Syntactically, the language is head-initial. In clauses, the predicate comes first, followed by the predicate's dependents. This is shown in (2), where the predicate *e'ewanan*, 'break,' is followed by its dependents.

(2)   E'ewenan   tsa   srahin   a   tsowos.
        PFV:break:TR ERG AGT.NMLZ:hunt ABS INST.NMLZ:spear
        'The hunter broke the spear.'

As (2) shows, grammatical relations are indicated on noun phrases using prepositional particles (which have an ergative alignment). The subject grammatical relation is also indicated by pronominal agreement markers (subject is not a mistake – the pronouns in Skerre have an accusative-alignment); however the third person singular is null, thus, one doesn't appear in (2). These pronominal markers appear in the second position of clauses, which is usually after the predicate, but can be after a number of pre-predicate elements. An example of their mobility is given in (3). In (3a), the pronoun is attached to the (head) predicate, whereas in (3b), it follows the initial negator.

(3)   a.   Sik=ha   res   so Sires.
            be.able=1SG.NOM speak INS speech
            'I can speak Skerre.'

        b.   Koni=ha   sik   res   so Sires.
            NEG=1SG.NOM be.able speak INS speech
            'I can't speak Skerre.'

Object markers, in contrast, are not agreement markers, though they are suffixed to the verb, as shown in (4).

(4)   a.   E-yetii-sa=ha.
            PFV-find-3SG.ACC=1SG.NOM
            'I found her.'

        b.   E-yet-in=ha/*E-yetii-sa=ha   a   Woskora.
            PFV-find-TR=1SG.NOM/PFV-find-3SG.ACC=1SG.NOM ABS (name)
            'I found Woskora.'

    Subordinate clauses, akin to grammatical relations, are marked with pre-clausal, morphologically invariant words. This is exemplified with *to*, the relative clause marker, in (5)

(5)   Ik=wa sati a   wisin   to res   so Sires-Inkaris?
       exist=Q here ABS someone REL speak INS speech-English
       'Is there someone here who speaks English?.'

Sample Text

Enar a yiket i riyos takosiri ir tarik ya siwataariyo ni rastako. Keyas a sisats ni sisenkos ya teken ir tik saa ak-ti ya kari-te so ista i siwatarin. – Article 1, *Universal Declaration of Human Rights*

Interlinear and Re-translation

Enar   a   yiket i   riyos ta-ko-siri   ir ta-rik   ya si-wa-taariy-o   ni
be.born ABS all   GEN being PTCP-NEG-depend and PTCP-be.equal DAT NMLZ-DENOM-respect-PDT and
rastak-o.
privilege-PDT
'All beings are born independent and equal in respectfulness and privilege.'

Ke-yas   a   si-sats   ni si-senkos   ya teken ir tik   saa 'ak=ti   ya kari=te
AC-give ABS NMLZ-think and NMLZ-be.moral DAT 3PL   and be.necessary COMP act=3PL.NOM DAT self=3PL
so ista   i   si-watarin.
INS manner GEN NMLZ-DENOM:sibling
'Thought and morality are given to them and they should act towards each other in the practice of sibling-hood.'

J. S. Burke (rtoennis@yahoo.com)

˙ mid-length vowel
: long vowel
short vowels are unmarked

Transitive Agreement (agent/patient)

*šikko- 'punch, beat'

šikkonko: 'I punch her'
šikkone:p 'We(inclusive) punch her'
šikkope:š 'We(exclusive) punch her'
šikkokena: 'Thou(singular) punch her'
šikkokente:s 'Thou(plural) punch her'
šikkokema: 'You(singular) punch her'
šikkokemte:s 'You(plural) punch her'
šikkomepo: 'She(proximate) punches her(obviative)'
šikkoti: 'It(proximate) punches her'
šikkometespo: 'They(proximate) punch her(obviative)'
šikkotite:s 'They(inanimate,proximate) punch her'
šikkopo: 'She(obviative) punches her(proximate)'
šikkotespo: 'They(obviative) punch her(proximate)'
šikkota:p 'Someone punches her, She is punched'

Intransitive Subject Agreement

*sappe- 'dance'

sappenki: 'I dance'
sappena:p 'We(inclusive) dance'
sappepa:š 'We(exclusive) dance'
sappekane: 'Thou(singular) dance'
sappekanta:s 'Thou(plural) dance'
sappekame: 'You(singular) dance'
sappekamta:s 'You(plural) dance'
sappema: 'She(proximate) dances'
sappetu: 'It(proximate) dances'
sappemata:s 'They(proximate) dance'
sappetuta:s 'They(inanimate,proximate) dance'
sappepi: 'She(obviative) dances'
sappetaspi: 'They(obviative) dance'
sappete:p 'Someone dances'

Intransitive Object Agreement (unsympathetic)

*pokhit- 'fall thus'

pokhitinkino:š 'I fall thus'
pokhitnano˙špi: 'We(inclusive) fall thus'
pokhitpano˙šši: 'We(exclusive) fall thus'
pokhitkano˙šne: 'Thou(singular) fall thus'
pokhitkano˙šnita:s 'Thou(plural) fall thus'
pokhitkano˙šme: 'You(singular) fall thus'
pokhitkano˙šmita:s 'You(plural) fall thus'
pokhitmano:š 'She(proximate) falls thus'

```
pokhittuno:š 'It(proximate) falls thus'
pokhitmano˙šta:s  'They(proximate) fall thus'
pokhittuno˙šta:s 'They(inanimate,proximate) fall thus'
pokhitpino:š 'She(obviative) falls thus'
pokhittano˙šsipi: 'They(obviative) fall thus'
pokhitteno˙špi: 'Someone falls thus'
```

**Intransitive Subject-Object Agreement**

```
*pomi- 'give a name to, name'
```

```
pominki: 'I name her'
pomina:p 'We(inclusive) name her'
pomipa:š 'We(exclusive) name her'
pomikane: 'Thou(singular) name her'
pomikanta:s 'Thou(plural) name her'
pomikame: 'You(singular) name her'
pomikamta:s 'You(plural) name her'
pomimapi: 'She(proximate) names her(obviative)'
pomitu: 'It(proximate) names her'
pomimataspi: 'They(proximate) name her(obviative)'
pomituta:s  'They(inanimate,proximate) name her'
pomipima: 'She(obviative) names her(proximate)'
pomitaspima: 'They(obviative) name her(proximate)'
pomite:p 'Someone names her, She is named'
```

<u>Reflexive (with Intransitive Subject Agreement)</u>

```
*makpe- 'wash, bathe, clean'
```

```
mahokpenki: 'I wash myself'
mahokpena:p 'We(inclusive) wash ourselves'
mahokpepa:š 'We(exclusive) wash ourselves'
mahokpekane: 'Thou(singular) wash thyself'
mahokpekanta:s 'Thou(plural) wash thyselves'
mahokpekame: 'You(singular) wash yourself'
mahokpekamta:s 'You(plural) wash yourselves'
mahokpema: 'She(proximate) washes herself'
mahokpetu: 'It(proximate) washes itself'
mahokpemata:s 'They(proximate) wash themselves'
mahokpetuta:s 'They(inanimate,proximate) wash themselves'
mahokpepi: 'She(obviative) washes herself'
mahokpetaspi: 'They(obviative) wash themselves'
mahokpete:p 'Someone washes herself/itself, She/it is washed'
```

TEONAHT:
Sally Caves
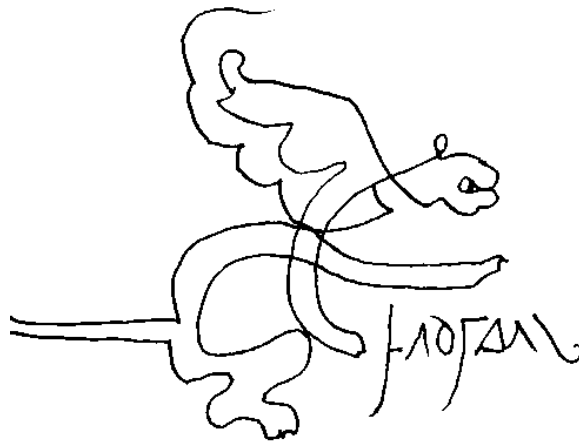
** The language of the *Teonim* of *Teon,* sometimes *Teonea* (from *Teon* + *hea,* "country, land"), a region that surfaces and submerges most often within the Black Sea, sometimes the Caspian. It is surmised that the Teonim are perhaps from the Caucasus, or--given their vanishing propensities, their scant but bizarre appearances in our history--from somewhere else entirely. Some etymologists surmise that the very name *Teon* may be related to its common verb *teoned,* "to run, flee"--describing a place of refuge, a place to run to; or a place that is itself in flight. The winged, rampant (or should I say *volant*) feline is its favorite mascot.

** A formal language for written and declaimed use. Informal Teonaht has many dialectical features, abbreviations, truncations, and idioms, but I have not yet started recording these. The language I've presented here is "received standard." What you would find in a newspaper.

** NOT an auxiliary language like Esperanto; not an "ideal" language; not a language that corrects the errors of other languages, or makes reparations in the area of gender or class, or which attempts to smooth out spelling conventions; it is not a "logical" language; it is not devoted to making its grammar easy or clear or commonsensical, although it does have certain efficiencies. While it evolved pretty much on its own, it shows clear influence by Latin, German, Welsh, Old Norse, Old Irish, Old English, Hebrew, Sumerian, and, yes, modern English--one of the strangest of the existing natural languages.

** NOT a finished language; not a *static* language. While its basic structure has been set for years, now, it is always in a state of flux, like a real language--only with an evolution that has been sped up. Also, it will take me more than a summer to get all its grammar and vocabulary documented on line. And even *that* may change.

** Possibly Indo-European. There are many Indo-European words in its lexicon, and its structure follows some typical IE patterns described below; but there are also a vast number of unattested words and grammatical developments that are unique to Teonaht.

** Zero-copula in the present tense.

** OSV, occasionally SOV. An "object-initial" language is the rarest of language types. Teonaht is strict about the subject's position, especially if a pronoun, in preceding the verb, but it typically heads the sentence with the object, a feature that may have been enforced literarily. It often exhibits the more common SOV structure by putting the nominative first when focussed, but then "echoing" it with the subject pronoun before the verb. The verb is always final in main clauses.

** Both head initial AND final. Adjectives generally follow the noun whereas prepositions precede it, a development you find in Latin and French (originally SOV like most IE languages). Teonaht pays very little attention to the Greenburgian rules about placement of adjectives and postpositions in OV languages. There is quite a bit of option whether you precede or follow the noun with plural and possessive articles and conjunctions. You can say either *hman uo deygrin*, "bread and butter," or *hman deygrinjo*, "bread butter and." A lot of syntactic decisions in Teonaht are made on the basis of rhythm and rhetoric. Its speakers care what "sounds good."

** Largely analytic: as in English, the majority of nouns, with the exception of the *Nenddeylyt* nouns which show accusative marking, have little or no case inflection, but the pronouns do. Syntax, prepositions, and affixes or clitics make the functions of words unambiguous. Likewise, the majority of verbs do not inflect, but express tense and aspect through a variety of what I call "moveable clitics" which can detach from the end of the verb and reattach to the beginning of the pronoun. Teonaht likes the verb to be final, and absolute in form.

** Exhibiting what I call "The Law of Detachability," which allows clitics to do what I describe above: this is probably Teonaht's most distinctive feature, enabling suffixes to "detach" from the end of words and "prefix" to the beginning of those or other words. This capacity is most noticeable in the formation of tense marking: in main clauses, Teonaht prefers to remove the tense and aspect suffixes and prefix them to the preceding pronoun: *ry ennyvel*, "I ate" becomes *elry ennyve*. Gerald Koenig of the New Generation Language Project was impressed enough with this feature that he asked me if he could borrow it for NGL.

** Largely morphologically accusative. Like most other IE languages, Teonaht makes a clear distinction between the nominative and the accusative/dative, i.e., between the subject, whether agent or participant, and the object and oblique objects, especially in the dual case system of its pronouns.

** A "Split Nominative" with some active tendencies. Teonaht distinguishes between two types of nominative, which I am here designating as "agent" (A) and "experiencer," (E); the symbol that Dixon and other linguists use to designate "experiencer" or "participant" is (S), but since this universally represents the intransitive subject, I've chosen (E) instead, since experiencers are often transitive subjects as well as intransitive: the agent (A) and the "experiencer" or non-agent (E) express volition and non-volition respectively (rather than transitivity and non-transitivity). In other words, the subject that shows volitional, agentive action is marked differently from the subject that shows little volition and agency, but rather experience or "quality"--a semantic feature that requires marking in its verbs, its fronted tense particles, and its articles, but NOT its pronouns. Thus Teonaht can identify subjects of volitional intransitives as agents-- "the man (A) walks"--and subjects of non-volitional transitives as participants--"the girl (E) heard the sound". I have also invented my own terminology for the categorization of these verbs: **vt** for "volitional

transitive"; **vi** for "volitional intransitive" (sometimes called the "unergative"); **ni** for "nonvolitional intransitive"; **nt** for "nonvolitional transitive"; and **av** for "ambivolitional"--a verb that can change its valency as either volitional or non-volitional, transitive or intransitive. Teonaht does not normally allow the patient (P), or what I prefer to call the object (O), to function in the participant role (as in ergative languages), which is why I am tentatively calling it an active accusative language with a split-nominative. There is only one instance which violates this rule: the "medio-passive" (or "subject-patient construct") in which the "subject" of the verb in the middle voice gets objective (or patientive) marking. This may be a holdover from an old ergative system, or a borrowing, or an over correction.

Teonaht Script: Cursive
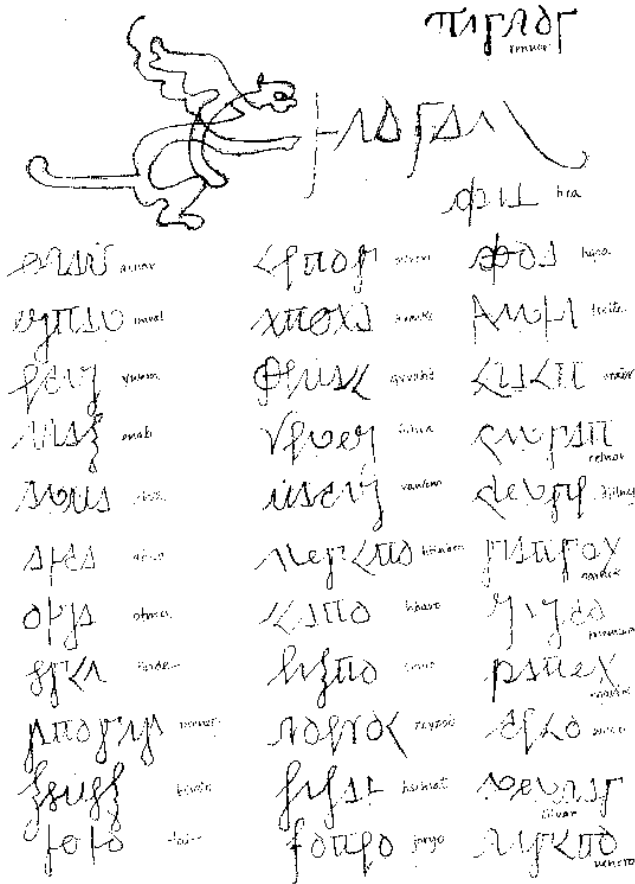
It may help to examine the terminology supplied by older Teonaht grammarians: there is always one term for the object (and it changes from grammarian to grammarian), but two terms for the subject *Euab*, or "self": *Pelme*, or "mind/intention," and *Eskkoat*, or "shadow," "silhouette." It is as if the Agent is seen as the thinking, intending subject and the Participant as the shadow of the self, perhaps even not the self. Inanimate things can govern transitive verbs, but they are usually marked as Participants. "Object" is usually termed *Ouar*, "other," and very often *Tsorel*, the archaic word for "city" (sometimes *Mûndya* or *Nirhhterli*, "world"). It is entirely typical of the early Teonaht grammarians to name the parts of speech after the parts of an inhabitable structure, for they saw language to be a means of moving through space, categorizing it, living in it, making it coherent.

A list of favorite words: **armmandy**, "from the east" [armea + tandy, motion from]; **beglizend**, "lock of hair," "tress"; **dazrydel**, "in a state of magic [tasry + del, "state"], beglamoured; **fandi**, "be slow" stative verb; **galleyli**, "music"; **ilvaz**, "night sky," il= "dark"; **falallairy**, "loom," or any system that brings disparate things together; **farlarop**, "object hurled in rage," or someone hit by an object hurled in rage--making both complicit; **fondivar**, from fondi, stat.verb: "be deep," -var, one who does, so "one who unearths secrets and keeps them: a wiseman; **kemkrilyt**, "intricately difficult" [adj. form of kemkkrily, "labyrinth"]; **krefimort**, "objectionable utterance, lit. "mouth clapped shut," from kref, "grip", mora, "mouth" + t-suffix indicating goal; **kresprilisp**, "text," that which got its writing, lit. **lisned**, "to get," i.e., be in a passive state of reception; **hlest**, "sea-green"; **hlihtuo**, "blue-fire, fox-fire; **lahenle**, "willful ignorance"; **naolffetor**, "dreadwolf" a monster; **tessary**, "towards the city" from tesa + ary motion towards"; **ynnehil**, "behold, congratulations!"

Oldest words: **Aylyleylyo**, "a sacred utterance"; , **eldrimed**, "angel"; **Erahenahil**, "paradise"; **mohhead**, "non-evil spirit or wraith"; **netily**, "tree fairy"; **otma**, "demon"; **tatilynakose**, "utterly disgusting; **typenema**, "bright lime-green"; **wyrlorf**, "a dog-man monster; **vyko**, my very first word, "hello and goodbye".

Al eskkoat ol ai sendran, rohsan nuehra celyil   takrem bomai nakuo.

My shadow me it follow   roses   curious in-motive world cont.-it place.

"My shadow follows me, putting strange new roses into the world."

Sally Caves

John Clifford's page

Here are traditional specimens of the languages I am going to talk about (and will chat about).

aUI (John L. Weilgart, 1968,1979) The Language of Space: universal (literally) communication, clear thinking by overt analysis of concepts and natural correlation between form and meaning. Latin alphabet plus capitalized vowels and nasalized vowels and caps and y. lc vowels are short (generally lower, except /a/ is schwa), cap vowels are usual. /y/ is u-umlaut (German "ueber") between consonants, y elsewhere; /q/ is o-umlaut (or "the o in 'word'"), /x/=kh, /j/=zh, /c/=sh. The order of the vowels is /aeiuo/ then the caps in the same order. /l/ is usually written /L/ to avoid confusion, consonantal /y/ is often written /Y/. There is also (well, actually it is basic and the Latin alphabet is merely for convenience at the typewriter) an aUI alphabet, which is also a system of ideoglyphs and which clarifies some questions about word structure. Each phone is also a morpheme associated with a prime concept. The nasalized vowels are the numbers 1-10 in order, with 0 being nasalized /y/. Words are built up from sounds following the interaction of the prime concepts to define the new concept. The primes are a priori (intuitive). Words constructed by this method occasionally resemble familiar words with similar meanings (e.g./bos/ for domestic animal. /Ut/ for "in order to"). It is unclear whether Weilgart did this deliberately when possible or whether it was accidental but taken as evidence that his system was basically correct. Stress on a nasal first, if none then on a capital vowel, if none then penult. When two or more of a category, stress is on the closest to penult. SVO strictly adhered to (no change for subordinate clauses, questions) and AN.

Lord's Prayer (kUtOr Ub ku)
Fnum ytvu, xu cEv ag kna,bum fUI kUrUryv! Bum knuwa terv!bumtwU Eryv kab bEn Uj ag kna!serv fnum iAm nod at fnu fiA! Ib yrvtrOrv pIn fnum yrUvs rUt fnu, Uj fnu yrvtrOv rUt pIn fnum yrevu. Ib bu yc daiurv fnu tag yrUm tsOb, yUg fUwerv fnu tyg yrU! YUt knuwa Ib wU Ib kUO cEv bum At ymA Ib canA. FUdsEcErv!

Toki pona (Sonja Elen Kisa, 2001) Minimalist language for clarifying thought by reducing to the fundamental notions. Also meant to display Daoist simplicity and to promote a positive attitude.
Uses only a,e,i,j,k,l,m,n,o,p,s,t,u,w, /j/=y otherwise standard, but very loosely defined, i.e., each covers a wide phonetic range by position but without overlap (except syllable final /n/ is m before /p/). Syllables (C)V(n), C omitted only in first syllable (which are stressed), no /n,m/ after /n/, no /ji/, /wo/, /wu/, /ti/. Total vocabulary of 118 words. SVO (no rearrangement) and NA (no subordinate clauses).

```
mama pi mi mute
mama pi mi mute o
sina lon sewi kon.
o nimi sina li sewi en pona.
o ma sina li kama.
o jan li pali e wile sina en lon sewi kon en lon ma.
o sina pana lon tenpo suno ni e moku tawa mi.
o weka e pali ike mi, sama la mi weka e pali ike pi jan ante.
o pana ala e wile ike tawa mi.
o awen e mi weka tan ike.
Ni li nasin.
```

Lojban ([Loglan: James Cooke Brown, 1955, 1960, 1975, 1981, 1989, ongoing]
Logical Language Group (Robert LeChevalier, John Cowan, et al), 1988, 1997,
ongoing). Officially to test Sapir-Whorf. In practice, human-machine
interface (control, translation), some clear thinking, auxiliary use (mainly
derived from interface use and unique machine parsing). Latin alphabet less
/h,q,w/, plus /'/ (pronounced as /h/), /./ (significant pause), /,/
(unpredicted syllable break), capitalization (unpredicted stress). Usual
values, except /c/=sh, /j/=zh, /x/=kh, /y/ is schwa. Penult stress (freer in
names). No primes per se, but most vocabulary is built from c. 1300
primitives ("gismu") which represent the most common concepts (in English) as
shown by usage in a variety of studies. The word forms are formulaic fusions
of the corresponding words in the six languages with the most speakers, all
fitted into CVCCV or CCVCV forms, each with at least one shorter form for use
in compounding vocabulary development. New vocabulary is by collapsing
modifier-modified cluster into new predicates, while retaining the basic
pattern of gismu (only longer): CC in first five sounds, penult stress. There
are also several hundred (C)V(('))V forms for pronouns, prepositions (mostly
derived from gismu), various syntactic functions. SVO (but some free, some
marked rearrangements) and AN

Lord's Prayer (le xisyctu jdaselsku be la jegvon.) (ni'o)

```
                   doi cevrirni .iu noi zvati le do cevzda do'u
                    fu'e .aicai .e'ecai lo do cmene ru'i censa
                     .i le do nobli turni be la ter. ku se cfari
           .i loi do se djica ba snada mulno vi'e le cevzda .e .a'o la ter.
                (.i do nobli turni vi'e le cevzda .ebazake .a'o la ter.)
          (.i loi do se djica ba snada mulno vi'e le cevzda .e .a'o la ter.)
                  .i fu'e .e'o ko dunda ca le cabdei le ri nanba mi'a
                       .i ko fraxu mi loi ri zu'o palci
                 .ijo mi fraxu roda poi pacyzu'e xrani mi
                       .i ko lidne mi fa'anai loi pacyxlu
                        .i ko sepri'a mi loi palci
```

Esperanto (Lazarus Ludovic Zamenhof, 1887, various minor revisions since) An international auxiliary language. Latin alphabet less /q, x, w,y/ plus circumflexed forms (typed with following x) of /c,g,h,j,s/ and hachek u (written /ux/ or /.uq/ or, as here,/w/). Pronunciation as usual except /c/=ts, /j/=y, /cx/=ch, /gx/=j, /hx/=kh, /jx/=zh, /sx/=sh, /ux/=w. Penult stress. No primes nor primitives, but a couple dozen active derivational affixes of very specific content and sporadic portmanteau. Vocabulary is international words systematized to the noun:-o, adjective –a, adverb –e, verb –i, -Vs, pattern, plus local words for local features and an apparently random set of words from European languages for pronouns and syntactic functions. SVO (but free rearrangement) and AN

Lord's Prayer
Patro nia, kiu estas en la cxielo,
Via nomo estu sanktigita.
Venu Via regno,
plenumigxu Via volo,
kiel en la cxielo, tiel ankaw sur la tero.
Nian panon cxiutagan donu al ni hodiaw.
Kaj pardonu al ni niajn sxuldojn,
kiel ankaw ni pardonas al niaj sxuldantoj.
Kaj ne konduku nin en tenton,
sed liberigu nin de la malbono.
Amen.

I'm Adam Parrish. You will find below a thing that I've been working on. The language is called Kuzarnätjeth. It sounds like you'd expect from IPA, but read <th> as /θ/, <sh> as /ʃ/, <z> as /ts/ and <ä> as /æ/. E-mail me here: adam.parrish@yahoo.com

K^{W}esentuqjan Sumethr

A poor translation of "J'ai fait l'amour bien jeune" (traditional folk song from Bretagne)

K^{W}esentuqjan sumethr
Sothek^{W}etni wdi stiakrashkr
K^{W}esentuqjan sumethr
Anteshnieshet teqnetäthr

Thurjan sthadet isesh
K^{W}thnazek^{W}er äsk ek^{W}estat
Sienenrashrkät nieshnä
Anqantäkdä nen anek^{W}estakdä

Men uqät ojuk^{W}i
Anqantänus anmeqmeqnusr
Anthzaraknätr anzarnätjethr
Andiaksu tuksundatjekr

Suksundatjekktet ät
K^{W}esenshtek she
Sthredktet sthqandatkdä sumethras
Anqninär she sjokthukete

Interlinear translation

k^{W}esentuqjan   sumethr
k^W-es-en-tuq=jan   s-um-eth-r
3IN-1SG.DAT-by.touch-love-two.people=when   1SG-root-lack-IMPF
"I loved when I was young"

sothek^{W}etni   wdi   stiakrashkr
soth-ek^{W}e=t-ni   wdi   s-ti-ak-rash-k-r
ahead-rest=place-LOC   intend   1SG-with.hands-so-bring-IRREAL-IMPF
"in the future, (I) intend to so continue"

k^{W}esentuqjan   sumethr
k^W-es-en-tuq=jan   s-um-eth-r
3IN-1SG.DAT-by.touch-love-two.people=when   1SG-root-lack-IMPF
"I loved when I was young"

anteshnieshet   teqnetäthr
an-tesh-ni-e-shet   teqnet=äth-r
3AN-year-have-seq.pl-hearsay   eighteen=girl-COM/INS
"with a girl of eighteen years"

thurjan   sthadet
thu-r=jan   s-th-ad-et
night-IMPF=while   1SG-3IN.ACC-by.sight-perceive
"at night, I see (it)"

isesh $\qquad$ k^Wthnazek^{W}er $\qquad$ äsk $\quad$ ek^{W}estat

i-se=sh $\qquad$ k^W-th-naz-ek^{W}e-r $\qquad$ äsk $\quad$ ek^{W}e-sta=t

outwards-light=source $\qquad$ 3IN-3IN.ACC-above-rest-IMPF $\qquad$ this $\quad$ rest-flat=place

"a light, it rests above these lands"

sienenrashrkät $\qquad\qquad$ nieshnä

sie-n-en-rash-r=kät $\qquad\qquad$ nie-sh=nä

1RFLX-3IN.DAT-by.feeling-bring-IMPF=so $\qquad$ 1EXCL-make.love=woman

"So I believe my lover"

anqantäkdä $\qquad\qquad$ nen $\quad$ anek^{W}estakdä

an-qan-tä-k=dä $\qquad\qquad$ nen $\quad$ an-ek^{W}e-sta-k=dä

3AN-away-go-IRREAL=action $\qquad$ there $\quad$ 3AN-rest-flat-IRREAL=action

"(that) she goes away, (that) she lies down there"

men $\quad$ uqät $\qquad\qquad$ ojuk^{W}i

men $\quad$ uqä=t $\qquad\qquad$ oju-k^{W}i

all $\quad$ house=place $\qquad$ dog-3IN.POSS

"all the dogs of the village"

anqantänus $\qquad\qquad$ anmeqmeqnusr

an-qan-tä-nus $\qquad\qquad$ an-meqmeq-nus-r

3AN-away-go-many.animals $\quad$ 3AN-bark.REDUP-many.animals-IMPF

"they (many animals) left, they were barking (a lot, over and over)"

anthzaraknätr $\qquad\qquad$ anzarnätjethr

an-th-zar-ak-nät-r $\qquad\qquad$ an-zar-nät-jeth-r

3AN-3IN-by.mouth-so-show-IMPF $\quad$ 3AN-by.mouth-give=means-COM/INS

"they were thereby saying (it) in their language"

andiaksu $\qquad\qquad$ tuksundatjekr

an.di=aks-u $\qquad\qquad$ t-uksun-dat-jek-r

3AN-be.brave=man-VOC $\quad$ 2SG-firefly-chase-many.small.things-IMPF

"O brave man, you're chasing fireflies" (= you're wasting your time)

suksundatjekktet $\qquad\qquad$ ät $\quad$ k^{W}esenshtek $\qquad$ she

s-uksun-dat-jek-k=tet $\qquad\qquad$ ät $\quad$ k^W-es-en-shtek $\qquad$ she

1SG-firefly-chase-many.small.things-IRREAL=if $\quad$ very $\quad$ 3IN-1SG.DAT-by.touch-smile at.least

"Even if I chased fireflies, at least I had a lot of fun"

sthredktet $\qquad\qquad$ sthqandatkdä $\qquad\qquad$ sumethras

s-th-red-k=tet $\qquad\qquad$ s-th-qan-dat-k=dä $\qquad\qquad$ s-um-eth-r=as

1SG-3IN-additionally-IRREAL=if $\quad$ 1SG-3IN-away-chase-IRREAL=action $\quad$ 1SG-root-lack-IMPF=time

"and if I also chased away my youth"

anqninär $\qquad\qquad$ she $\quad$ sjokthukete

an-qni=nä-r $\qquad\qquad$ she $\quad$ s-jok-thu-ket-e

3AN-be.beautiful=woman-COM/INS $\quad$ at.least $\quad$ 1SG-agreeably-night-pass-seq.pl

"at least I spent a number of agreeable nights with the beautiful woman"

Sample Sentences from Various Languages of Mine
David J. Peterson <dedalvs@gmail.com> http://dedalvs.free.fr/

◇ *The many "cases" of Zhyler!*

·ᴎᴐᴐᴢᴎ~ᴪ·ᴩᵻᏥy yᴐᏥyᴐᴠᴢ ᒧᴡᒧᴢᴀᴠᴈᴠᵻ ᴧᒧᴧᏥᴠᴧ ᴬᵍ̄ᴍᴠᴎ
ᴎᴛᴡᴛᴧᴎᴛᴧᴛᴧ ᴏᒧᴡᴈᒧᴧᒧᵻ᙭ᒧᴈ ᴠᴐᴢᴠᴡ ᙭ᒧ ᴡᴏᴐ᙭ᴩᴡ᙭ᒧᵻ
ᴈᒧᴧᴙᒧᴡᴧᒧᴈ ᴢᴛᴡᏥyᴈ ᒧᴙᴧᒧᴧ ᴬᴠᴢᴢᴠᵐ̄gᴐg ᒧ᙭᙭ᒧᴡ

Trans.) tumʃut, z-yjkɯ ɯmkɯmaʃ erendʒavaj neskas ðoxat tirizdizin wervenejlef ɑmʃar le rɯmlyrlej vestʃernem ʃirkɯf ezdʒez ðaɲʃaxomo eller.

Int.) /shovel.Ins., that-girl.Nom. mother.1sg.Ben. bed.Sbe. boy.DAT. father.Abe. Tirizdi.Aut. wolf.Plu.Top. book.Acc. this table.Spr. pen.Acc.Cnj. friend.Gen. house.Ine. window.Trn. give.Past/

Gloss.) "With a shovel, that girl gave the boy under the bed a book about wolves by Tirizdi from her father and the pen on this table through the window of a friend's house for my mother."

◇ *The dueling verbs of Sidaan!*

⁙ᴙᴧᴣᵻᴬᴙᵚᴎᴿ⁙ᴦᴠᵱᴎᵚᴬᴴ⁙ᴲᴬᴨᴣᵻᴬᴙᴬ⁙᙭ᴇᴙ⁙ᴠᴙᴬᴣᴙᴠ᙭⁙

Trans.) sambaɲɛft ciɲuʎe klɛmbas oya nasqano.

Int.) /NonFin.give.1Sg. Gen.flower Gen.girl.DOAgr. wolf help.Past/

Gloss.) "I gave a flower to the girl which helped the wolf." *or* "My giving of a flower to the girl helped the wolf."

◇ *The pictureyness of X!*

Int.) /'dot'-'stormcloud' 'glow person' 'eye'.'spiral det.' 'I' 'shining sun' 'cobra'.'path det.'.'sword det.'.'lightning det.'.'spiral det.' 'between left'.'gem det.' 'chair'.'down arrow det.'.'up arrow det.'.'mountains det.'.'spiral det.' 'and' 'book'.'chair det.' 'between right'. 'gem det.'/

Gloss.) "Last night, during a lightning storm, I saw a boa constrictor between the recliner and the bookcase."

◇ *The something-or-other-ness of Tan Tyls!*

Trans.) xəpəhitah sopʷəsəx akxə̃mp aqʰas səxqols.

Int.) /buffalo.bad NoEv.see.3sg.Anim.3sg.Obv. Acc.horse Acc.snake 3sg.Anim.3sg.Obv.NoEv.trample/

Gloss.) "The bad buffalo saw the horse that trampled the snake."

◇ *The dueling word orders of Njaama!*

Trans.) hɛ́ː !ɛ̆bu l-ɛːlĭn ĭkaːnɛ́ s-ónĭmɛ́ki sá.

Int.) /NewSbj. cheetah Obj.-woman see 3Sg.-Neg.Perf.Cop 3Sg./

Gloss.) "The cheetah didn't see the woman."

◇ *The mighty verbishness of Epiq!*

Trans.) mutaʃaqesmjaχontwasapanəsəχentastəkuɸə!

Int.) /1Sg.Pres.Act.Impf.Prim.'to have'.penguin.AccStem.war-ready.AccStem.foolish.AccStem.all.'as food'.'plan to'.Emph.Cl1/

Gloss.) "I plan to have all those foolish, war-ready penguins for breakfast!"

◇ *The relative obscurity of Sathir!*

Trans.) ʃawə tʰɔsɾa ɛðʷɔɾəs ʃɛdawə.

Int.) /dampen tunic DefErg.grass DefErg.wet/

Gloss.) "Wet grass makes one's clothes wet."

◇ *Kamakawi!*

Trans.) kipe ka li ojokojo foutapilo iu tetu uilə ke liwi iʔi hemə!

Int.) /yesterday Past.NewSbj. get Oyokoyo Foutapilo Obj.Plu. shrimp all Past.SameSbj. deny Obj.1Sg. almost/

Gloss.) "Oyokoyo Foutapilo almost kept all the shrimp from me yesterday!"

An Introduction to Kēlen

I've always been fascinated by language. I encountered Tolkien at an impressionable age, and his world inspired me to create my own fantasy world. My early play with language creation resulted in a handful of names that shaped Kēlen phonology and still survive in Kēlen mythology.

Later, in college, I happened to take a Linguistics course. This inspired me to major in linguistics and completely revise my language at least a dozen times. Linguistics was also responsible for showing me the sheer diversity of language and those underlying patterns that go by the name of linguistic universals.

The current version(s) of Kēlen arose out of the desire to violate the language universal that says all languages have verbs. So, Kēlen lost all of its verbs and became a language of nouns and particles.

What would a verb-less language look like? Possibly the language would have a small number of words that do the functions of verbs without any of the semantic content and would tell how many arguments to expect and what the relationship is between these various arguments. Kēlen has a closed class of "relationals" that perform the syntactic function of verbs:

- ᴀ LA, which asserts that an argument exists in a location or a state
- ᴀ NI, which asserts that an argument is or has relocated or changed its state
- ᴀ SE, which asserts that an argument is related to a source and/or a goal
- ᴀ PA, which asserts that one argument contains another.

Combine these with inflections and various modifiers, and we have even more ways to express the relationships between the various arguments in the sentence.
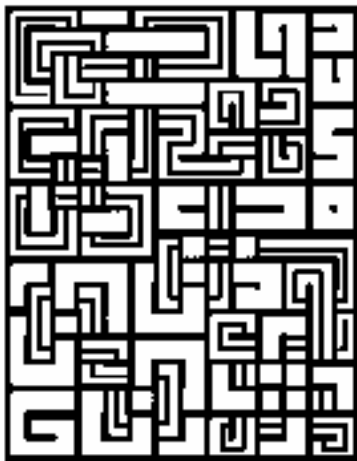
Kēlen's other claim to fame is probably the alphabets. The standard alphabet is inspired by Sanskrit and looks like so:

However, there are other alphabets.

Some
Ceremonial
Interlace
Alphabet
examples:

And an example of Box Script:

Sylvia Sotomayor
The Kēlen language: http://www.terjemar.net/kelen.php

Name	Affiliations	Conlangs	Aspects / School of conlanging interested in	Contact info	Talk to me about…
Arthaey Angosii aka Catherine		Asha'ille	naturalistic artlangs, conscripts, and concultures	http://conlang.arthaey.com/ arthaey@gmail.com or arthaey@arthaey.com	Talk to me about your artlang, conscript, or conculture (or listen to me talk about mine *grin*). I'm also looking for interested penpals for an conlang-learning exchange.
Doug Ball	Stanford	Skerre, Tanach-a Shile	Realistic Artlanging, Application of linguistic theories to conlanging	http://tsketar.tripod.com tsketar@excite.com	Eastern Austronesian languages, North American languages, noun incorporation, case-marking and the like, clitics, polysynthesis, linguistic theories (OT, Evolutionary Phonology, non-morpheme based morphology, LFG, HPSG)
Josh Brandt-Young		Seadi, Tjaren; Esperanto	Phonology, historical change		
Richard Brodie		Chromaphonoglyphics	Conscripting	http://www.richardbrodie.com /	Passions: anagramming, translating Middle English poetry, introducing/perfecting the new writing paradigm represented by CPG
Jeff S. Burke	The Daszerian Languages Translation Project	The Central Mountain Family	Naturalistic artlangs	rtoennis@yahoo.com	Algonquian, Iroquoian, morphology, phonology
Sally Caves aka Sarah Higley		Created: Teonaht; Known: Lingua Ignota; trying to know: Laadan, Kelen, Tokana, Klingon, Lojban.	a priori inventions, fictional languages, personal or private languages.	http://www.frontiernet.net/~sc aves/teonaht.html	About my lifelong devotion to Teonaht, about its world, about earlier language experiments, about invented scripts, artwork, conlanging as poetry.
Jonathan Christensen		A very rudimentary begining state of Orrenic	Typology, sematic construction, the language/culture interface, morphology, writing systems		
Terrana Cliff		Betamaze	I'm particularly interested in writing systems.	rillani@gmail.com	Betamaze
John E. Clifford			Logical languages, minimal languages, off-the-wall languages (violate "universals")	clifford-j@sbcgobal.net	All and any of the above.

Name	Affiliations	Conlangs	Aspects / School of conlanging interested in	Contact info	Talk to me about…
James Dee			I would like to see an interspecies pidgin. By that I mean a minimal language using "phonetic" elements such as rhythm patterns that could be used by any species regardless of anatomy or sensory apparatus. I believe that there would be some benefit to animal communications research to have a common system that might make their results more easily comparable. (Although I suspect that it would be of more interesting to sci-fi fans who like to speculate about first contact situations.)	androgenoide@yahoo.com	I have some preliminary vocabulary suggestions posted on the web at http://www.geocities.com/androgenoide/microlang.htm. Someday I'll get back to that project, at least long enough to get the rest of my existing notes posted, but it will probably have changed quite a bit by then.
Kelly Drinkwater		Skuigelz	Artlanging in general, conscripting in particular	kelly.drinkwater@students.menloschool.org	
Brent E. Edwards		Esperanto	Auxlangs. Simplicity of learning mixed with expressiveness. Use of auxlangs for global trade, communication in science, and understanding.	http://chipuni.livejournal.com	Auxlangs and global languages. I believe in a two-language solution to global communication: your home language and a global auxlang.
Aidan Eliott-McCrea	UC Santa Cruz, ZBB	none yet; though some conscripts: Kedan, Serela, Imirn	Naturalistic Artlanging, Holistic World-Building, Alien Languages, Sign Langauges, Writing Systems	http://www.sedesdraconis.com	Conbiology, Albatross, Random Esoteric Information
Sai Emrys	Conference organizer, teacher of the Conlangs DE-Cal, & founder of LiveJournal conlangs community.	n/a	I'm actually not a conlanger (gasp!) - I'm a meta-conlanger. I am interested in creating new conlang 'tech', pushing the bounds of what language can do, and applying Sapir-Whorf towards beneficial consciousness manipulation.	http://saizai.livejournal.com conlangs@saizai.com	Talk to me about anything conference-related, nonlinear writing systems, cogsci, conlangs teaching, or anything else that's neat. Or if you have a suggestion for what I can do with the next few years of my life..
Carol Anne Hagele	Sarah Higley	Little known/ none created	Interested in seeing how far Sarah Higley's language has come since she trapped me in the tree house 35 years ago on a sweltering summer day and tried to teach me "Heaven Cat".	hagele@earthlink.net	

Name	Affiliations	Conlangs	Aspects / School of conlanging interested in	Contact info	Talk to me about…
Matthew Haupt	Allied Tax Planners	Peetik - Work In Progress	I got into conlanging after I learned that Tolkien had written The Lord of the Ring partly to have a place where people spoke the languages he had developed! I've spent a lot of time on **langmaker.com**, **omniglot.com** and some others teaching myself linguistics. I like what Jeff Henning says about creating a "proto-language"/ancestral tongue and I'm trying to develop one of mine own currently.	filmfxman@hotmail.com	Proto-languages, Adamic language, word roots, how language changes/morphs over time, writing systems (I like aspects of Cirth, Georgian and D'Ni), and even Bulgarian, if the spirit moves you.
Neil Howell				neillhowell@yahoo.com	
Christopher Husch	I'm the official representative of the Zompist Bulletin Board, an online community of conlangers.	Anas	Naturalist. I make conlangs for a conworld intended to be Earthlike (so none of that ridiculous aversion to European-style langs that seems to infect everyone! As long as they're well-done, I enjoy making/learning about all types of languages).	chusch@gmail.com	O goodness gracious. I don't know. I'm not really very interesting; I haven't a whole lot to say about myself.
Douglas Nerad			I\'m an amateur "conlinguist". I like language in general and enjoy the process of creating and learning rudimentary languages.	douglas@nerad.org	I am interested in conlangs for world building with the ultimate goal of using it for writing projects and private speech among friends.
Adam Parrish			Personal languages, constructed language in fiction	adam.parrish@yahoo.com	
Matt Pearson	Linguistics Department, Reed College	Tokana, Thh-tmaa	Artlangs, 'naturalistic' conlanging, conlanging and linguistic models/theories, alien communication, constructed languages in SF/F literature.	pearsonm@reed.edu	Any of the above…
David J. Peterson	UCSD	Kamakawi, Zhyler, Epiq, Kelenala, Sathir, Njaama, Sheli, Gweydr, Tan Tyls, X, KNSL, Wasabi, Megdevi	naturalist, CSL (consignlanguages), creoles, visual languages	http://dedalvs.free.fr/ dedalvs@gmail.com	I live for morphology, though phonology and orthography are two of my favorite hobbies.

Name	Affiliations	Conlangs	Aspects / School of conlanging interested in	Contact info	Talk to me about…
Brittany Pettengill			I hope to create some of my own languages someday, maybe even one to share with my twin sister.	bpettengill@berkeley.edu	I am an undergradute UCB student intending to major in linguistics who is very interested in the field.
John Quijada		Ithkuil / Iláksh	non-Indo-European-style conlangs, highly synthetic conlangs, philosophical languages	http://www.ithkuil.net jq_ithkuil@inreach.com	Ithkuil, cognitive linguistics, non-natlang-style conlangs, my novel I just finished writing, good sci-fi authors, eclectic cinema, Northern California wine-tasting
Mark Sherman		(some) Quenya; created Sayboh (WIP)		http://theveryvery.endoftheinternet.org/	
Arden R. Smith		Know (more or less): Tolkien's languages, Esperanto, Volapük; Created: Juvenile rubbish that you will never see	Tolkien's creations, especially his Elvish alphabets; history of IALs; linguistic crackpots	http://home.earthlink.net/~erilaz/	
Sylvia Sotomayor		Kēlen	language universals and morphosyntax	http://www.terjemar.net/kelen.php	language universals and morphosyntax
Yoni Teitelbaum		Earth Minimal	Applications of linguistic and con-lang concepts to other areas; non-verbal languages and forms of expression (e.g. math, music, cooking, visual art...)	ytbaum@stanford.edu	The above. Also grammar/syntax and the evolution of languages.
Lue-Yee Tsang		Silendion	artlanging (\"architectural\" conlanging of the \"Naturalist\" school), morphosyntax, speech levels	lueyee@berkeley.edu	
Katrina Vahedi			Shaping the 'sound' of a language	kvahedi@ucsd.edu	Phono geek at University of California, Santa Cruz
Vladimir Vysotsky		none so far	mellifluity, experiments with universals and metaphors	http://trivee.org	Conlang lurker :)
Andrew Wallace		Quenya	I am interested developing a context for a language, especially Tolkien's context for his Elvish languages.	http://www.bookworlds.org	Talk to me about Tolkien's Elvish languages, and creating worlds (cosmogenesis).