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ABSTRACTS
FIRST SESSION (27TH JUNE)

Puzzling input and the role of markedness: The acquisition of Québec French stress.
Prof. Heather Goad (McGill University)

It is generally agreed that the rightmost vowel in the phrase is prominent in French (Dell 1984). The formal status of this prominence, however, is disputed. Some have argued that prominence reflects stress: a foot is built at the right edge of the stress domain (e.g. Charette 1991). Others have argued that prominence is part of the intonation system (e.g. Jun & Fougeron 2000); unlike the vast majority of languages, French is a language without a foot and, thus, one without lexical stress.

Both analyses face obstacles. From a cross-linguistic perspective, the stress-based analysis is appealing; however, if the French foot is iambic (contra Selkirk 1978), it is challenged by the observation that French does not appear to be typical of iambic languages on any dimension. The intonational prominence analysis also suffers in that it would require the postulation of a marked prosodic hierarchy, one without a foot and prosodic word. Under both interpretations, the data are often puzzling, with the analysis suggested by one set of forms seemingly undermined by another set.

One can reasonably conclude, then, that first language learners are confronted with a challenging task in trying to sort out the formal properties of the French system of prominence. Although the input to which learners are exposed robustly evidences final prominence, it is no easy matter to arrive at an analysis that accounts for this. In view of this, we test the hypothesis that early grammars are largely shaped by markedness considerations: in the face of uncertain data from the ambient language, early grammars reflect cross-linguistically favoured properties. French final prominence poses a good test case for this hypothesis since the picture it paints for the child is no less complex than for the linguist.

Contra the work of Jun & Fougeron (2000) and others, we take the strong position that all languages have feet and prosodic words. We also assume that these constituents are available, as part of Universal Grammar, from the onset of acquisition. We thus expect learners to presume the existence of the foot and to thereby analyse the

consistent part of the French system – final prominence – in terms of this constituent, specifically, as an iambic foot right-aligned with some higher prosodic domain. Once an iambic foot has been posited, we expect markedness to influence children's decisions about the type of stress system to be built, even in the face of puzzling data from the ambient language. We predict that the domain in which stress is computed will be the prosodic word rather than the phrase; and if it is an iambic foot that has been hypothesized by the child, we expect it to be quantity-sensitive, such that heavy syllables attract stress regardless of their position in the word, and we anticipate that footing will be iterative.

If, by contrast, children's grammars are primarily shaped by the input, it is not evident what type of system the French-exposed child would build because the evidence for one analysis over the other – final prominence as stress versus intonation – is largely inconclusive. Indeed, although we will ultimately see that evidence from stress clash resolution points in the direction of a stress-based analysis for adult French, it may well be the case that the ambient data are sufficiently confounding for the learner to converge on this grammar without being bootstrapped into the analysis by UG and markedness.

To examine these issues, we focus principally on productions from one learner of Québec French at ages 2;2,29 and 2;4,04. We argue that this child's patterns of behaviour largely support the view that, even in the face of uncertain evidence from the ambient language, markedness strongly influences the shape of early grammars on the prosodic dimension.

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Syllable prominence and prosodic structure: Typological, acoustic and developmental evidence.

Prof. Yvan Rose (Memorial University of Newfoundland)

In this paper, I discuss three distinct sets of data which, in spite of initial appearances, highlight some issues fundamental to theories of syllable prominence and stress. The first set comes from a synchronic process traditionally called Schneider's Law (SL), which prevents a sequence of 2 coda-onset geminates in adjacent syllables in Inuktitut. Perhaps the most important fact about Inuktitut is that this language does not have a metrical system --it is a syllable-timed language. In spite of this, SL is prosodically-

conditioned, however at the level of the segmental make-up of the syllable, i.e. the presence/absence of a coda consonant, which make the syllables behave as strong/weak. This prominence distinction is independently motivated on historical grounds, through a consideration of other languages/dialects of the Eskimo-Aleut family of languages (Rose, Pigott & Wharram 2011). While Inuktitut and French are not genetically related, they share the property of being syllable-timed languages. Moving on to French, I then discuss the general prosodic properties of Québec French, in relation to its European cousin dialect. In European French, the word and the clitic group appear to be prosodically unified in that no prosodic difference seem to exist between word- and clitic-initial syllables (e.g. Barysevich & Poiré 2011); only word-final syllables are prosodically prominent. However, seems to differ Québec French from its European cousin in a significant way: in Québec French, there is evidence for prominence in word-initial syllables, independent of clitic vowels (e.g. Poiré & Kaminskaïa 2004). The word in Québec French thus has two loci for prominence, word-initial and word-final vowels (see, also, Goad & Prévost 2008).

Building on these observations, I address a consonant harmony phenomenon observed in one learner of Québec French, Clara (Rose 2000; Goad-Rose corpus PhonBank), who displays two inter-related processes of consonant harmony in her early word productions. Three observations are relevant: First, we observe a regressive pattern of Labial harmony affecting both coronal and velar consonants in CVCV words. Second, CVC forms depart from this early during the acquisition period in that they display either alternative processes (e.g. consonant deletion) or are realized in a target-like fashion. This, as argued previously in Rose (2000), suggests that CVC forms, or final consonants more specifically, are prosodified in a way that differs from non-final consonants. Third, concomitant with the labial harmony pattern is another harmony, this one targeting the pro-clitic consonants which are realized before nouns and verbs. In this case, the harmony is not restricted to labial, and variably operates in either progressive or regressive fashions.

While these results are only preliminary at this stage, I suggest that the distinction between these two domains, the clitic domain encapsulating the word domain, is non trivial in that the child treats each domain in a somewhat different fashion. My working hypothesis is that Clara analyses the two domains (word and clitic) as different and that these analyses are driven by a conspiracy of two factors, namely the variable nature of the pro-clitic marker (presumably not fully understood at such an early stage in development) and evidence coming from the prosodic nature of word-initial syllables in Québec French.

First units in acquisition of French: Do we need a foot ?
Prof. Sophie Wauquier (Université Paris 8, UMR 7023)

Portrait of a phonological cripple: What schwa can(not) do to preceding vowels in French and elsewhere.

Prof. Tobias Scheer (Université de Nice, CNRS 6039)

Every phonologist knows that schwa is special. The most salient property of schwa is its own fate: diachronically speaking, it tends to disappear and to produce, in synchronic systems that precede this evolutionary stage, vowel-zero alternations.

The present talk draws attention to a property of schwa which, contrary to the events related to its own body, has not been the focus of cross-linguistic investigation in the past. The property at hand is the (in)capacity of schwa to do what regular (full) vowels do. That is, the description of many phonological processes need a special proviso for schwa in their structural description, which typically reads "except before schwa" or "only before schwa". Significantly, but without surprise, schwa can never do "more" than regular vowels; in case schwa and full vowels show impaired behaviour, schwa systematically fails to do something that full vowels do. For example, schwa may be unable to guarantee the existence of a preceding cluster: /Ng/ in German (but not in English) is simplified to [ŋ] before schwa (compare English *finger* [fɪŋɐ] and German *Finger* [fɪŋɐ]).

Hence, this talk aims at compiling cases where neighbouring segments fail to be affected by schwa (but do experience the influence of full vowels). In a second step, the relevant pool of phenomena is classified according to the (non-)effect observed. Finally, I argue that theory should reflect the two families of schwa-effects that will have been identified, i.e. failure to support (e.g. preceding clusters) or failure to diminish other segments (e.g. vowel-zero alternations, cf. below).

The first thing to be done is to define which objects exactly count as schwa. I introduce a phonological, rather than a phonetic definition: a vowel is a schwa if and only if it alternates with zero. In the overwhelming majority of cases, of course, vowels that correspond to this definition are also phonetic schwas, i.e. central vocalic articulations. But there is a sizable amount of schwa effects that are triggered by vowels which alternate with zero, but are phonetically peripheral. The prime evidence here comes from Slavic, where alternating vowels are systematically non-central (e.g. all of Western [ɛ] and Eastern [ɛ,ɔ] Slavic as well as Serbo-Croatian [a]) but still fail to produce the same effect on neighbours as non-alternating vowels. The reverse is also true: there are cases where phonetic schwas do not alternate with zero and produce exactly the same effect on neighbours as peripheral vowels. One case in point is the high schwa [ɨ] that is found in Polish (spelt "y"). Hence the only thing that appears to be shared by all vowels that participate in the schwa-phenomenology is the fact of alternating with zero.

This definition being set, I review a number of phenomena where schwa has a specific (non-)bearing on neighbours. All cases that I have come across concern preceding segments, and this is the direction of most phonological processes anyway. I do not expect to find cases where schwa has a specific effect on the environment to its right. The cases of schwa-effects may be classified informally according to the segment

that is affected, i.e. either a vowel or a consonant. Instances of both types will be reviewed:

1. the aforementioned distribution of [ŋg] and [ŋ] in German: "[ŋ] in closed syllables (both internal and final) and in open syllables if followed by schwa, [ŋg] in open syllables if followed by a non-schwa"

2. Dutch schwa-epenthesis: "sonorant-obstruent clusters are broken up by a schwa in final closed syllables and in open syllables if followed by schwa, while no schwa-epenthesis occurs in open syllables if followed by a non-schwa"

3. vowel-zero alternations in modern Slavic languages (e.g. Czech, Polish): "vowels in closed syllables (both internal and final) and in open syllables if followed by schwa, zero in open syllables if followed by a non-schwa"

4. French ATR of mid vowels: "-ATR vowels in closed syllables (both internal and final) and in open syllables if followed by schwa, +ATR in open syllables if followed by a non-schwa"

5. distribution of [ə] and [ɛ] in French: "[ɛ] in closed syllables (both internal and final) and in open syllables if followed by schwa, [ə] in open syllables if followed by a non-schwa"

6. vowel length in Czech: "short vowels in closed syllables (both internal and final) and in open syllables if followed by schwa, long vowels in open syllables if followed by a non-schwa"

7. o-u and ą-ę (nasal vowels) alternations in Western Slavic (Polish, Czech, Slovak, Sorbian): "u,ą in closed syllables (both internal and final) and in open syllables if followed by schwa, o,ę in open syllables if followed by a non-schwa"

8. Italian instantiation of the Romance diphthongisation (diachronic): "original Latin short stressed e,o in closed syllables (both internal and final) (festa, corpo) and in open syllables if followed by schwa (**e**dera, m**o**bile), ie,uo in open syllables if followed by a non-schwa (siede, nuovo)".

These are all instances that demonstrate the particular weakness of schwa: it produces the same effect on preceding segments as closed syllables, a context that is known for its damaging effect. Also, it is interesting to observe the kind of effect that schwa *fails* to produce: sometimes it fails to support "big" objects such as consonant clusters or long vowels, which, as a consequence, will somehow be damaged (they undergo shortening, epenthesis, deletion, are prevented from diphthongising…). But at other times, it fails to diminish a segment, which may therefore remain undamaged (vowel-zero alternations). Therefore, two different families of processes must be recognized: the same mechanism in exactly the same context could not possibly produce destructive (vowel-zero alternations) and supportive (the rest) effects at the same time. Accordingly, I propose to encode this natural contrast by two lateral relations, Government and Licensing. In the syllabic model that I promote, these lateral forces are multifunctional in the sense that they also account for all syllabic contrasts, i.e. Coda vs. non-Coda, open vs. closed syllables etc. This is to say that they do not serve the sole purpose of encoding the segmental effects described. Rather, an attempt is

made to unify two sets of phenomena that usually remain unrelated: the definition of syllable structure and the effect thereof.

Finally, I make a point regarding the parametric situation of schwa. As a matter of fact, for each process mentioned above there is a language where schwa is not any special. That is, it behaves like a regular full vowel. For example, /Ng/ is reduced to [ŋ] before schwa in German, but not in English. Or alternation sites are vocalised before schwa in Czech, but not in Slovak (dom**e**ček "house double dim." in the former, against dom**ø**ček in the latter, the e of -ek alternates with zero itself, hence is a schwa). This leaves us with a minimal parametric channel for schwa: it either behaves like a regular vowel or not. If not, it fails to produce any influence, i.e. behaves like a zero. The goal of the parameterisation and the lateral tools mentioned, then, is to capture the impressive surface-variation displayed above by only two parameters: schwa can or cannot govern, schwa can or cannot license.

English feet since 1400.
Prof. Chris Golston (California State University Fresno)

Various sources of data (metrics, acquistion, phonotactics, wordgames) suggest that English words are oganized into metrical feet that are only weakly divisible into syllables. I call these *English feet* and explore their properties.

English metrics since 1400 or so uses two types of rhyme, 'masculine' and 'feminine':

> *Whan zephirus eek with his sweete <u>breeth</u> / Inspired hath in every holt and <u>heeth</u>*
> *Tendre croppes, and the yonge <u>sonne</u> / Hath in the ram his halve cours <u>yronne</u>,*
> (Chaucer, *Prologue* 5-8)

Masculine rhymes like fit linguistic theory neatly: the syllable rhymes match (*eeth*) and the onsets (*br, h*) do not. Feminine rhymes are problematic because the part that matches is not a constituent: the rhyming part (*onne*) is the rhyme of the first syllable and all of the second syllable; the foot-initial onset (*s, r*) does not match, but the foot-medial onset does (*n*).

Ontogeny recapitulates phylogeny here: my daughter's speech changed all dorsals to coronals foot initially and kept them distinct elsewhere (Bills & Golston 2001):

> ˈtæks 'cracks' ˈtɑləə 'collar' ˈtɪs 'kiss' ˈtɑkˌɯotʃ 'cockroach'
>
> ˈtɪdz 'kids' ˈtɑfi 'coffee' ˈtɪkɪt 'cricket' ˈtʌpˌteks 'cupcakes'
>
> ˈfɪŋgʊ 'finger' ˈæɯɪk 'Alec' ˈtæbiz 'crabbies' ˈbɪgi 'Sine's reflection'

The pattern strongly suggests that 'English feet' guide language learning.

English phonotactics (Jensen 2000) are also only describable in terms of English feet: e.g., [h] and clear [l] only occur foot-initially, while [ŋ] and dark [ɫ] only occur foot-medially and foot-finally. Aspiration on stops is realized fully foot-initially [ˈtʰɪmɪ] and lost foot-medially foot-finally (Davis 2001).

Finally, at least one word-game in English (eg, Hammond 1990) is based on the same English feet: only words that beginw with an English foot can be used in the game.

All this leads to a problem with stress in English, which seems to be parsed by moraic trochees (Kager 1989), not by English feet. I end with a proposal for resolving the conflict.

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Roundtable discussion: *Are there or are there not binary feet in French metrics?*

Chaired by Dr. Jean-Louis Aroui (Université Paris 8, UMR 7023)

Metrists who are native speakers of French usually consider French metres to be simply counting metres, where a metre is a string of metrical positions which are not grouped into metrical constituents other than the line or the half-line. Generally speaking, a metrical position is associated to one and only one syllable, and syllabification obeys very strict prosodic rules, specific to verse. Even a generative metrist like Verluyten (1982, 1989) did not consider grouping structures such as the foot or the metron for the French Alexandrine. The template he proposed is a concatenation of two strings of six positions each.

However, for at least two centuries, some non-French metrists have tried to characterise French metres as ictic or footed constructions. The ictic approach has had its time of glory. Initially proposed by Scoppa (1811-181'), it was used by some French metrists, and it appeared for the last time in Milner & Regnault's book (1987). To my knowledge, the footed approach is more recent. It can be found, in various forms, in Hanson (2009) and Fabb & Halle (2008). It is also implied in Golston & Riad's theory (1997, 2000).

I shall overview the history of the above approaches, trying to highlight their advantages and/or disadvantages, in order to then introduce a theoretical debate about constituency in French metres, keeping in mind the need for consistency in metrical typology.

Second session (28ᵗʰ June)

On the divisibility of simple meter
Prof. Benoît de Cornulier (Laboratoire de Linguistique de Nantes)

				chrono-length.	Metrics ?
1	chron.	**Un-** ^ **tel** ^	**u**n' chan- **son**	d 67cs	d = d
2	chron.	**O**rléa**n**s,	**B**e**au**gen**cy**…	d 180 cs	d = d
3	gloss.	Guéris**on**	Recouv**rez**	n 3v	3 ?
4	gloss.	Comme à cette fleur, la vieilless(e)	Fera ternir vostre beauté	8v	8 ?

Call "d" the (non grammatical) duration of the interval between the successive instants of vowel onsets printed in bold characters in 1 (a cheer not sung) and 2 (sung). These durations are not fixed, and may vary more or less freely from an utterance of the cheer or song to another (for instance, « 67 » and « 180 cs » respectively) ; but *inside* each utterance, they provide duration equivalences by their periodicity (measures such as 67 and 180 are not metrical per se).

In a similar way, in 3 and 4, the poetical verses above (by Clement Marot and Ronsard, XVIth century) are associated with lengths in number of vowels (3 or 8) ; these two lengths, invariable from one occurrence (utterance) to another, are generally considered to be meters, and, for some twenty or thirty years, have sometimes been characterized by metrical schemas including such relations as shown below :

1	2	3		1	2	3	4	5	6	7	8
x	x	x		x	x	x	x	x	x	x	x
Gué-	ri-	son		Comm'	à	cet-	te	fleur	la	vieil-	les-(se)
Re-	cou-	vrez		Fe-	ra	ter-	nir	vos-	tre	beau	té

where the x's correspond to vowels ordered from 1 to n, according to metrical « positions » seeming to render in detail the internal structure of the meter. In two lines having the same meter, 8 for instance, two vowels sharing the same order, for instance 5th out of 8, would thus be metrically equivalent insofar as they are associated with the same metrical position (5).

My purpose is to suggest that the difference between the two types of « measure », by a duration which is non-grammatical (chrono-duration) or grammatical (by number of vowels), is not as radical as may first appear ; that the

rhythmic impressions obtainable from lengths in number of vowels are like primitive qualities (qualia) rather than of a quantitative nature ; that they are not divisible and cannot be mentally associated, one by one, with a division of the line (sequence of words) in semiotic units (words, morphemes) or formal parts (phonemes, syllables).

The metrics of English songs: Towards a non-modular view of text-setting.

Dr. Rosalía Rodríguez-Vázquez (Universidade de Vigo & UMR 7023)

Over the last twenty years, the analysis of the interactions between text and tune in vocal music has developed as a separate field of study within General Metrics. Up to the present, all accounts of text-setting have supported a modular view of their object of study, according to which 'song' is 'a composite which combines two objects each with its own structure, a linguistic object – text – and a musical object – tune' (Dell and Halle 2009).

This paper will present evidence against the modular view of text-setting argued for in Hayes and Kaun (1996), Kiparsky (2006), Fabb and Halle (2008) and Dell and Halle (2009) by analysing several instances of English folk songs contained in different collections.

I apply metrical and grouping constraints to a sample corpus of songs in order to prove that i) the same metrical and grouping constraints are at work and ranked equally in the text and the tune of English folk songs, ii) the fact that the same lyrics can be sung to different tunes is only a by-product of the recurring metres used in folk-song, iii) in certain vocal genres, the composer/performer of a song does not construct a match between three tiers of rhythmic structure – linguistic prominence, poetic metre, and music rhythm – but between two, namely linguistic prominence and musical rhythm.

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Discrepancies between linguistic stress and musical rhythm in Italian songs: A first exploration.

Dr. François Dell (EHESS-CNRS) & Dr. Teresa Proto (Paris 8, UMR 7023)

We report on work in progress on text-to-tune alignment in Italian songs, focusing on mismatches between stress and rhythm. We are looking for simple constraints that would allow us to set apart the well-formed settings from the ill-formed ones. Our 'constraints' are not OT constraints; they are rather empirical generalizations stated in terms meant to facilitate comparison across languages and singing traditions. Our data are drawn from the settings attested in a corpus of around 900 lines of verse and from native speaker judgments of acceptability.

To represent the rhythmic structure of the melodies we use the metrical grids employed by Lerdahl and Jackendoff (1983) and Hayes and Kaun (1996), among others. To represent the distribution of stresses in the Italian lyrics we use formally similar grids that are reminiscent of those advocated for Italian by Nespor and Vogel (1986, chapter 10).

Our constraints disfavor configurations in which the relative strength of two syllables in the rhythmic structure of the melody is not matched by their relative prominence in the stress grid. The stresses taken into account are not only the main stresses of words but also those of phonological phrases. Some mismatches involve non-adjacent syllables.

Our results raise questions about the relationship between the stress pattern of Italian and the fact that in songs certain types of misalignment are licit while others are not.

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The prosodic metrics of Tashlhiyt Berber songs

Prof. Tomas Riad (Stockholms Universitet & Université Paris 8)

In thorough and enlightening studies, Jouad (1995) and Dell & Elmedlaoui (2008) establish a number of regularities in the patterning of meter in Berber songs.

L4m-a:	Metrical feet contain four moras
L4m-b:	Metrical feet begin with L, i.e. {LHL, LLLL, LLH} (*{HH, HLL})
NoHH:	No Tashlhiyt or Tamazight meter can require lines to contain adjacent H syllables
Class:	There are two classes of permissible verse feet: {LHL, LLLL} and {LLH}
ALTERN:	Adjacent feet do not belong to the same class […]

I interpret these regularities in terms of linguistic constraints, as per the theory of Prosodic Metrics (Golston & Riad 2000). I show the following: L4m-a follows from unmarked binarity, under the assumption that poetic meter is made from the unmarked representation of the linguistic prosodic hierarchy. L4m-b and NoHH both follow from the high ranking in Berber of the linguistic, rhythmic constraint NOCLASH. Permitted verse feet are precisely those that *don't* violate NOCLASH. Class follows from the division into rhythmically unmarked {LL.H} and lapsing verse feet {L.H.L, L.LL.L}. ALTERN follows from "violation is minimal" (of NOCLASH).

This approach avoids duplication and grounds the poetic meter in the grammar of Tashlhiyt, and also predicts a close correspondence between the meter of the songs and the productive prosodic morphology, eg. noun formations (Jebbour 1999), and language games (Lahrouchi & Ségéral 2009).

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The line as a relevant metrical unit
Prof. Nigel Fabb (University of Strathclyde)

The line is a section of text with no linguistic status (it is not a phonological or syntactic constituent). It is possible to state generalizations which refer to the line, and there are characteristic features which are found cross-linguistically in lines. Some of these generalizations involve 'meter', and the question for this paper is whether meter (including rhythm and counting, along with some related phenomena such as caesurae) is best understood in terms of the line, or in terms of some smaller unit (mora, syllable, foot).

I show that the theory of Fabb and Halle (2008) regulates rhythm always with reference to the line as a whole, while most other approaches regulate rhythm with reference to some smaller unit (which is then repeated within the line), and I evaluate the two types of approach. In the Fabb and Halle (2008) theory there is no metrical structure within the line (any regulation must refer to the grid as a whole not to a sub-part of the grid as there are no sub-parts); most other approaches have an internal structure to the meter of the line (e.g., involving metrical feet).

Types of meter which seem particularly suited to the former approach include non-rhythmic counting meters and aperiodic rhythmic meters; types of meter which seem particularly suited to the latter approach include rhythmic periodic meters (e.g., iambic pentameter). I consider whether some of the non-rhythmic counting meters and aperiodic rhythmic meters should really be reinterpreted as having a periodic structure (Deo 2007), such that they can be understood at the level of the small unit.

I consider rhythmic periodic meters, and examine (i) whether rhythmic variation is local or relates to the line as a whole (e.g., is sensitive to position in the line); (ii) how rhythmic variety can be understood (e.g., if where is a principle that the rhythm must vary, cf. Golston 2009); (iii) whether missing and extra syllables are best understood at the level of the line or of the small unit.
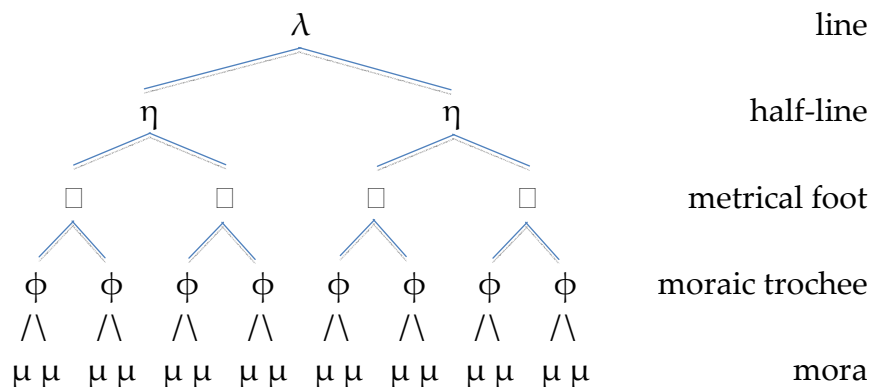
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Reconstructing a meter for Proto-Indo-European
Prof. Chris Golston (California State University Fresno)

I present evidence for a reconstructed PIE *quantitative tetrameter* with 16 moras per line:

λ	line
η η	half-line
	metrical foot
φ φ φ φ φ φ φ φ	moraic trochee
/\ /\ /\ /\ /\ /\ /\ /\	
μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ	mora

Evidence comes from three native IE meters: anapestic tetrameter from Greek drama, a family of meters called 'trochaic tetrameter' in Sanskrit (Deo 2007), and the alliterative verse of Old English.

The first ingredient to the reconstruction is looking past rhythmic analyses that force data into anapestic (Greek), trochaic (Sanskrit), or mixed (Old English) foot-types. If we focus instead on observable quantities (the moras in heavy and light syllables), the similarities are fairly easy to see and support reconstruction of a quantitative tetrameter for the parent language. A purely quantitative, non-rhythmic analysis already exists for Greek anapests (Golston & Riad 2000) and Old English verse (Golston & Riad 2001, Golston 2009), and I extend the analysis to Sanskrit meters here. The second key ingredient is Deo's (2007) insight into Sanskrit meter, which distills over 50 individual meters in the classical tradition into a single meter, her 'trochaic tetrameter'; traditional understanding of Sanskrit meter hides profound similarities with other meters that Deo's analysis helps bring out.

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