

**LING620, Spring 2021**  
**Seminar on Prosody/Syntax Relations**

[Mark Liberman](#) and [Martin Salzmann](#)

This seminar will explore the relations between prosody and syntax, with an eye on relevant issues at other levels of description, especially focus, information structure, and allophonic variation. We'll combine a survey of the field's intellectual history with a future-oriented assessment of current descriptions and theories. The tentative schedule (for the virtual discussion sessions) is Fridays 9:00-12:00. We welcome participants interested in syntax, phonology, and phonetics, from psychology and computer science as well as linguistics. Selection among the dozens of relevant subtopics will be guided by audience interest.

It's a common-sense observation that "We read and recite, not by syllables, words, or sentences, but by groups of related words called phrases", as a [1923 high-school rhetoric textbook](#) put it. And as the authors go on to explain, "Phrasing depends upon the thought, not upon the part of speech, punctuation, or breath supply. [...] Use shorter phrases in reading subject matter hard to understand and in emphasizing details. Use longer phrases for familiar subject matter and for giving a general impression." They go on to talk about the rhetorical use of emphasis, melody, and voice quality. And they tell us similar things about the dynamics of gesture, gaze, and posture.

But is all that stuff part of "language"? Or is it just part of an expressive system that we share with other animals, along with intelligent presentational use of the audience's predictable interpretive responses to the available modulation of the vocal (and other) organs, like the use of font, color, size, orientation, and placement in advertisement text?

Early generative grammar, as of Chomsky and Halle's 1968 *Sound Pattern of English*, took the latter view. According to that theory, phonology is a sort of wasting disease of structure. Its input is a set of fairly abstract morpho-phonological word representations, embedded in a surface syntactic structure. And its output is simply a sequence of phonemes, implemented as a matrix whose rows are universal phonetic features, and whose columns represent the string of phonemes, with matrix cell values being plus or minus (except for stress, which is cumulatively numeric). The phonology operates cyclically on the input structure, dissolving it as it goes along, and creating no new structures. No syllables; no prosodic phrases; no intonational tunes; no focus or emphasis; nothing but the phoneme string.

And the attitude towards all that other stuff was pretty much, well, it's just expressive presentation, like gesture, along with various anatomical and physiological necessities. Syllables? "You can only open your mouth so far before you have to close it again." Intonation? "The prototypical Englishman, forbidden by convention from waving his hands, waves his larynx instead".

This is actually a good default hypothesis, because surely some aspects of speech are "part of an expressive system that we share with other animals, along with intelligent presentational use of the audience's predictable interpretive responses to the available modulation of the vocal organs, like the use of font, color, size, orientation, and placement in advertisement text". We obviously need to make (aspects of) morpho-syntax, semantics, and pragmatics available for phonetic realization and interpretation, but it's not obvious that we need any new phonological structures.

So what kind of arguments have led the field (before and after SPE) to go beyond this default?

(1) Better phonology (or morphology or syntax or semantics). It's argued that (the right) phonological structures let us capture generalizations (synchronic, diachronic, or typological) more clearly and cleanly. In addition to better morphophonology (based on syllable and foot structure, phrasal domains, etc.), this includes

(2) ... word order patterns that cannot be accounted for on the basis of the regular phrase structure/movement rules of the language, e.g. prosodic constraints on phrase size, and prosody-driven movement/clitic placement.

(3) Differences among languages and language-varieties. It's argued that if languages use (aspects of) prosody differently, it isn't just natural expressive modulation.

(4) Representation of semantic and pragmatic content. It's argued that if we want to do formal semantics and pragmatics in a serious way, we need to say more about prosody. Chomsky followed Harris's lead in banning "meaning" and "communication" entirely, as what he called a "mystery" rather than a "problem"; but meaning and communication have leaked back into the field in various ways since then.

Among the many specific topics that arguments in this area have been based on, we can list

- local sound system structure, such as onsets, rhymes, syllables and feet;
- phrase-level aspects of sound systems, such as sandhi, liaison, raddoppiamento fonosintattico, tone-spreading, lengthening, stress, intonation, rhythm;
- clitic placement;
- movement operations that are said to be driven by prosody (e.g., hyperbaton in Latin, pronoun displacement in Irish, lowering in Tagalog) or restricted by prosody (e.g., heavy-NP-shift, extraposition);
- syntactic constraints that have been reanalyzed as prosodic (e.g., Comp-trace-effects);
- prosodic restrictions on the possibility of syntactic doubling (e.g., verb doubling, wh-doubling).

We'll evaluate (some of the) versions of these arguments, critically and in detail. They all offer important research opportunities to researchers, often because of serious gaps or faults in the existing work. Our goal is to find approaches and methods for bringing greater empirical rigor to the science(s) of prosody.