

Part 1: California C, 7:30 – 9:00 PM
Part 2: California C, 9:00 AM – 12:00 PM

Phonology: An Appraisal of the Field in 2007

Organizers: Larry M. Hyman, University of California-Berkeley
Ellen Kaisse, University of Washington

Participants: Abigail C. Cohn (Cornell University)
Bruce Hayes (University of California, Los Angeles)
Paul Kiparsky (Stanford University)
Donca Steriade (Massachusetts Institute of Technology)

Five phonologists discuss the current state of phonology from their different perspectives. Part 1, a one and a half hour plenary, previews the symposium presentations and allows the assembled LSA membership to hear and contribute to the discussion. The presentations in Part 2 treat the advent and implications of laboratory phonology, the extent to which different phonological theories aid in phonological description, new views of the relationship between phonology and morphology, and the possibility of abandoning certain classical idealizations in phonology. Each discussant gives a presentation with time for questions after each. A 30-minute audience and panel discussion concludes Part 2.

Abigail C. Cohn (Cornell University)

The framing of laboratory phonology & theoretical phonology & the influence of early generative theory

I attempt to address two questions: (1) the relationship between generative phonology and its descendants and laboratory phonology, and (2) the ways in which assumptions in early generative theory have defined and delineated the fields of phonetics and phonology. With regard to the first, I consider what led to the codification of ‘laboratory phonology’ (LabPhon) in the mid-1980s. At the outset, the central goals of LabPhon included framing issues in terms of a richer way of investigating phonology and reconciling phonological and phonetic approaches to the investigation of human sound systems. LabPhon was seen as an enrichment or complement to theoretical phonology; now, it is seen by many as an alternative. I consider this shift in light of the evolution of generative phonology (broadly defined), as optimality theory has become the dominant paradigm in theoretical approaches to phonology in North America. This more juxtapositional stance is consistent with recent trends whereby there is increased polarization and fragmentation in terms of how we talk about and how we do phonology. In the second part of the paper, I suggest that this polarization is counterproductive to the goals of reaching a deeper understanding of the nature of human sound systems as part of human cognition and human behavior. In highlighting the differences, we lose sight of how much of a shared agenda we have in our investigations. We need to understand how we frame both assumptions and models and how this framing affects our investigations. I consider how an interwoven set of assumptions of early generative theory, framed in Chomsky (1965) *Aspects of the theory syntax* and other seminal work, have shaped our theories and our approaches to linguistic investigation. These include: the definition of the ideal speaker/hearer within a homogeneous speech community; the separation of competence and performance; the importance of modularity and the avoidance of redundancy; and the nature and source of language universals, and the implications for the nature of the task of language acquisition. I argue that in large measure these assumptions are approximately correct, but not in the literal sense in which they are often interpreted. If we can unpack and rethink these assumptions, we will be able to move away from a polarized discourse and come to understand the ways in which these assumptions are useful and the ways in which they are not. To move forward, we need to be willing to question our most cherished assumptions, and we need to be willing to move away from a polarized discourse about the right theory. We can gain new insight into some of the central questions before us through a more synthetic and collaborative mindset.

Bruce Hayes (University of California, Los Angeles)
Phonological theory: Finding the right level of idealization

Every scientific field must find the right level of idealization at which to work. In phonology, four kinds of idealization are widely adopted. (1) Data workers often abstract away from free variation, recording only the most frequent phonetic form for any particular word. (2) Analysts idealize across the lexicon, identifying the patterns of alternation that are most frequent and analyzing only these. (3) The question of how to identify and analyze patterns in paradigms is reduced to a narrower question, that of how to derive all the members of a paradigm from a single underlying representation of its stem. (4) Analysts give themselves carte blanche to explore the range of analyses permitted under a theory, making the tacit assumption that some theory of the future will explain how the chosen analysis could be discovered by children learning the language. I do not mention these idealizations in order to scorn them; in fact, I think they have been extremely useful, enabling the development of insightful and sophisticated phonological theories that will serve us well as we seek to extend our understanding. However, the choice of idealizing assumptions is never made a priori, and maturing fields often find it useful to try to account for their data in less idealized form. In phonology, current work is exploring what might be done by abandoning the four idealizations just mentioned. My overall conclusion is that with accumulating theoretical progress, the idealizations that were made in the infancy of our field may no longer be necessary. Aiming higher, we can hope to develop our theories in ways that are both more sophisticated and more responsive to data.

Larry M. Hyman (University of California, Berkeley)
Phonological theory & description: Is there now a gap?

I consider the relationship between phonological theory and phonological description, addressing questions like: What has it been? What is it now? What should it be? I suggest that while there should ideally be a symbiotic relationship between the two, there are reasons for concern. Although there is nothing incompatible between theory and description (which are sometimes even hard to disentangle), certain recent trends have encouraged theoretically-minded phonologists to turn away from ‘deep’ (e.g. morphophonemic) description of phonological systems. It is easy to demonstrate the impact of successive movements in 20th century phonology on the descriptive work of their time: Structuralist phonemics, classical generative phonology, nonlinear phonology, lexical phonology, and prosodic domain theory have all provided concepts and tools that have informed and facilitated phonological description. The question is whether current theories do this as well. Most of my attention is on optimality theory, which has had an impact well beyond phonology. Much of the current research in phonological OT can be conveniently grouped into two efforts: (1) work addressing (often problematic) issues which arise as the result of certain basic assumptions of the theory; (2) application of the theory to what it does best. Theoretical goals as well as technological advances have also stimulated computational and psycholinguistic work. The question is whether the OT revolution has been as useful to descriptive phonology as prior frameworks. I suggest it has not been, largely because of its turning away from questions of (underlying) representation and its focus on surface outputs. Those who attempt to apply OT to deep description will find that there is a ‘too many analyses problem’ that makes it hard to confidently proceed with the same kind of argumentation that was prevalent of descriptive work in pre-OT generative phonology. Instead, OT has adopted a kind of self-conscious universalism that, from the point of view of the individual phonological system, is not particularly description-friendly. I discuss reasons why there may for the first time now be a gap between phonological theory and description.

Paul Kiparsky (Stanford University)
Description & explanation: English revisited

Like SPE and autosegmental and metrical phonology, OT has raised important new why-questions and provided answers to many of them. But while those earlier theoretical advances also made the practice of descriptive phonology easier, OT has made it harder. However robust a phonological generalization may be, we can't incorporate it into an OT grammar until we understand how to derive it from ranked universal constraints. The difficulty of producing reasonably comprehensive and perspicuous phonological descriptions under this regime no doubt accounts for some of the continuing resistance to OT. This raising of stakes has the virtue of forcing better explanations but also leads in practice to the narrowing of the empirical domain. I revisit SPE-type analyses of English phonology and ask what insights of them OT salvages, how it improves on them, and what it is forced to give up. I argue that stratal OT can capture what is right about them.

Donca Steriade (Massachusetts Institute of Technology)
Correspondence, ph-dependence, & the structure of lexical entries

Phonology models the mapping between expressions stored in a mental lexicon and their spoken and perceived surface counterparts. In a rule-based system, this mapping is a series of deformations undergone by the lexical entry. Different combinations of morphemes undergo this process in parallel. Each derivation is shielded by ignorance from the outcomes of all other derivations. In cyclic derivations, when one expression is syntactically nested within a larger one, the rule system occasionally succeeds in characterizing the systematic identity of two distinct expressions, e.g. the shared portion of [A] and [[A]B]. But cyclicity can ensure in a rule system only that the shared [A] parts are handled identically by the rules, but not that they surface identically. For about a decade now, phonologists have experimented, in the context of OT, with the alternative of grammars consisting of surface-oriented, static conditions. Of interest here are the conditions that require identity or distinctness between certain pairs of expressions. I build on this body of work to highlight a phenomenon I call ‘ph(onological)-dependence’ and which can now be understood, precisely because explicit correspondence conditions have become part of grammar. Ph-dependence: A phonological process can apply to the dependent form of a lexical item if it has applied to one of its basic forms. I argue that the mechanism that gives an account of ph-dependence is the possibility of correspondence between a candidate and the basic form or forms contained in a lexical entry. I discuss the mechanism that leads to storage of such forms. I then show that one can use the lack of interaction between forms that are morphologically but not semantically related and between forms that are semantically but not referentially related to explore the principles that structure these complex entries.