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# **Slavic Phonology in the United States**

Slavic phonology, the study of sound patterns in the Slavic languages in their synchronic and diachronic aspects, has always been a diverse field and it continues this tradition today. Work in phonology intersects with historical linguistics, dialectology, morphology, syntax, and phonetics, not to mention sociolinguistics, language acquisition, and language teaching. Since these related fields (with the exception of phonetics) are discussed separately in this collection, I will limit my discussion of issues in Slavic phonology to the relationship between theoretical phonology and Slavic phonology in the U.S., with a primary focus on synchronic (as opposed to diachronic) phonology.<sup>1</sup>

Slavic phonology has undergone significant changes both in its research program and in its position within Slavic linguistics in the past fifty years. At one time, Slavic phonology was at the forefront of both diachronic and synchronic Slavic linguistics, but if we are to judge from the number of publications in phonology as compared to those in other areas of linguistics, phonology has now ceded its position to work in syntax. The other major shift in the field is that Slavic phonology and contemporary linguistic theory are to some extent moving in different directions so in a sense there are two types of Slavic phonology: that practiced by Slavists and that done by general linguists, with very few individuals bridging the gap. The field is at a very critical juncture and the future of Slavic phonology will to a large extent be determined by how we train our graduate students today.

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Background. In America, Slavic phonology began with the arrival an appointment of Roman Jakobson to a position at Columbia University in 1946.<sup>2</sup> The author of the remarkable seminal work, Remarques sur l'évolution phonologique du russe comparée à celle des autres langues slaves (1929), was convinced that language change should be viewed as change in phonological systems rather than as a series of individual phonetic sound changes. His search for an explanation of linguistic phenomena and the recognition that theory is central to any understanding of sound patterns laid a solid foundation for productive work in Slavic linguistics in America for the next fifty years or so. Many students of Jakobson and their students continue to work in a version of Prague School structuralism to this day. Among the questions studied are the morphological role of stress, the nature of phonemic inventories and language typologies, and a great number of issues in historical phonology.<sup>3</sup> In 1987, H. Aronson noted that the structuralist tradition "remains dominant in articles dealing with South Slavic and Balkan linguistics" (p. 191), at least in the publications of the *Slavic* and East European Journal (SEEJ), if not elsewhere. Since most of this work was in the area of phonology, this means that structuralism prevailed as the theoretical framework for American Slavists working on the South Slavic languages well into the late 1980's, with the notable exception of E. Scatton's work on Bulgarian, some of which appeared in Folia Slavica.<sup>4</sup> In West Slavic linguistics the story was much the same, though here the introduction of a new theoretical vision was beginning to be seen in Slavic studies by the 1970's.<sup>5</sup> East Slavic linguistics with its primary focus on Russian phonology, and in particular, Russian stress, enjoyed the coexistence of two or more theoretical points of view, among them the generative approach of linguists such as M. Halle ("The Accentuation of Russian Words," Language 1973:312-48), and Slavists such as H. Coats (together with T. Lightner, "Transitive Softening in Russian Conjugation," Language 1975:338-41) and D. Worth, ("Grammatical Function and Russian Stress," Language 1968:784-91, "On Cyclical Rules in Derivational Morphophonemics" in *Phonologie der Gegenwart* 1967:173-86), and others.<sup>6</sup>

But Jakobson was not just a great Slavist, he was also a great linguist, and among other contributions, his concept of sounds as consisting of distinctive features in binary opposition was a major revolution in linguistic theory.<sup>7</sup> The notion that a sound or a phoneme may be characterized by concurrent independent properties of articulation or acoustic perception, i.e., Distinctive Features, opened up a completely new way of looking at sound patterns and their behavior. The theory of distinctive features was more fully worked out in Jakobson, G. Fant and M. Halle, Preliminaries to Speech Analysis: The Distinctive Features and Their Correlates (1952) and in Jakobson's Fundamentals of Language (1956). Important applications of early distinctive feature theory include M. Halle's, The Sound Pattern of Russian (1959). Distinctive feature theory has been modified significantly since then, first by a revision of its binary nature to include a more Trubetzkoyan (Grundzüge der Phonologie, Travaux du Cercle Linguistique de Prague, 7, 1939) approach in terms of the privative nature of some features and the centrality of markedness (feature specification and underspecification), later by a hierarchical vision of feature organization known in the theoretical literature as feature geometry (see G. N. Clements and E. Hume, "The Internal Organization of Speech Sounds," in J. Goldsmith, ed., The Handbook of Phonological Theory [1995], 245-306). Most recently, feature specification is taken to be the result of a series of constraints on feature faithfulness and feature markedness (e.g., C. Zoll, Parsing Below the Segment in a Constraint-Based Framework [1998]). All of these developments in distinctive feature theory started with Jakobson's insight that this was a better (more economical, general, explanatory, if you will) way to describe and explain the various sound patterns found in languages, both in their current state as well as in the changes they experienced over time. The central role played by Jakobson and Halle in these developments virtually ensured that the fields of Slavic linguistics and general linguistics were in continuous and productive dialogue.

But when the next major shift in theoretical phonology came in 1968 with the publication of N. Chomsky and M. Halle's, *The Sound Pattern of English (SPE)*, Slavic

linguistics began to diverge from developments in theoretical linguistics: some Slavists undertook to explore the implications of SPE phonology for the Slavic languages (among them H. Kučera, W. Browne, H. Coats, J. Foster, E. Scatton, A. Isačenko, H. Lunt, D. Worth, R. Steele), while others retained the previous Jakobsonian framework as their theoretical modus operandi (M. Flier, E. Stankiewicz, A. Schenker, and their students). The new paradigm of generative phonology was an extremely productive one and it is at this time that we begin to see an increased number of contributions to work in Slavic by general linguists, among them T. Lightner's book, *Problems in the Theory* of Phonology: Volume 1. Russian Phonology and Turkish Phonology (1972), which often served Structure of Russian courses in those departments that were keeping in touch with general linguists. H. Lunt's 6th revised edition of his Old Church Slavonic Grammar (1974) presents an epilogue of OCS generative phonology, a testament to the fact that Slavists and linguists were working together. Another case in point is H. Kučera's, "Language variability, rule interdependency, and the grammar of Czech," Linguistic Inquiry 1973:499-521. But Slavists not working in generative phonology were still active in theoretical linguistics, and articles by H. Andersen ("Lenition in Common Slavic," Language 1969:553-74, "A Study in Diachronic Morphophonemics: The Ukrainian Prefixes," Language 1969:807-30, "Diphthongization," Language, 1972: 11-50, "Abductive and deductive change," Language 1973:765-93) and M. Shapiro ("Explorations into markedness," Language 1972:343-64), for example, maintained both a Slavic presence in theoretical linguistics journals and a theoretical component in Slavic linguistics throughout the early 1970's.

Generative linguistics quickly spread throughout the American linguistics community and phonology was no exception. General linguists from abroad worked with their U.S.-based colleagues and a new type of Slavic linguistics began to be developed, carried out not so much by Slavists, as by general or applied linguists from Slavic-speaking countries. One notable example of such an undertaking is E. Gussmann's *Studies in Abstract Phonology* (1980) a book devoted entirely to Polish. By

the mid-1980's the gap between Slavists and general linguists working on Slavic linguistics was fairly wide. To cite just one example, the cycle and the cyclic application of phonological rules was an important issue in SPE and post-SPE phonology and several Slavists had interesting things to say about the application of this theoretical maxim to Slavic languages (e.g., D. Worth, "Vowel-Zero Alternations in Russian Derivation," *International Jouirnal of Slavic Linguistics and Poetics* 1968:110-23) during the early years of generative phonology. But by the time the cycle was reinterpreted as a component of Lexical Phonology, a work such as that by J. Rubach (*Cyclic and Lexical Phonology: The Structure of Polish* [1984]) which brought issues of Lexical Phonology to bear on Slavic language data did not cause much of a stir in Slavic Studies.<sup>8</sup>

Theoretical linguistics continued to explore modifications of phonological theory, but with very few exceptions, this research was carried out without the participation of Slavists. The insightful work done on tone languages and stress by general linguists (W. Leben's Suprasegmental Phonology, 1973; J. Goldsmith's Autosegmental Phonology, 1976/1979 and his Autosegmental and Metrical Phonology, 1990; B. Hayes', A Metrical Theory of Stress Rules, 1985 and later his Metrical Stress Theory: Principles and Case Studies, 1995) led to a major revision in the understanding of prosodic phenomena such as tone, stress, pitch accent, vowel length and syllable weight and it initiated new directions in phonology known as Autosegmental Phonology and Metrical Phonology.<sup>9</sup> The postulation of separate phonological tiers within the representation of sound systems was a profound change in the prevailing SPE theory (see J. McCarthy's Formal Problems in Semitic Phonology and Morphology, 1979/1985 and subsequent work) and these notions were extended to the representation of syllable structure. Whereas before the syllable was defined in terms of its boundaries (J. Hooper, An Introduction to Natural Generative Phonology, 1979; T. Vennemann, Preference Laws for Syllable Structure, 1988), now the syllable was viewed as consisting of skeletal positions, timing slots and/or weight units (moras, harking back at least to Trubetzkoy

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1939, if not poetics). The implications of this vision of the syllable were explored by N. Clements and S. J. Keyser, CV Phonology: A Generative Theory of the Syllable (1983), J. Levin, A Metrical Theory of Syllabicity (1985), L. Hyman, A Theory of Phonological Weight (1985) and in work on sonority such as E. Selkirk's article on syllables ("The Syllable," in H. van der Hulst and N. Smith, eds., The Structure of Phonological Representations [1982:337-83) and D. Zec, Sonority Constraints on Prosodic Structure (1988/1994), which includes substantive discussion of Bulgarian. Although the Slavic linguistic tradition is rich in discussions of the syllable (A. Abele, "K voprosu o sloge," Slavia 1924:1-34, and elsewhere; J. Kuryłowicz, "Contribution à la théorie de la sylabe," Biuletyn polskiego towarzystwa językoznawczego 8 [1948:80-114], and many others), from the Slavists we see C. Bethin's, Polish Syllables: The Role of Prosody in Phonology and Morphology (1992), but all other analyses in this framework that deal with Slavic language data (with very few exceptions, notably H. Kučera and G. Monroe, A Comparative Quantitative Phonology of Russian, Czech, and German [1968]) come from general linguists, e.g., J. Rubach's, The Lexical Phonology of Slovak (1993), M. Kenstowicz and J. Rubach, "The Phonology of Syllable Nuclei in Slovak," Language 1987:463-97, (which does cite the work of W. Browne, "The Slovak Rhythmic Law and Phonological Theory," Slavica slovaca 1970:253-56, the paper by D. Birnbaum, "Rising diphthongs and the Slovak Rhythmic Law," Harvard Studies in Phonology, 2 [1981:1-16], and A. Isačenko's, Spektrografická analýza slovenských hlások [1968]), or S. Inkelas and D. Zec, "Serbo-Croatian Pitch Accent," Language 1988:227-48, which cites the early work of W. Browne and J. McCawley, "Serbo-Croatian Accent," in a 1975 translation of the 1965 work published in Zbornik za filologiju i lingvistiku 8:147-51. A summary of developments in generative phonology may be found in M. Kenstowicz, Phonology in Generative Grammar (1994) which offers several case studies from the Slavic languages, and in J. Goldsmith's, The Handbook of Phonological Theory (1995).

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The most recent paradigm shift in theoretical phonology, Optimality Theory (A. Prince and P. Smolensky, *Optimality Theory: Constraint Interaction in Generative Grammar* [1993], J. McCarthy and A. Prince, *Prosodic Morphology: Constraint Interaction and Satisfaction* [1993], J. McCarthy and A. Prince, Faithfulness and reduplicative identity," in *UMOP* 18 [1995:249-384], R. Kager, *Optimality Theory* [1999]), is yet to see the extensive involvement of Slavists, and work done in this area with Slavic language data is almost exclusively being carried out by non-Slavists (a recent exception being M. Baerman's, "The evolution of prosodic constraints in Macedonian," *Lingua* 104 (1998:57-78), and his dissertation which appeared with LINCOM-EUROPA as a book, *The Evolution of Fixed Stress in Slavic*, 2000).<sup>10</sup> One indication of this is that in 1998, 1999, and 2000 (with one exception) all contributions in phonology to the Workshop on Formal Approaches to Slavic Linguistics were by linguists affiliated with Departments of Slavic Languages and Literatures. This has profound implications for the field of Slavic linguistics.

**State of the field(s): Overview.** Slavic phonology in America is thriving, and it is not. Contributions to the *Slavic and East European Journal (SEEJ)* in phonemics/phonology for the period 1990-99 constitute 32% of the total contributions in linguistics. This compares well with the preceding two decades when the figure was 16% in 1980-89 and 19% in 1970-79 (including two issues of *SEEJ* devoted to the Soviet-American Conference on the Russian Language which contributed 25 papers, seven of them in phonology). This means that in 1999 we were at the same level of phonology contributions to *SEEJ* as in the period 1960-69. This cycle is also reflected in the American contributions to the international congresses of Slavists: in 1963 there were 9 papers in phonology, the next four congresses saw between 3 and 4 such papers, with the 1988 congress hearing 6 papers in phonology (including 3 on the morphophonemics of stress). By the 11th Congress in 1993 and the 12th in 1998 the

number of papers focussing on sound patterns and sound changes increased to eight (though a significant number of these continued to be in the area of morphophonemics).

At the same time contributions to *Language*, the journal of the Linguistic Society of America, shows a completely different picture. Slavic phonemics/phonology was represented by 3-4 papers in the following decades: 1930-39, 1940-49, 1950-59, 1960-69. In the period 1970-79 there were seven articles in Slavic phonology, six authored or co-authored by Slavists (H. Andersen [2], M. Shapiro, M. Elson, H. Coats, K. Holden) and two by general linguists who had done extensive work in Slavic (M. Halle, T. Lightner). An eighth paper by S. Thomason included some Slavic (Russian) data in a discussion of opaque rules. So it is quite surprising to find that in the period 1980-89 *Language* published only two articles in Slavic phonology, both written by general linguists (M. Kenstowicz and J. Rubach on Slovak, S. Inkelas and D. Zec on Serbo-Croatian). The last decade saw only one article on Slavic phonology and it was written by a non-Slavist (J. Szpyra on Polish). The picture that emerges is that there is an increasing distance between Slavists and general linguists.

Yet there had been fairly active communication between Slavists and general linguists throughout the 1950's and 1960's, with the creation of *Slavic Word*, for example, which first appeared in 1952 as a short-lived supplement to the journal of the Linguistic Circle of New York, *Word*. It published some outstanding work during its brief four-year run.<sup>11</sup> The *International Journal of Slavic Linguistics and Poetics*, established by R. Jakobson, F. Whitfield, C. van Schooneveld, Chr. Stang in 1959 (later including E. Stankiewicz, D. Worth among its linguist-editors) showed a variety of contributors and theoretical approaches.<sup>12</sup> And another specifically Slavic publication, *Folia Slavica* (1977-87) contributed several articles to Slavic phonology from Slavists as well as general linguists.<sup>13</sup> The fairly recently (1984) established international journal devoted entirely to phonology, *Phonology Yearbook*, later renamed *Phonology*, includes work on Slavic, as do *Natural Language and Linguistic Theory* and *Linguistic Inquiry*, but such contributions are infrequent and tend to come from the same linguists.<sup>14</sup>

Two new initiatives changed the panorama for theoretical Slavic linguistics in the early 1990's. The first was a series of annual workshops on Formal Approaches to Slavic Linguistics (FASL), originally conceived as a focus group on Slavic syntax, which has now stabilized as an annual event of international reputation and participation. It is not surprising that the earlier workshops had none or only one paper on phonology, but there were two contributions in phonology in 1996, three in 1997, four in 1998, five in 1999 (counting a paper on metrics) and three in 2000. Contributions to FASL come from Slavists (K. Robblee, R. Feldstein, C. Bethin, N. Agman), but the majority is from non-Slavists.<sup>15</sup> The other development was the inauguration in 1993 of a new publication, *Journal of Slavic Linguistics*, edited by G. Fowler and S. Franks, devoted entirely to Slavic linguistics. Here the profile looks somewhat different: there were four articles in phonology in 1993 and none in 1998. The *Journal* has published work by Slavists (E. Andrews, S. Pugh, D. Birnbaum, C. Bethin, K. Langston, F. Gladney, R. Feldstein, H. Galton) and by general linguists (R. Plapp, A. Ramer) of all theoretical persuasions.

One measure of change in the field is the organization of panels at the Annual Meetings of the American Association of Teachers of Slavic and East European Languages. In the 1990's we began to see a shift from the traditional area panels such as East Slavic Linguistics to more thematic panels such as the one on the Russian verb. The panel on phonology was introduced in 1993, and the complete shift from area panels to thematic panels took place in 1996. Whereas the syntax panels often include extensive comparative work to test theoretical assumptions, there is an absence of similarly oriented work in phonology. The phonology papers given in other types of panels, such as Historical Linguistics or Dialectology, are few in number and their focus does not tend to be on theory.<sup>16</sup>

State of the field: Slavic phonology by Slavists. Slavists are primarily interested in Slavic languages and secondarily, if at all, in what the Slavic languages have to say about any given theory or in which theoretical perspective is most successful in organizing observed language patterns in Slavic. The goal of their study is the language itself, its history, dialects, and organization either alone or in a larger context. To get some idea of what American Slavists are doing in the area of phonology we could look at the past decade or so as reflected in various publications, starting with the American Contributions to the International Congresses of Slavists. The tenth international congress of Slavists in 1988 heard three American contributions in phonemics or phonology (M. Flier and H. Galton in historical, R. Lencek in dialectology). There were also three papers on morphophonemic stress (R. Alexander, J. Schallert, E. Stankiewicz). By 1993 there were five papers in historical phonemics/phonology (R. Alexander, C. Bethin, M. Flier, H. Lunt, A. Timberlake) and another on historical morphophonemic accent (J. Schallert). The contributions to the last 1998 congress were almost exclusively in historical linguistics or dialectology (H. Andersen [2], C. Bethin, H. Birnbaum, A. Corin, M. Flier, F. Gladney) with one in morphophonemics by R. Greenberg. It is fascinating to compare this with the 1963 International Congress of Slavists where the nine phonology/phonemics papers constituted more than half of all contributions in linguistics. With the exception of papers by M. Halle on Russian conjugation and cyclic rule application, H. Kučera's on functional loads and J. van Campen's on phonetic features, the rest of the contributions were in the area of historical phonology and dialectology (R. Abernathy, H. Birnbaum, R. Jakobson, G. Shevelov, U. Weinreich) or morphophonemics (E. Stankiewicz). But while this distribution of contributions reflects a fairly serious engagement and discourse with theoretical phonology at the time, the very similar profile of the 1998 contributions cannot be said to be engaged with contemporary linguistic theory at the same level. In fact, with one or two exceptions, the 1963 audience would have felt right at home with the work being presented in 1998.<sup>17</sup>

Work published in the past ten years in the *Slavic and East European Journal* for the most part focusses on historical linguistics, dialectology and synchronic stress patterns. Publications in the *Journal of Slavic Linguistics* continue the focus on stress and accent (R. Feldstein, F. Gladney, K. Langston), historical phonology (E. Andrews, C. Bethin, H. Galton, D. Birnbaum, F. Gladney, A. Ramer) and synchronic phonology (S. Pugh, A. Ramer, R. Plapp).<sup>18</sup> Thus Slavic phonology continues to have a very strong historical orientation, and accentuation in all of its manifestations is still the topic of many investigations. It is interesting to note that Slavic linguistics as a field is not unaware of developments in theoretical linguistics, and work in Slavic syntax, for example, has gone hand-in-hand with contemporary theory while not entirely abandoning its fundamental respect for accurate language description. Slavic phonology as practiced by most Slavists, on the other hand, tends to be much less receptive to new ideas. It is rare to find such a strong theoretical hold on a field in any other component of linguistic inquiry as early Jakobsonian thought continues to have on much of Slavic phonology.

Slavists, given the nature of their inquiry, draw from a rich variety of Slavic language data, with special focus on the South Slavic languages in historical, accentual and dialectology investigations and on Russian for purposes of stress and applied linguistics. Publications in the *International Journal of Slavic Linguistics and Poetics* (IJSLP), for example, study Common Slavic, Late Common Slavic, Slovene, Polish, Ukrainian, Macedonian, Upper Sorbian, Serbo-Croatian in addition to textual work on Old Church Slavic, and much on Russian. Slavic phonology in this respect is genuinely Slavic, though Russian continues to be the focus of many applied papers dealing with sound patterns.

Given this, it is striking that so much recent work in theoretical phonology is rather disproportionately focussed on Polish, with some consideration of Serbo-Croatian, Slovak, Russian, and Macedonian. The reasons for this are obvious: in most cases the general linguist is using his or her native language as the data for theoretical argumentation. The predominance of Polish in theoretical phonology, for example, is due not only to the inherent complexity and value of the data for theoretical questions

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but also to the fact that most of the linguists working on these questions happen to be native speakers of Polish (e.g., E. Gussmann, J. Rubach, J. Szpyra, E. Czaykowska-Higgins, and many others). This holds true for several other Slavic languages as well, among them Russian and Serbo-Croatian. This means that other general linguists with no background in Slavic heavily depend on these works for their discussion of various points, thereby further increasing the amount of space and time devoted to Polish, Russian, and perhaps Serbo-Croatian and Slovak, with Belorusian, Czech, Slovene, Sorbian, and Ukrainian hardly discussed, in spite of the fact that there are good resources published in English for these languages.<sup>19</sup> If one were to take into account work published abroad, the profile of languages serving theoretical linguistics would not change much; Polish is now probably the most studied Slavic language in terms of phonological theory.<sup>20</sup> This is quite different from the early days of generative phonology when the work of Halle, Lightner, and many of their students put Russian at the forefront of theoretical interest.

State of the field: Slavic phonology by general linguists. For general linguists the primary object of study is language in its universality and its diversity, and then the structure of any given language or languages as data for certain theoretical hypotheses or the application of a theory to the description of a given language. The Slavic languages have provided some very rich and challenging material for phonological theory in the past and there is no reason why they cannot continue to do so in the future. In any theory of phonology one has to determine what the contrastive elements are, how speakers systematize the sound patterns in mental representations, and how they produce what we hear as language. Once we accept that the mental representation is not necessarily the same as the actual production of sound sequences, a phonologist is concerned with two basic aspects of the model: that of the representation (underlying form, input) and the mapping that relates it to what is spoken and heard (surface representation, output, phonetic level), with its unpredictable as well as predictable

characteristics.

Early generative phonology operated with the notion of an underlying representation (UR) of contrastive elements and a system of potentially ordered rules relating the UR to its surface manifestation. Much work was devoted to establishing what was in the underlying representation and even more effort was devoted to discerning the nature of and the relationship among the rules in the rule component of the grammar and the interactions between the various components. An issue of central importance was the notion of abstractness, or, how different could the UR be from the surface form? One of the critical studies to explore the implications of abstract UR's was Lightner's 1972 work on Russian, where--among many other challenging things-one finds that the front mid vowel /e/ behaves quite differently in the same or similar environments. There is the [e] in 'bread', which remains [e] regardless of which consonants surround it and under stress [xl'ep], [xl'ébə]; there is the [e] of [at'éc], [atcá] 'father', which is sometimes there and at other times not; and there is the related [o] in [p'os], [psa] 'dog', and in *nes* [n'os] 'he carried' and *nesla* [n'islá] 'she carried' which does not alternate with zero and still looks as if it bears some connection to /e/ (if one takes the position that the palatalization of consonants is predictable in Russian). If the behavior of this vowel is said to be a consequence of a given underlying representation and/or the application of a set of rules, then the various patterns exhibited by it should be describable by such a grammar. In other words, the three patterns of [e] behavior are said to be due to either different URs and/or a different set of rules applying to the URs.

It turned out that it was difficult to explain the different behavior of this vowel by a set of conditioned rules and Lightner's solution was to postulate three different underlying representations for the patterns: long or tense  $/\bar{e}/$  for the [e] in 'bread', short  $/\bar{e}/$  for the pattern in 'carry', and a high lax vowel for the vowel which alternates with zero / $\bar{i}/$ , called a yer. Putting aside the fairly transparent historical motivation for these underlying representations, the difference attributed to the UR was somewhat ad hoc (diacritic) in that quantity is not distinctive in Russian and yers never show up in that form on the surface. These representations raised important questions about the formal requirements of the theory and its claim to represent a speaker's knowledge of the sound system of a given language as well as learnability issues.

Abstractness continued to be a concern in the application of rules, and this is nicely exemplified by Gussmann (1980) where he shows that the /e/ which alternates with zero in Polish, as in [pjes], [psa] 'dog' and [sen], [snu] 'dream', sometimes palatalizes the preceding consonant and sometimes not. At the time the solution was to propose two different underlying representations for these vowels, a high lax /i/ and /u/, in addition to /e/ which did not alternate with zero. After doing work in terms of conditioning the palatalization (by /i/) or not (by /u/) of the preceding consonant, the two sounds were said to merge into [e], a case of absolute neutralization. The alternation of Slavic yers, as in Russian [d'en'], [dn'a], [d'in'ok], [d'in'ka] 'day' and various diminutives, or in [búlkə], [búlək], [búləčkə], [búləčək] 'roll' led to considerations of cyclic rule application (D. Worth [1968]) and questions about the role of morphology in phonology. The so-called yers in Slavic phonology have continued to pose a challenge to most later modifications of generative phonology, providing especially interesting arguments for the nature of phonological representation (see C. Bethin, Slavic Prosody: Language Change and Phonological Theory [1998:205-14] for a summary of the issues). Yers have been used to motivate the postulation of empty syllable positions, empty root nodes, various properties of syllabification and metrical relations. The representation of yers in all of the Slavic languages (and to some extent the question of the representation of Polish nasal vowels) continues to provide a challenge for phonological analyses done in Optimality Theory.

The other very widely studied Slavic phenomenon is, of course, palatalization. The work on consonant palatalizations in Slavic has contributed to refinements in phonological theory, making the case for derivational levels, the cyclic application of phonological rules, and in the end providing some of the best evidence for claims made by Lexical Phonology (cf. Rubach 1984, 1993). This version of phonology

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acknowledges not only a difference in the nature of phonological rules (cyclic or not), but also postulates a difference in derivational levels (lexical and post-lexical). Such explanations are used to account for the absence of velar palatalization before front vowels within a stem while allowing it to occur across a stem and affix boundary as in the Polish *chemik* [x'em'ik] but *chemiczek* [x'em'iček], diminutive of 'chemist'. Here velar palatalization is said to be a cyclic rule (Rubach 1984 and others), thereby applicable only to derived forms. This is one area of Slavic phonology that will continue to provide a challenge to phonological theory, partly because it is complex and morphologically restricted while being quite pervasive in Slavic systems. In theories where derivational cycles and levels are not part of the working apparatus, such as Optimality Theory, all of these Slavic cases will have to either find an alternative analysis or force the theory to change to take such language phenomena into account. Here alone there is much work to be done by Slavists who have a good contextual knowledge of consonant palatalizations in their synchronic and diachronic aspects.

Three other areas of Slavic linguistics have found some resonance in theory, namely, the sonority restrictions on syllable structure, various voicing phenomena, and the analysis of accent systems. The former involves a large number of what appear to be violations to well established sonority sequencing requirements for syllable structure, specifically that sonority tends to increase in syllable onsets and decrease in syllable codas, unlike what is exemplified by Russian *mgla* 'mist', *rubl'* 'ruble', or Ukrainian *rdza* 'rust'. Issues of voicing neutralization in Russian, Polish, Serbo-Croatian, and Ukrainian have been cited by general linguists in the attempt to work out typologies of voicing across languages, most recently, L. Lombardi, "Positional Faithfulness and Voicing Assimilation in Optimality Theory," *NLLT* 1999:267-302. Finally, Russian stress, which was the focus of so much work in Slavic morphophonemics, continues to be the subject of both theoretical and applied studies, with contributions by general linguists as well as Slavists. Other Slavic stress systems have been used to test metrical phonological theory (Polish and Macedonian by S. Franks, Polish by J. Rubach, M.

Hammond, and others), or Optimality Theory (J. Alderete's 1999 dissertation, "Morphologically Governed Accent in Optimality Theory" includes a case study of Russian, and M. Baerman's work includes historical, dialectal, and typological studies with reference to OT). Some very interesting work has been done on pitch accent in Contemporary Serbo-Croatian (I. Lehiste and P. Ivic, "Interaction Between Tone and Quantity in Serbo-Croatian," *Phonetica* [1973], 182-90, and elsewhere; Inkelas and Zec 1988; and D. Zec, "Rule Domains and Phonological Change," *Phonetics and Phonology, Vol. 4: Studies in Lexical Phonology* [1993], 365-405 and her more recent work, "Footed tones and tonal feet: Rhythmic constituency in a pitch accent language," *Phonology* 16 [1999], 225-64). Here, too, there is much left to do, especially in those languages which have not had much exposure in theoretical synchronic linguistics, such as Slovene.

Finally, the postulation of intermediate derivational levels was a cornerstone of generative derivational phonology. This notion was important in explaining why there could be surface exceptions to certain phonological rules, even within words. If, for example, a given language has a process of /a/ changing to /e/ before /t'/, and another whereby /e/ changes to /i/ in the same environment, and it still has words with the sequence of [et'] left, one explanation would be to assume linear ordering of the two processes or rules: the rule changing /a/ to /e/ follows the one that changes /e/ to /i/, thus leaving some /e/'s unchanged. This type of opacity presents a problem for Optimality Theory which does not allow—at least in its original formulation—intermediate levels. The Slavic languages have countless examples of such phenomena which would provide many excellent studies and material for testing current theoretical assumptions. One solution to such cases that has been proposed on the basis of Slavic data is A. Lubowicz's reanalysis of Slovak ("Derived Environment Effects in OT," 1998, ROA-239) as an example of constraint conjunction.

**Recent developments.** In the last five years Slavic phonology has continued to follow the "separate but equal" trend of the past: Slavists for the most part continued to focus on historical phonology, while theoretical linguists dealt with synchronic phonology. The publication of M. Greenberg's, A Historical Phonology of the Slovene Language (Carl Winter 2000) is one example, and recent dissertations in Slavic phonology include: G. Schwartz, The Lemko and Slavic Palatalizations: An Acoustic and Perceptual Approach to Historical Phonology (Washington, 2000), R. Richard's, *Common Slavic's Pannonian Dialect as Viewed through Old Hungarian* (UCLA, 2001), M. Pisaro, *Quantity in Czech: A Dialectical and Historical Analysis* (Chicago, 2002), M. Feeney, Can Proto-languages Have Dialects? A Critique of Recent Russian Approaches to the Historical Reconstruction of Common Slavic (Kansas, 2003), J. Koenig's, A Diachronic Analysis of the Interaction of Syllabification and Yer Vocalization (Princeton, 2004), and earlier, G. Lundberg, A Phonological Description and Analysis of the Dialects of Haloze, Slovenia (Kansas, 1999), and K. Balakrishnan, The Lengthening of Vowels in the Štokavian Dialects of Serbo-Croatian (Yale, 1998). In Departments of Linguistics, the focus was on theoretical linguistics with Slavic language data, as in R. Plapp, Lexical Phonology and Optimality Theory: Analysis of Russian (Iowa, 1999), P. Neal, Stress Patterns in English of Two Groups of Slavic Speakers (Texas-Austin, 1999), R. Smiljanic, Lexical, Pragmatic and Positional Effects on Prosody in Two Dialects of Croatian and Serbian: An Acoustic Study (Illinois-Urbana Champaign, 2002), R. Sanders, Opacity and Sound Change in the Polish Lexicon (UC-Santa Cruz, 2003), and the earlier Y. Takatori, A Study of Constraint Interaction in Slavic Phonology (Optimality Theory, Russian, Polish, Bulgarian) (Yale, 1997), and I. Kraska-Szlenk, The Phonology of Stress in Polish (Illinois at Urbana-Champaign, 1995/Lincom 2003).

As much theoretical phonology in the U.S. continued to test the predictions of Optimality Theory (OT) and models of language acquisition, research in Slavic phonology dealt with linguistic interfaces and the nature of the theoretical model.<sup>21</sup>

Functional approaches to phonology, as represented by the recent publication of Phonetically Based Phonology, edited by B. Hayes, R. Kirchner and D. Steriade (Cambridge, 2004) and much work elsewhere, have re-focussed attention on some longstanding problems of Slavic phonology such as vowel reduction and palatalization. Several doctoral dissertations, among them K. Crosswhite, Vowel Reduction in Optimality Theory (UCLA, 1999/Routledge, 2001), J. Barnes, Positional Neutralization: A Phonologization Approach to Typological Patterns (Berkeley 2002), D. Kavitskaya, Compensatory Lengthening: Phonetics, Phonology and Diachrony (Berkeley, 2001/Routledge 2002), A. Kochetov, Production, Perception and Emergent Phonotactic Patterns: A Case of Contrastive Palatalization (Toronto, 2001/Routledge, 2002), and earlier work such as M. Boyd, Palatalization and Coronalization in Russian and Czech: A Non-linear Approach (Ohio, 1997), appeared in Departments of Linguistics. Interest in perception and the maintenance of phonological contrasts is exemplified by the work of A. Łubowicz, Contrast Preservation in Phonological Mappings (Ph.D dissertation, UMass, 2003/ROA-554), and J. Padgett, "Contrast and Post-velar Fronting in Russian," Natural Language and Linguistic Theory 21 (2003:39-87), where Polish and Russian serve as case studies. The phonology-phonetics interface and questions of perception continue to serve as a productive research area for these and other linguists, where the data come primarily from Polish and Russian, though Belarusian, Bulgarian, Czech, Slovene and Ukrainian have entered the recent literature.<sup>22</sup> Evidence from Slavic palatalizations and gliding has proven to be germaine to arguments on opacity and derivational levels in the papers of J. Rubach, A.

The role of morphology and paradigms in phonology has become a robust research program once again, as evidenced by J. Rubach and G. Booij, "Allomorphy in Optimality Theory: Polish Iotation," *Language* 77.1 (2001:26-60), K. Crosswhite's earlier 1997 work on Bulgarian ("Intraparadigmatic Homophony Avoidance in Two Dialects of Slavic"), the appearance of L. Butska's 2002 Rutgers dissertation, *Faithful* 

Lubowicz, and others testing the theoretical model.<sup>23</sup>

*Stress in Paradigms: Nominal Inflection in Ukrainian and Russian*, and recent theoretical work by John McCarthy and others published in *Paradigms in Phonological Theory*, ed. by L. Downing, T. Alan Hall, and R. Raffelsiefen (Oxford, 2005). Given the strong interest of theoretical phonology in paradigm effects and the nature of output-output correspondence, we should expect to see more work in this area and more interest in the Slavic languages as they are indeed a rich source of material.

Prosody continues to be a topic of investigation by both Slavists and general linguists, as do questions of sonority and voicing. Recent work by D. Zec on Serbian and Old Church Slavic, K. Crosswhite, T. Beasley, J. Alderete and V. Markham on Russian and K. Crosswhite, T. Beasley on Macedonian, D. Kavitskaya on Common Slavic, C. Bethin on Czech, Ukrainian and Belarusian, deals with stress, tone, quantity and accent in Slavic. The papers presented at the Thirteenth International Congress of Slavists in Ljubljana (2003) included only two contributions in phonology (C. Bethin, L. Grenoble) and both dealt with prosody.<sup>24</sup> *FASL* proceedings also published several papers on voicing and the problem of /v/ in Slavic.<sup>25</sup>

Traditional Slavic publications have offered little in terms of Slavic phonology in the past five years. There were no phonology papers in the *Slavic and East European Journal* from 2000 to 2004. The *Journal of Slavic Linguistics* published only two: a historical phonology paper (R. Feldstein's, "The Unified Monophthongization Rule in Common Slavic," *JSL* 11.2 (2003:251-85) and G. Schwartz, "The Lemko's Affricates: Phonetic, Perceptual and Sociolinguistic Aspects," *JSL* 11.2 (2003:323-45). A volume of *Indiana Slavic Studies* (2002) has papers in phonology from C. Bethin, R. Feldstein, F. Gladney, B. Velcheva and E. Scatton.<sup>26</sup> Contributions to FASL came primarily from general linguists and averaged three per meeting.<sup>27</sup> *Language* (Rubach and Booij on Polish 2001) and *Natural Language and Linguistic Theory* (Padgett on Russian 2003) each had one article dealing with Slavic data, and *Linguistic Inquiry* published three of J. Rubach's papers ("Glide and Glottal Stop Insertion in Slavic Languages; A DOT Analysis", (2000:271-317), "Against Subsegmental Glides" (2002:672-87), "Derivation in Optimality Theory" (2004:656-70)). Within Slavic Studies, conference presentations on Slavic phonology continue to appear fairly regularly at the rate of four papers per meeting at the AATSEEL Annual Meetings (2000-2004) in the phonology panel, but there were almost no phonology papers in other related panels. The *International Journal of Slavic Linguistics and Poetics* published its last volume in 2001, but the *Journal of Slavic Linguistics* continues to be a place where Slavists and general linguists meet. A thematic issue on Slavic phonology and morphology is due in the near future.

To summarize, recent work in Slavic phonology continues as before, but with more focus on Slavic from general linguists as the complexity of Slavic data is exploited in investigations of linguistic interfaces and theoretical modelling. While interest in Polish and Russian remains strong, the introduction of Bulgarian, Serbian, Slovene, Macedonian, Slovak, Czech, Ukrainian, and Belarusian is broadening the scope of languages covered in the theoretical literature. Thus Slavic languages continue to be the focus of a small but active group of Slavic and general phonologists, and the emergence of a talented new generation of linguists working with Slavic languages certainly bodes well for the future.

**Some Future Research Directions.** New work in Slavic phonology could be profitably carried out at the interfaces of phonology with phonetics, morphology, syntax and poetics. For example, studies of voicing, tense/lax distinctions, vowel reduction, pitch accent, palatalization, and length should find support from phonetics on the model of I. Lehiste's and P. Ivić's study, *Word and Sentence Prosody in Serbo-Croatian* (1986), and more recent work done by general linguists at the interface of phonetics and phonology.<sup>28</sup> Within OT there is much being done on phonetically grounded constraints and in making more explicit the relationship between phonetics and phonology in constraints and constraint interaction (e.g., the recent work of D. Steriade, R. Kirchner, "Contrastiveness and faithfulness," *Phonology* [1997], 83-111; B. Hayes, "Phonetically driven phonology: the role of Optimality Theory and inductive grounding" [1996, ROA-195-1196] and their students such as E. Flemming, *Auditory representations in* 

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phonology [1995, UCLA Ph.D. diss.] as well as D. Archangeli and D. Pulleyblanks's, Grounded Phonology [1994]).

The relationship between phonology and morphology has always been at the core of Slavic linguistics in its emphasis on morphophonemics, especially as related to stress patterning, and it was a fundamental concern of generative phonologists. This is a particularly fruitful area to explore within Optimality Theory and it will have important implications for the theory itself. For example, the abstractness of underlying representations has again been raised in surface-oriented phonology, where the existence of allomorphy forces a decision about its representation in OT, either as the allomorphic model where the grammar simply selects the appropriate allomorph in a given context or as some type of correspondence relation (either Input-Output or Output-Output) in the grammar. Recent modifications of OT include Correspondence Theory (McCarthy and Prince, 1995), Transderivational Correspondence Theory (L. Benua's 1997 UMass dissertation, "Transderivational identity: Phonological relations between words"), Sympathy Theory (J. McCarthy, "Sympathy and phonological opacity," Phonology 16 [1999], 331-99) which try to maintain the Strict Parallelism of OT, and interleaved (multilevel) OT which upholds the Surface Orientation of the theory at the expense of parallelism (e.g., P. Kiparsky, "Paradigm effects and opacity", Stanford Univ. ms, 1998, C. O. Orgun's 1996 Berkeley dissertation, "Sign-Based Morphology and Phonology with Special Attention to Optimality Theory," and others). Interestingly, the allomorphic model and functional considerations in the formulation of constraints as positional faithfulness (or positional markedness) in some ways bring us close to the issues considered by Structuralist analyses.

The intersection of phonology with syntax has long been important in the research on clitics, and it is now receiving more attention in studies of intonational phrasing.29 Finally, metrical phonology has a great potential symbiotic relationship with poetics, as Slavic linguists (E. Klenin, D. Worth, among others) well know, and as is illustrated by the volume *Rhythm and Meter*, ed. by P. Kiparsky and G. Youmans (1989). Some recent investigations such as that of N. Friedberg, "Russian Metrics and Stochastic Constraints: Determining Metrical Complexity" (FASL 1999) suggest that more work could be done in this area.<sup>30</sup>

In general, this is a particularly exciting time for theoretical phonologists and one would expect that Slavists could be making significant contributions to current discussions. Questions about markednes, allomorphy, morphological derivations and paradigm regularity in Optimality Theory should be dealt with on the basis of the complex data from the Slavic languages. But unless Slavists take the time to become familiar with current developments in phonology and find a way to make the complexity of Slavic data accessible to general linguists, this work will continue to be done by non-Slavists, if it is done at all.

Summary and conclusions. Today, with very few exceptions, the relationship between Slavic phonology and general theoretical phonology seems to be one of complementary distribution. Slavists continue to be interested in questions of historical and comparative phonology and dialectology, while general linguists who work with Slavic languages are primarily oriented towards synchronic analyses.<sup>31</sup> In some ways, this complementary distribution of labor makes sense. In order to make significant contributions to historical, comparative phonology or dialectology, one needs to have intensive and extensive training in the relevant language areas. This is the kind of training graduate programs in Slavic linguistics are especially good at providing. A program of this type, however, leaves little time for additional work in theoretical linguistics and for a long time Slavic departments chose to go their own way, while not always discouraging one or two curious individuals from peeking across departmental boundaries.<sup>32</sup> Work in theoretical formal linguistics does not, as a rule, require a concentration of any depth in a given language area with the results that native speaker data is often the focus of study in the absence of a better motivated choice. Thus theoretical questions about phonology are not answered on the basis of, say, Polish only

because Polish presents a particularly compelling set of data but also because the given linguist simply had access to Polish rather than to another Slavic language, one which might have proven to be equally or perhaps even more challenging than Polish for the question at hand. The result is that we now have essentially two separate fields of Slavic phonology, that studied in some Slavic departments and that being done by general linguists.

Where is Slavic phonology going? The two fields of Slavic phonology, the subfield within general linguistics and the field of Slavic phonology as done by Slavists, differ somewhat in their objectives. Theoretical phonology is interested in the description of sound patterns across languages and in the acquisition of such patterns in *language*, whereas Slavists are more interested in the properties and context of a given Slavic language or languages. Thus the division of labor, given the different goals, is not unexpected and not necessarily undesirable. There is still much to be learned about the Slavic sound systems in their larger linguistic, historical, and cultural contexts that Slavists are particularly well-equipped to undertake. However, since most linguistic investigations approach a given problem from some theoretical perspective, be it implicit or explicit, the question for many Slavists will be: Which theoretical framework will be most illuminating in understanding the speech sounds and patterns in Slavic?

At this point, our field seems to be divided: some phonologists in the position to train graduate students in Slavic linguistics still choose to work in and train their students in Jakobsonian linguistics, while others have begun to incorporate recent developments in theoretical phonology into their own work on Slavic. The problem seems to be that some Slavists working in phonemics/phonology today see no reason or simply cannot find the time to learn about new developments in general linguistics. This tends to result in the general linguists' dismissal of Slavic work and the Slavists' disregard of the efforts of their colleagues: it is not clear to general linguists why they should pay attention to or even try to read work done in structuralist or post-structuralist frameworks nor is it clear to some Slavists that recent theoretical developments are advances in any real way. But the consequences of this division are particularly harmful to the students we are training. If they are not encouraged to pay attention to contemporary linguistic theory, they will be isolated in a non-productive way. And it is easier for a Slavist who already possesses an in-depth knowledge of one or more Slavic languages to become conversant with current theory than it is for a non-Slavist (or non-native speaker of a Slavic language) to acquire the extensive and intensive knowledge of a Slavic language one should have in order to do thorough analyses.

**Future needs and recommendations.** How do we accomplish a reapproachment of the two fields? Much of the effort will fall to the training of our students which can be facilitated in some fairly practical ways. If our goal is to expand the dialogue between Slavists and general linguists, thus bringing what have become essentially two different research fields back into the same orbit, then our students, especially at the graduate level, would benefit from new teaching materials: a text on the structure of Russian that would include up-to-date analyses of the phonetics, phonology, morphology and syntax of Russian in a form that could also be profitably read by students of general linguistics, and a book on the problems of Slavic phonology, organized thematically in terms of problem types of special interest such as the vowelzero alternations, the phonology-morphology interface, issues of vowel reduction, diphthongs, quantity, and other prosodic phenomena, accompanied by a workbook of problem sets in Slavic. We might add to this other desiderata such as good synchronic descriptions of various Slavic languages (general linguists who wish to work on the Russian sound system, for example, too often resort only to D. Ward's book on the phonetics of Russian and a few have depended on Townsend's Russian Word *Formation*), theoretical investigations on the basis of less well-studied Slavic language data, and perhaps more work in comparative Slavic phonology.

I would argue that future Slavic phonologists should have a good knowledge of contemporary phonological theory. Although much excellent work is being done in

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Slavic dialectology, Slavic historical linguistics, and in synchronic Slavic linguistics, it is the latter that tends to feel the theoretical pressure most because so much of linguistic theory today strives to understand the system of a language in its current form as a way of understanding language structure in general. Openness in Slavic graduate programs in terms of various electives and options in related departments would go a long way in reanimating connections across fields. While it may not be possible to train our students equally well in all aspects of theoretical linguistics and in Slavic as well, given the requirements and the complexities of the disciplines, it should be possible to train our students well in Slavic linguistics and in a sub-field of theoretical linguistics. In other words, Slavists could choose a theoretical specialization such as phonology or syntax as part of their graduate training in Slavic linguistics, and general linguistics programs in universities with strong Slavic linguists could look at tracks or concentrations in a specific language area as part of their program options. This would probably enhance the employability of both types of graduates, but especially those in Slavic linguistics. And we would stand to gain if we once again enable our students to be part of the larger intellectual community of phonologists as well as students of Slavic.

While it is not necessarily bad that the Slavists of 1963 and those of 2005 should continue their discourse, it is not necessarily good that this seems to be happening instead of, rather than in addition to, conversations with colleagues down the hall. Granted, the wealth of Slavic linguistics, both in terms of material as well as in its intellectual history, is an irresistible attraction, but there is also much exuberant work in phonology being done right around us. Unless we stop to pay attention to it we will miss the opportunity to contribute to the growing and exciting research enterprise that is phonology today.

### NOTES

1. The retrospective is based primarily on work done by U.S.-based Slavists and/or work published in U.S.-based Slavic and general linguistics outlets. It is not possible to evaluate all work in various festschrifts, proceedings of local conferences, institutional working papers or much of that published abroad by U.S.-based Slavists. This regrettably skews the discussion somewhat and to a large extent ignores different theories of phonology that have an active research program elsewhere. If I have omitted relevant work, I aplogize to the authors and would appreciate it if this were brought to my attention. I am grateful to Catherine V. Chvany and the audience at SLING2K for helpful comments on an earlier version of this paper.

2. R. Jakobson arrived in the U.S. in 1941 but it wasn't until 1946 that he was appointed the Thomas G. Masaryk Professor of Czechoslovak Studies at Columbia (H. Kuc<sup>°</sup>era, Obituary of Roman Jakobson, *Language* [1983:871-83]). Slavic linguistics was active in the U.S. before Jakobson's arrival, of course, and the work of G. Trager, C. Bidwell, C. Hodge, and others regularly appeared on the pages of Language in the 1930's, 1940's and 1950's. To note just a few contributions in Slavic phonology: G. Trager's article on "The Phonemes of Russian," Language (1934:334-44), followed by his "Serbo-Croatian Accents and Quantities," Language (1940:29-32), and "The Phonemic Treatment of Semivowels," Language (1942:220-23); C. Hodge's, "Serbo-Croatian Phonemes," Language (1946:112-20); J. van Campen and J. Ornstein, "Alternative Analyses of the Bulgarian Non-syllabic Phonemes," Language (1959:264-70). G. Shevelov (as Y. Serech) published Problems in the Formation of Belorussian as a Supplement to Word in 1953. But Jakobson's hand in training a very large number of Slavists, especially during his Harvard years (1949-67) when he directed or read over 45 dissertations (Kučera, p. 879), made him by far the most influential teacher of his generation, if not of the last fifty years.

3. Some well-known Slavists working in phonemics and morphophonemics in the 1950's and 1960's also published in *SEEJ*: C. Bidwell ("The Phonemics and Morphophonemics of Serbo-Croatain Stress," *SEEJ* 1963:160-65, H. Aronson ("Vowel/Zero Alternations in the Bulgarian Inflection," *SEEJ* 1962:34-38), H. Klagstad, Jr. ("The Phonemic System of Colloquial Standard Bulgarian," *SEEJ* 1958:42-54), E. Stankiewicz ("Accent and Vowel Alternations in the Substantive Declension of Modern Standard Slovenian," *SEEJ*, 1959:144-59) and his *Studies in Slavic Morphophonemics and Accentology* [1979]), which includes "Prague School Morphophonemics" originally published in *Sound, Sign and Meaning* (1976), 101-119. The larger view of phonemics in Slavic Studies is given by M. Halle, "Phonemics" in *Current Trends in Linguistics, I* (1963).

4. The work of E. Scatton ("How Bulgarian Treats Its Vowels: Truncation and the Morphology and Phonology of Contemporary Standard Bulgarian," *Folia Slavica* 1977:110-123, "Palatalization and [j] in Bulgarian," *Folia Slavica* 1980:317-21), and elsewhere, is generative in orientation.

5. Within *SEEJ* there is a co-existence of morphophonemics and generative phonology in the area of West Slavic linguistics: J. Starzec Brady's and M. Kantor's article "Phonological Aspects of Polish Nominal Declension" (425-34) appeared in 1975 to be followed by L. Becker's "A Rule Inversion in Polish" in 1979, and M. Elson's "A Morpheme-Based Analysis of Stress in Standard Polish" (437-47) published in 1985 is followed in 1987 by C. Bethin's work , "Syllable Structure and the Polish Imperative Desinence," (76-89) in the framework of autosegmental generative phonology.

6. East Slavic linguistics as represented by publications in *SEEJ* did not focus on theory, either prior to 1987, when E. Klenin and C. Chvany observed that "characteristic of SEEJ linguistics is its orientation toward particular problems, with an interest in elucidating complexities of modern Russian usage" (p. 177 in "East Slavic Linguistics," SEEJ Anniversary Issue 1987:176-85), nor much after that time when most studies are devoted to Russian stress and intonation (e.g., D. Andrews, "American Intonational Interference in Emigre Russian: A Comparative Analysis of Elicited Speech Samples," [1993:162-77], D. Hart, "An Assessment of Testing Variables in Non-Native Russian Stress Placement," [1994:479-92]). Generative phonology is represented by M. Halle "On Russian Accentuation," (1975:104-11), by H. Coats and A. Harshenin, "On the Phonological Properties of Russian v," (1971:466-78), by H. Lunt's look at Russian orthography in "Phonological and Morphological Units in Teaching Russian," (1975:74-84), and W. Daniels, "Natural Phonology and the Teaching of Pronunciation," (1975:66-73), until C. Bethin's article on "Iotation and Gemination in Ukrainian" appeared in 1992. Much was being done in the area of East Slavic generative phonology, but it was being done by non-Slavists and it was published elsewhere.

7. See M. Halle, "On the Origin of the Distinctive Features," *Roman Jakobson: What He Taught Us*, ed. M. Halle (*IJSLP 27 Supplement*, 1983), 77-86.

8. One exception is C. Bethin, *Polish Syllables* (1992) which cites Gussmann, Rubach, Szpyra, and other general linguists extensively. For a general discussion of issues pertaining to the phonological cycle, see J. Cole, "The Cycle in Phonology," in J. Goldsmith, ed., *The Handbook of Phonological Theory* (1995), pp. 70-113.

9. Suprasegmentals were a problem for American Structuralism and they were not handled especially well in SPE-phonology either, leaving much to further research. This is not to say that work such as that of J.R. Firth, "Sounds and Prosodies,"

*Transactions of the Philological Society* 1948:127-52 or that of Z. Harris, "Simultaneous Components in Phonology," *Language* 1944:181-205 was unaware of the issues, it is just that later revisions were formalized in a way which produced interesting (and so far lasting) modifications to phonological theory.

10. To mention just a few recent works in Optimality Theory that deal with Slavic language phenomena: J. Yearley, "Jer Vowels in Russian," (pp. 533-71), and P. Deevy's, "An Optimality Theoretic Analysis of Stress in Macedonian," (pp. 137-66) both in the Papers in Optimality Theory, edited by J. Beckman, L. Dickey, S. Urbanczyk (UMOP, 18 [1996]), C. Zoll's, "Ghost Segments and Optimality," in Proceedings of the West Coast Conference on Formal Linguistics [1993]; and J. Rubach's "Extrasyllabic Consonants in Polish: Derivational Optimality Theory," pp. 551-81 in Derivations and Constraints in Phonology, ed. by I. Roca (1997), C. Schutze's, "The Prosodic Structure of Serbo-Croatian Function Words: An Argument for Tied Constraints," MIT Working Papers in Linguistics 30 (1997), 355-67, and J. Rubach's 2000 paper on glides in *Linguistic Inquiry* (see note 15). Various case studies of Slavic languages appear in dissertations, among them K. Crosswhite's 1999 UCLA dissertation, "Vowel Reduction in Optimality Theory," which offers an extensive analysis of dissimilative (j)akan'e in Russian, and M. Baerman's 1998 UC Berkeley dissertation on fixed stress in Slavic. Contributions in this area to FASL seem to be increasing and other recent papers may be found on the Rutgers Optimality Archive (http://ruccs.rutgers.edu/roa.html).

11. The first issue of *Slavic Word* (1952) included R. Jakobson's well-known "On Slavic Diphthongs Ending in a Liquid" (pp. 306-10), H. Lunt's "On Old Church Slavonic Phonemes: The Codex Zographensis" (pp. 311-28), in phonology, and the last issue in 1955 contains H. Kučera's, "Phonemic Variation in Spoken Czech" (pp. 575602). American Slavists (among them D. Worth, E. Stankiewicz, C. Bidwell, W. Schmalstieg) continued to contribute to *Word* until the early 1960's.

12. Some early issues of IJSLP published papers that are still cited today, e.g., E. Stankiewicz's "The Vocalic Systems of Modern Standard Slovene," 1959:70-76; I. Lehiste's, "The Phonemes of Slovene," 1961:48-66; H. Kučera's, "Mechanical phonemic transcription and the phoneme frequency count of Czech," 1963:36-50; M. Zagorska-Brooks, "Nasal Vowels in Contemporary Standard Polish," 1964:102-09; D. Worth, "Vowel ~ Zero Alternations in Russian Derivation," 1968:110-23; A. Isačenko, "East Slavic Morphophonemics and the Treatment of Jers in Russian: A Revision of Havlik's Law," 1970:73-124. Much of the work was oriented towards diachronic phonology: M. Flier, "Morphophonemic Change As Evidence of Phonemic Change: The Status of Sharped Velars in Russian," 1980:137-48; L. Micklesen, "The Accentology of Slavic Verbs in -i-," 1980:267-80; H. Galton, "Does the West Slavic Accent Have a Delimitative Function?" 1983:41-61; L. Becker and C. Bethin, "On the Historical Development and Synchronic Nature of the Slovene Prosodic System," 1983:63-79; G. Shevelov, "A Remark on Extra-Systemic Vowel Length in Slavic: The Cases of Ukrainian and Macedonian," 1985:385-98; A. Timberlake, "Dual Reflexes of \*dj in Slavic and a Morphological Constraint on Sound Change," 1981:25-54, "The Metathesis of Liquid Diphthongs in Upper Sorbian," 1985:417-30; H. Lunt, "Common Slavic, Proto-Slavic, Pan Slavic: What Are We Talking About? I. About Phonology," 1997:7-68, "On Common Slavic Phonology: Palatalizations, Diphthongs, and Morphophonemes," 1998:7-14; A. Corin, "Notes On a Typological Shift in Early Slavic Phonology," 1997:93-104; K. Langston, "Compensatory Lengthening in Ukrainian Revisited," 1998:107-20. Among the synchronic analyses one finds several generative ones, e.g., C. Bethin, "Voicing Assimilation in Polish," 1984:17-32, "Polish Nasal Vowels," 1988:33-72, and S. Franks, "Regular and Irregular Stress in Macedonian,"

1987:93-144. The journal dedicated several of its volumes to Festchrifts for Slavic linguists, among them E. Stankiewicz (1982) and H. Birnbaum (1985).

13. The Festschrift for H. G. Lunt (*Folia Slavica*, 1978-79) presented work by E. Scatton, "The Phonology of the Jers: Syncope and Vowel Reduction," 1979:222-30; D. Worth, "Jer Loss and Vowel/Zero Alternations in CSR," 1978:360-65; F. Gladney, "Reflections on I Kratkoe," 1979:113-27; and M. Halle and P. Kiparsky, "Internal Constituent Structure and Accent in Russian Words," 1979:128-53. Later volumes included work in Slavic phonology by M. Levin, "Stress Notation in Russian Declension," (1978:229-33), A. Timberlake, "Uniform and alternating environments in phonological change," (1978:312-28), C. Bethin, "Nasal Vowel Alternations in Polish," (1987:169-84) and "Syllable Final Laxing in Ukrainian", (1987:185-97).

14. Slavic language studies appear in *Phonology* in 1985 by J. Rubach and by P. Kiparsky, and then not again until 1989 when M. Hammond's, "Lexical Stresses in Macedonian and Polish," pp. 19-38 (with a reply by S. Franks in 1991), and J. Rubach's, "Syllable Structure Assignment in Polish," pp. 121-58, were published, and not since then until Zec's contribution on Serbo-Croatian pitch accent appeared in *Phonology* 16 (1999). The journal *Natural Language and Linguistic Theory* in the past ten years published S. Franks' work on Macedonian stress (1989), J. Rubach and G. Booij's article on Polish (1990), J. Rubach on Slovak (1993), but no other work is devoted exclusively to Slavic, although Slavic language data appear in the studies by J. Padgett (1994), L. Lombardi (1995, 1999) and K. Rice (1996). The past ten years of *Linguistic Inquiry* saw E. Gussmann, "Resyllabification and Delinking: The Case of Polish Voicing," 1992:29-56; J. Rubach, "Affricates as Strident Stops in Polish," 1994:119-43, his "Nonsyllabic Analysis of Voice Assimilations in Polish," 1996:69-110, and now a study of glides in Polish, Czech, Slovak and Bulgarian, "Glides and Glottal Stop Insertion in Slavic Languages: A DOT Analysis," 2000:271-317.

15. FASL workshops in the 1990's include the following contributions from U.S.-based linguists: B. Hyde (Dept. of Linguistics, Rutgers), "Overlapping Feet in Polish," (1998), D. Kavitskaya (Dept. of Linguistics, Berkeley), "Voicing Assimilation and the Schizophrenic Behavior of /v/ in Russian," (1998), R. Nair (Dept. of African and Asian Languages, Northwestern), "Polish Voicing Assimilation and Final Devoicing: A New Analysis," (1998), K. Crosswhite (Dept. of Linguistics, UCLA), "Vowel Lengthening and Length Neutralization in Orlec Serbo-Croatian," (1999), D. Zec (Dept. of Linguistics, Cornell), "Multiple Sonority Thresholds," (1999), I. Milnes and C. Wiltshire (Dept. of Linguistics, Florida), "Optimal Stress Patterns in Russian," and Yuki Takatori (Modern and Classical Languages, Georgia State), "Inertness of Sonorant [voice] in Polish." Other contributions in phonology were also all by members of either research laboratories or departments of Linguistics.

16. In 1993 phonology papers at AATSEEL could be heard in the Slavic Phonology panel, West Slavic Linguistics, Slavic Dialectology; in 1994 one could attend at least eight papers dealing with phonology dispersed throughout various linguistics panels; similarly in 1995 where phonology was found under the rubrics of West Slavic Linguistics, Historical Linguistics, and Phonology. The 1998 and 1999 conferences offered phonology primarily in the Slavic Phonology and Prosody panel with one or two papers appearing in other panels such as Historical Linguistics or specific language panels.

17. The 1963 congress offered the following papers: R. Abernathy, "Some Theories of Slavic Linguistic Evolution," H. Birnbaum, "Reinterpretacje fonologiczne nosówek słowianskich," M. Halle, "O pravilax russkogo sprjaženija," R. Jakobson, "Opyt fonologičeskogo podxoda k istoričeskim voprosam slavjanskoj akcentologii," H. Kučera, "Entropy, Redundancy and Functional Load in Russian and Czech," G.

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Shevelov, "Prothetic Consonants in Common Slavic: An Historical Approach," E. Stankiewicz, "Unity and Variety in the Morphophonemic Patterns of the Slavic Declensions," J. van Campen, "The Phonetic Feature Approach in the Description of the Morphology of the Slavic Languages," U. Weinreich, "Four Riddles in Bilingual Dialectology." In 1998, the 12th congress heard the following papers: H. Andersen, "Dialektnaja differenciacija obščeslavjanskogo jazyka. Paradoks obščix tendencij razvitija s različnymi lokal'nymi rezul'tatami," and his "The Common Slavic Vowel Shifts," C. Bethin, "The Bisyllabic Norm of Late Common Slavic Prosody," H. Birnbaum, "Na periferii. Najwcześniejsze zaświadczenie dwóch dialektów późnoprasłowiańskich," A. Corin, "On the Bifurcation of Slavic into Vocalic and Consonantal Languages," M. Flier, "The Jer Shift and Consequent Mechanism of Sharping (Palatalization) in East Slavic," F. Gladney, "Imperfective Accent in Slavic," R. Greenberg, "Towards a New Interpretation of Serbian and Croatian Morphophonemic Patterns."

18. The following articles in phonology or with a phonological component appeared in *SEEJ* from 1990 to 1999: S. Young, "Winter's Law and Slavic Diphthongal Bases," 1990:245-253; M. Mihaljević, "The Phonological System of the Croatian Redaction of Church Slavonic," 1992:1-35; C. Bethin, "Iotation and Gemination in Ukrainian," 1992:275-301; R. Greenberg, "Dialects and Ethnicity in the Former Yugoslavia: The Case of Southern Baranja (Croatia)," 1998:710-22; D. Dyer, "Some Influences of Russian on the Romanian of Moldova During the Soviet Period," 1999:85-98; D. Hart, "An Assessment of Testing Variables in Non-Native Russian Stress Placement," 1994:479-92 and his "Traces of English Stress Parameters in the Russian of English Speakers," 1998:268-82; M. Elson, "Collocational Stress in Contemporary Standard Macedonian," 1993:149-61; D. Andrews, "American Intonational Interference in Emigre Russian: A Comparative Analysis of Elicited Speech Samples," 1993:162-77. JSL published the following: R. Feldstein, "The

Nature and Use of the Accentual Paradigm as Applied to Russian," 1993:44-60; F. Gladney, "The Accent of Russian Verbforms," 1995:97-138; K. Langston, "Pitch Accent in Croatian and Serbian: Towards an Autosegmental Analysis," 1997:80-116; E. Andrews, "Interpretants and Linguistic Change: The Case of -x- in Contemporary Standard Colloquial Russian," 1993:199-218; C. Bethin, "Neo-Acute Length in the North Central Dialects of Late Common Slavic," 1993:219-50; H. Galton, "The Phonological Influence of Altaic on Slavic," 1994:77-91; D. Birnbaum, "Why Isn't Dybo's Law Iterative?", 1994:268-72; F. Gladney, "On the Syllabification of High Vowels in Late Common Slavic," 1994:164-170; S. Pugh, "More on Glides in Contemporary Standard Russian: The Loss of Intervocalic /j/ and /v/," 1993:343-51; A. Ramer, "A Remark on Initial Nasal Vowels in Polish," 1994:301-3; R. Plapp, "Russian /i/ and /i/ as Underlying Segments," 1998:76-108.

19. E. Stankiewicz's book, *The Accentual Patterns of the Slavic Languages* (1993) seems to be known to general linguists as a source of information on Slavic accent, and the volume edited by B. Comrie and G. Corbett, *The Slavonic Languages* (1993) presents excellent language sketches by some of today's leading Slavists. But one should also note books in English that could serve as general references for linguists who do not have a working knowledge of a Slavic language: H. Kučera, *The Phonology of Czech* (1961), and H. Kučera and G. Monroe, *A Comparative Quantitative Phonology of Russian, Czech and German* (1968), E. Scatton, *Bulgarian Phonology* (1975/1983), *A Reference Grammar of Modern Bulgarian* (1984), R. Lencek, *The Structure and History of the Slovene Language* (1982), R. Krajčovič, *A Historical Phonology of the Slovak Language* (1975), J. Gvozdanović, *Tone and Accent in Standard Serbo-Croatian, with a Synopsis of Serbo-Croatian Phonology* (1980), K. Horálek, *An Introduction to the Study of the Slavonic Language* (1983), H. Lunt,

Grammar of the Macedonian Literary Language (1952), G. Shevelov, A Historical Phonology of the Ukrainian Language (1979), Chr. Stang, Slavonic Accentuation (1957/1965), Z. Topolińska, A Historical Phonology of the Kashubian Dialects (1974), C. Townsend, Russian Word Formation (1980), and his A Description of Spoken Prague Czech (1990), E. Scatton's translation of B. Velcheva, Proto-Slavic and Old Bulgarian Sound Changes (1988), P. Wexler, A Historical Phonology of the Belorussian Language (1977), G. Toops' translation of H. Schuster-Szewc, Grammar of the Upper Sorbian Language (1998), and W. Žyla and W. Aycock's translation of I. Zilins'kyj, A Phonetic Description of the Ukrainian Language (1979), to mention just a few books in addition to those already discussed. One notes that much of this material is in historical phonology, so a linguist would have to look at language textbooks and reference grammars of specific languages for information.

20. Polish has been the topic of several book-length phonological studies published abroad in English: J. Szpyra, *The Phonology-Morphology Interface: Cycles, Levels and Words* (1989) and her *Three Tiers in Polish and English Phonology* (1995), J. Rubach, *Changes of Consonants in English and Polish: A Generative Account* (1977), E. Gussmann, *Contrastive Polish-English Consonantal Phonology* (1978), G. Rowicka, *On Ghost Vowels: A Strict CV Approach* (1999), in addition to an extraordinary number of articles in European journals, conference proceedings, and anthologies.

21. Several new volumes on phonology and interface phenomena have appeared, among them, *The Prosody-Morphology Interface*, edited by R. Kager, H. van der Hulst, W. Zonneveld (Cambridge, 1999), *The Syllable in Optimality Theory*, edited by C. Fery and R. van de Vijver (Cambridge, 2003), *Phonetically Based Phonology*, edited by B. Hayes, R. Kirchner and D. Steriade (Cambridge, 2004), and *Paradigms in Phonological Theory*, ed. by L. Downing, T. Alan Hall, and R. Raffelsiefen (Oxford, 2005) to mention just a few. The series in Laboratory Phonology continued with *Papers in* 

Laboratory Phonology V. Acquisition and the Lexicon, edited by M. Broe and J. Pierrehumbert (Cambridge, 2000) and Phonetic Interpretation: Papers in Laboratory Phonology VI, edited by J. Local, R. Ogden, R. Temple (Cambridge, 2004), Laboratory Phonology 7, edited by C. Gussenhoven and N. Warner (Mouton de Gruyter, 2002). The eighth volume from Mouton de Gruyter, edited by C. Best, L. Goldstein, D. Whalen, will have papers from A. Kochetov and D. Kavitskaya on Russian.

22. See also K. Crosswhite, "Vowel Reduction" in *Phonetically Based Phonology* (2004), pp. 191-231, J. Padgett and M. Tabain, "Adaptive Dispersion Theory and Phonological Vowel Reduction in Russian" (2003 ms.), B. Hermans, "Moderate Reduction, Extreme Reduction and Moderately Extreme Reduction" in FASL 12 (2004), C. Bethin, "On Pretonic Length in Belarusian and Ukrainian Nadsnovs'ki Dialects" in FASL 13 (2005:52-67).

23. See J. Rubach, "Backness Switch in Russian," *Phonology* 17.1 (2000:39-64), his "Duke-of-York Derivations in Polish," *Linguistic Inquiry* 34.4 (2003:601-29); A. Łubowicz's, "Derived Environment Effects in Optimality Theory," *Lingua* 112 (2002:243-80) and her WCCFL publications, "Counter-feeding Opacity as a Chain Shift Effect" (2003), "Locality of Conjunction" (2005), among other work, as well as L. Blumenfeld's, "Russian Palatalization and Stratal OT: Morphology and [back]," FASL 11 (2003:141-58) and J. Yarmolinskaya's, "Russian Palatalization and Opacity in Optimality Theory," FASL 13 (2005:376-86).

24. See, for example, D. Zec, "Footed Tones and Tonal Feet:Rhythmic Constituency in a Pitch Accent Language," *Phonology* 16.2 (1999:225-64), D. Zec, "Prosodic Weight," in *The Syllable in Optimality Theory*, edited by C. Fery and R. van der Vijver (Cambridge, 2003), and other recent work by Zec; T. Beasley and K. Crosswhite, "Avoiding Boundaries: Antepenultimate Stress in a Rule-based

Framework," *Linguistic Inquiry* 34.4 (2003:361-92) on Macedonian, K. Crosswhite, J. Alderete, T. Beasley and V. Markham, "Morphological Effects on Default Stress Placement in Russian Words," WCCFL 22 (2004), 151-64; K. Crosswhite, "Antepenultimate Stress as Ternarity: An Optimality Theoretic Account of the Macedonian Monosyllabic Head Effect" (to appear, NLLT); D. Kavitskaya, "Pitch Accent and Phonologization in Slavic Vowel Length," FASL 13 (2005:147-58); C. Bethin, "Metrical Quantity in Czech: Evidence from Hypocoristics," FASL 11 (2003: 63-82). The *American Contributions to the Thirteenth International Congress of Slavists*, edited by R. A. Maguire and A. Timberlake (Slavica, 2003) includes C. Bethin, "Prosodic Effects in Czech Morphology" (pp. 9-22), L. Grenoble, "The Prosodic Organization of Russian Conversation" (pp. 125-38).

25. FASL 9 (2001) has Y. Takatori, "Inertness of Sonorant [voice] in Polish", (311-26); FASL 11 (2003) published S. Blaho, "Derived Environment Effects in Optimality Theory: The Case of Pre-sonorant Voicing in Slovak", (103-20), O. Petrova, "Sonorants and the Labiodental Continuant /v/ in Russian Voice Assimilation: An OT Analysis", (413-32), FASL 12 (2004) includes D. Hall, "A Formal Approach to /v/: Evidence from Czech and Slovak."

26. C. Bethin, "Czech Stress in the Context of West Slavic," (75-90), R. Feldstein, "On the Classification of Ukrainian Nominal Stress Paradigms," (91-104), F. Gladney, "On Length and Accent in Czech Nouns," (105-118), B. Velcheva and E. Scatton, "Caluvkata si e celuvka: A Problem in Bulgarian Historical Dialectology," (119-124).

27. FASL 9 (2001) includes three phonology papers: P. Chew, "The Representation of Jers in Russian," (99-116), B. Hermans, "Compensatory Lengthening in Slovak," (155-72), and Y. Takatori (see note 25); FASL 10 (2002) had no phonology

papers; FASL 11 (2003) published four phonology papers (C. Bethin, S. Blaho, L. Blumenfeld, O. Petrova, see notes 23, 24 and 25); FASL 12 (2004) has papers by D. Hall and B. Hermans, while FASL 13 (2005) published five papers in phonology: F. Gladney, "Slavic Velar Palatalizations as Chain Shifts," (117-23), T. Scheer, "Slavic Vowel-Zero Alternations and Government Phonology: Two Approaches, One Solution", (300-311), and the papers by C. Bethin, D. Kavitskaya, J. Yarmolinskaya already mentioned.

28. The series of volumes on Laboratory Phonology under the title of *Papers in Laboratory Phonology* published by Cambridge University Press is particularly of interest and includes the following topics: *Vol. 1. Between the Grammar and Physics of Speech*, ed. by J. Kingston and M. Beckman (1990), *Vol. 2. Gesture, Segment, Prosody*, ed. by G. Doherty and D.R. Ladd (1992), *Vol. 3. Phonological Structure and Phonetic Form*, ed. by P. Keating (1994), *Vol. 4. Phonology and Phonetic Evidence*, ed. by B. Connell and A. Arvaniti (1995), and *Vol. 5. Language acquisition and the Lexicon*, ed. by M. Broe and J. Pierrehumbert (1999). It is interesting to note that of 9 dissertations in linguistics defended in 1998, two were on the phonetics/phonology interface: E. Diehm's, "Gestures and Linguistic Function in Learning Russian: Production and Perception Studies of Russian Palatalized Consonants" (Ohio State) and D. Evans-Romaine's, "Palatalization and Coarticulation in Russian" (Michigan).

29. See, for example, E. Selkirk, *Phonology and Syntax: The Relation Between Sound and Structure* (1984), and the work of L. Billings, "Approximation in Russian and the Single-Word Constraint" (Princeton Ph.D diss., 1995) and his and M. Yadroff, "Prosodic Correspondence in Syntax: Russian approximative inversion," in R. Kager and W. Zonneveld, eds., *Phrasal Phonology* (1998), as well as work by G. Zybatow and G. Mehlhorn on "Topic and Focus Prosody in Russian–An Experiment" presented at FASL 1999, and C. Schutze's, "Serbo-Croatian Second Position Clitic Placement and the Phonology-Syntax Interface," *MIT Working Papers in Linguistics*, 21 (1994), 373-473.

30. See also the work of B. Hayes, "Metrics and Phonological Theory," in *Linguistics: The Cambridge Survey, Vol. 2. Linguistic Theory: Extensions and Implications*, ed. by F. Newmeyer (1988), pp. 220-49, "The Prosodic Hierarchy in Meter," in *Rhythm and Meter*, ed. by P. Kiparsky and G. Youmans (1989), pp. 201-60, and references therein.

31. Some Slavic phonologists have used recent theoretical approaches in their work on Slavic, but the cross-pollination between current theory and Slavic linguistics is much more robust in Slavic syntax, where L. Babby has played a significant role in training a group of Slavic syntacticians conversant with syntactic theory. The situation in phonology will soon change as we can already see the beginnings of such a shift in recent dissertations, both in Slavic Languages and Literatures departments as well as in departments of Linguistics.

32. See also O. Yokoyama, "Reflections: Slavic Linguistics as a Discipline and an Occupation in the United States," *Journal of Slavic Linguistics* (1994:186-200).