song. The other attempted to prove that there existed traces of the cult of the Northwest Siberian pagan goddess 'Zolotaja Baba,' which had been mentioned on several occasions by ancient travelers, in the folk beliefs of the present-day Voguls, Ostvaks, and Votyaks. In 1907 my attention was drawn simultaneously to the problems of two isolated language families, the so-called Paleo-Asiatic languages on the one hand, and the Caucasian on the other. S. K. Kuznecov introduced me to the Paleo-Asiatic languages of Eastern Siberia. At his instigation I collected all the data contained in ancient travel reports on the Kamchadal language (on the peninsula of Kamchatka), which today is almost extinct. On the basis of this material I compiled a vocabulary and a short grammatical sketch of that language. Through this work I established correspondence with three scholars of East Siberian ethnography: Jochelson (for Yukhagir), Bogoraz (for Chukchi and Koryak), and Sternberg (for Gilyak). I discovered a series of striking correspondences in the vocabulary of Kamchadal and Chukchi-Koryak on the one hand, and Samoyed on the other. Unfortunately I had to interrupt this work because I was preparing for my baccalaureate examinations. Subsequently I never had an opportunity to come back to this interesting problem. A lecture given by V. F. Miller before the Moscow Ethnographic Society on the importance of Caucasian linguistics for the historical ethnology of Asia Minor stimulated my interest in Caucasian languages. Originally I had considered Caucasian languages and folklore only from the standpoint of the historical ethnology of Asia Minor. (In this sense I treated, for example, the North Caucasian stone birth legends in an essay in Etnografičeskoje Obozrenije, 1908.) However, I soon began to study the Caucasian languages for their own sake. In addition to all these individual problems, I was also interested in culture history in general, sociology, the philosophy of culture, and the philosophy of history.

"After graduation from the fifth gymnasium in Moscow I entered Moscow University, in 1908. At that time the university curriculum was based on the principle of a strictly separated program. Each department was divided into several special sections. Each of these sections had a fixed program of lectures, seminars, and examinations. The student could choose the section himself. After he had enrolled in a section, however, he had to complete the entire program and could not make any changes. A combination of subjects from different sections was not permitted. Ethnography and ethnology were part of the geography-anthropology section of the Department of Natural Sciences. The head of that section, Professor D. N. Anučin, conducted his classes strictly in accordance with the principles of natural history. Since ethnography and ethnology attracted me primarily in their philological and humanistic aspect, the

status of these sciences in the official program was unacceptable to me. I first enrolled in the philosophy-psychology section of the History-Philology Department (Humanities), since I intended to study primarily ethnopsychology, the philosophy of history, and methodological problems. But I soon recognized that the philosophy-psychology section had little relation to my special sphere of interest. In my third semester I transferred to the linguistic section. This section, headed by Professor W. Porzeziński, offered classes in general linguistics, Sanskrit, and Indo-European languages. Indo-European studies were pursued with special emphasis on Slavic and Baltic languages, Latin, Greek, Gothic, and Old High German were considered only secondarily, and the remaining Indo-European languages were not taught at all. For Armenian there was only a lectureship that remained vacant after the death of the lecturer, Chalatianz. The scope and direction of instruction in the linguistic section left me dissatisfied. My main interest lay outside Indo-European languages. I nevertheless decided in favor of this section for the following reasons. First, I had already become convinced that linguistic science was the only branch of "anthropology" which had a truly scientific method, and that all other branches of anthropology (ethnology, history of religion, culture history, etc.) could pass from the "alchemic" stages of development to a higher stage only if, with regard to method, they would follow the example of linguistics. Second, I knew that Indo-European linguistics was the only thoroughly studied area of linguistics, that through it one could study the correct linguistic method. Accordingly I concentrated diligently on the studies prescribed by the program of the linguistic section. At the same time, however. I continued my own studies in the field of Caucasian linguistics and folklore. In 1911 Professor Miller invited me to spend part of my summer vacation at his estate on the Caucasian coast of the Black Sea and study the Circassian language and folk poetry in the adjacent Cherkess villages. I accepted his invitation and in the summer of 1912 I continued my studies in Circassian. I was able to collect rather extensive data. I had to postpone its analysis and publication until after my graduation from the university, however. My personal contact with Professor Miller was highly profitable for my work, although his opinions on linguistics were somewhat antiquated. As a folklorist and specialist in Ossetic ethnography, however, he gave me valuable advice and references.

"I spent the academic year 1912-13 preparing for my final examinations and working on my thesis for the degree of Kandidat\* titled 'On the Desig-

<sup>\*</sup> Translator's note: This roughly corresponds to the American Ph.D. degree.

nations of the Future Tense in the Most Important Indo-European Languages.' The head of the linguistics section, Professor Porzeziński, approved my dissertation, presented it to the faculty, and requested my affiliation with the university for purposes of preparation for university teaching. This recommendation was unanimously accepted by the faculty. After I completed my final examinations in linguistics in the spring of 1913 I went to Tiflis, where I participated in the meeting of an All-Russian Congress of naturalists, geographers, and ethnologists. I gave three lectures ('Vestiges of Paganism in the Cherkess People on the Coast of the Black Sea,' 'North Caucasian Fire Abduction Legends,' and 'The Morpheme Structure of the East Caucasian Verb'). I spent the summer in the country and worked primarily on the analysis of my Cherkess data and on a comparative grammar of North Caucasian languages.

AUTOBIOGRAPHICAL NOTES

"In the fall of 1913 the faculty approved a trip abroad to complete my scientific education. I went to Germany as a Fellow of the Russian Ministry of Education and enrolled in the University of Leipzig. I attended the lectures of Professors Brugmann, Leskien, Windisch, and Lindner, and participated in the seminars and exercises supervised by them. My main interests at that time centered on Sanskrit and Avestan. In Leipzig I also bought a quantity of books, so that my personal library doubled after my stay there. I intended to go to Göttingen for the summer semester, but a personal matter prevented me from doing so, and I was forced to return to Russia. Soon after that the [First] World War broke out.

"During the years 1914 and 1915 I was preparing myself for the Habilitation.\* The procedure for attaining competency in comparative linguistics and Sanskrit was extremely strict at that time. It included five examinations that had to be taken within the course of one semester: (a) comparative grammar of the Indo-European languages, (b) Sanskrit, (c) Greek, (d) Latin, and (e) another Indo-European language chosen by the candidate and approved by the professor who taught it. A specific number of questions was given for the examinations in the theoretical subjects (for example, twenty-five questions in the comparative grammar of the Indo-European languages). The content of these questions was determined by agreement between the candidate and the examiner. At the examinations, in which all faculty members could participate, three questions were put to the candidate. Each of these questions had to be answered by a halfhour detailed discussion including the cogent literature. Each of the faculty members present had the right to ask other questions on the same subject

which had not been provided for in the program. In my case, for example, the examinations in comparative grammar lasted three hours (in addition to Professor Porzeziński and A. A. Hruška who was then dean, the classical philologist M. M. Pokrovskii and the Slavicists R. F. Brandt and V. N. Scepkin participated). For the examinations in the individual languages, texts with detailed linguistic and philological commentary, critical commentary, and culture history commentary had to be prepared, as well as a certain number of questions from historical grammar. For the examination in Greek I had prepared as a text the second book of the Iliad. for the examination in Latin. Petronius' Cena Trimalchionis. For the examination in Sanskrit, samples of all main categories of Sanskrit literature had to be selected. For this examination I prepared a translation with a detailed commentary of twenty-five Vedic hymns, three longer episodes from the epic (Nala and Sāvitrī from the Mahābhārata, and the Battle of the Apes from the Rāmāvana), two dramas (Kālidāsa's Vikramorvasiya and Mālavikāgnimitra), with particular attention to the Prakrit sections, and a text from prosaic literature (I selected the Vētālapañcavinsati). My competency examinations lasted the entire winter semester 1915-16. They were concluded by two public trial lectures ('The Various Aspects of Veda Studies' and 'The Problem of Reality of the Protolanguage and the Modern Methods of Reconstruction'). I was then granted the venia legendi and joined the faculty of Moscow University as a Privatdozent.

"Professor W. Porzeziński, who had so far conducted all lectures in general linguistics provided for by the program of that section, assigned the lectures and exercises in Sanskrit to me for the academic year 1915-16. I had the intention of teaching Avestan and Old Persian the following year, since Iranian languages had not been taught at all at Moscow University. In 1915 a book by A. A. Šakhmatov titled Očerk drevnejšego perioda istorii russkogo jazyka appeared, and it was of great importance for my linguistic biography. This book was devoted to the reconstruction of Proto-Slavic and Proto-Russian, and Šakhmatov as a faithful disciple and follower of F. F. Fortunatov proceeded in the spirit of his mentor. All the shortcomings of the method of reconstruction followed by the Fortunatov (Moscow) school stood out with particular clarity in his book. This imperfection made a very strong impression on me, I had always been very much interested in questions of methodology. I wrote a detailed critical review of the book, which I read at the meeting of the Moscow Dialectological Commission. My paper had the effect of a bomb. Up to that time Fortunatov's school had roled the Moscow arena and all Moscow linguists had accepted the dogmas and methodological principles of that school without reservation. A lively debate developed, in which

<sup>\*</sup> Translator's note: Tests designed to qualify a scholar to hold a professorial position.

representatives of the older generation of linguists polemicized against my views and tried to defend the methods of Šakhmatov, while the younger generation was on my side. I believe that my paper was of decisive importance for the further development of linguistic science in Moscow. It was the first expression of a turning away from Fortunatov's method of reconstruction. Many concluded from this that linguistic reconstruction in general was a hopeless undertaking and turned away from the entire area of historical linguistics. They were soon reinforced by the influences of the school of Ferdinand de Saussure which had been little known in Russia prior to the war. Even today most young linguists in Moscow work in the direction of 'static' or 'synchronic' linguistics and show little interest in historical linguistics. For myself, however, the discussion that ensued from my paper had quite a different meaning. After deciding that the method applied by F. F. Fortunatov, A. A. Šakhmatov, and other disciples was untenable, I merely concluded that one must look for a more suitable method for historical linguistics and linguistic reconstruction. I made it my task to search for such a method. Since Šakhmatov's book, which had convinced me of the untenability of the old method, was devoted to Slavic languages, my attention was directed to these languages. Previously I had been more occupied with Iranian languages (since of all Indo-European languages these had most influenced the Caucasian languages which were my main interest). The Slavic languages now came more into the foreground. I decided to write a book titled Prehistory of the Slavic Languages, and in it I planned to illustrate the process of development of the individual Slavic languages from Proto-Slavic, and of Proto-Slavic from Indo-European, by means of an improved method of reconstruction. . . . "

Here end the autobiographical notes. During the summer of 1917 Trubetzkoy visited the Caucasus which soon became enveloped in the turmoil of civil war. After many dramatic journeys and adventures he was able to resume his work toward the end of 1918. About two hundred letters, which were miraculously saved, tell us of Trubetzkoy's scientific life from that time until his death on June 25, 1938. The first of these letters is dated December 12, 1920, the last May 9, 1938. An edition of all these letters is now in preparation. They contain many valuable thoughts, observations, and discoveries by Trubetzkoy which are still unknown. Here only a selection of remarks is given which illuminate the development of his views on basic questions of linguistics, and especially of phonology. 1\*

"After a really very intensive life in Moscow during these past years, I

was first in Kislovodsk in the deepest provinces, and later in Rostov. Despite the existence of a university (which conferred upon me the chair of comparative linguistics), there was not a trace of intellectual life and not a soul with whom one could have discussed anything. . . . For better or for worse, one is forced to become self-sufficient, to work all by oneself without discussing one's work with anyone. . . . During my stay in Kislovodsk I had begun writing a treatise titled 'Attempt at a Prehistory of the Slavic Languages,' I attempted to reconstruct the history of the development and division of Common Slavic, I applied the method I had opposed to that of Sakhmatov in my [Moscow] paper. The results were not uninteresting. . . . I had to break rather radically with the dogmas of the 'Moscow School.' . . . I had to break with many other dogmas as well. If my work should ever be published, it will probably be strongly attacked, and not only on the part of the 'Muscovites,' But it also contained some thoughts that, I hope, will ultimately find general acceptance. It was very difficult for me to write because I had taken along only a few books, and the university library in Rostov was absolutely useless in my area. Nevertheless, I completed the history of phonology in outline form and prepared a sketch of the morphology. But just then we had to leave Rostov, and during our evacuation all my manuscripts and books remained there [and vanished without a trace]" (12-12-1920).

From 1920 on Trubetzkoy is in Bulgaria. He is appointed lecturer in Slavic philology by the University of Sofia, with the privilege of giving lectures in comparative linguistics. There he wrote and published a book on culture theory, which he had already planned in 1909 and 1910 as the first part of a trilogy titled "Justification of Nationalism." The first part was to be titled "On Egocentricity." It was changed to the more meaningful title "Europe and Humanity." The original dedication to Copernicus was omitted as being too pretentious. The aim of this book is purely negative and destructive. The first task is to revolutionize consciousness. "The essence of such revolution consists in completely overcoming egocentricity and eccentricity and to pass from absolutism to relativism" (3-7-1921). At the same time Trubetzkoy was trying to reconstitute his manuscript of the *Prehistory*.

"I am proceeding from the viewpoint that Common Slavic is not only a short moment but an epoch, or rather, a sequence of epochs. The first dialectal particularities which appear in the 'Proto-Slavic dialects' (in other words, in those dialects of Indo-European from which Common Slavic subsequently developed) toward the end of the Proto-Indo-European era, may be viewed as a point of departure. Those last phonic phenomena which spread through all Slavic languages may be considered the end of

<sup>\*</sup> Translator's note: According to a personal communication from Roman Jakobson, the publication of these letters is imminent.

Common Slavic; for example, the loss of the vowels  $\tilde{u}$  and  $\tilde{l}$  which generally had the same character in all Slavic languages. This means that the era of Common Slavic comprised several millennia, at least two and one-half millennia.... I consider the twelfth century as the end of the era of Common Slavic" (12-12-1920). "In view of these conditions it would be just as meaningless to determine the phenomena of Common Slavic without precisely establishing the period in which each of these phenomena occurred, as it would be for a historian to indicate on the same map the boundaries of the conquests of Napoleon and of Alexander the Great. I am therefore attempting to establish a reciprocal relative chronology of the various phenomena of Common Slavic. In this way I obtained a chronological table that includes not only almost all phonic phenomena of Common Slavic, but also the majority of phenomena of Common Russian. Common Polish, etc. For many of the particularities of the various dialects of Common Slavic had already appeared, while phenomena that appeared in all dialects continued to occur. Some morphological innovations, among which relative chronology also holds, may be included in this table of phonic phenomena as well. One thus obtains a table that indicates the successive development of phonological and morphological features as they occur in the dialects from which the autonomous Slavic languages developed" (2-1-1922).

"In the summer of 1922 I accepted an appointment to the chair of Slavic at the University of Vienna.... I have to give five lectures weekly. These lectures may not be repeated for three years. They are to comprise six Slavic languages and the most important works in literature.... For the coming year I will be so deluged by work that I cannot even think of writing a book. I will only be able to publish some articles from time to time. This, of course, is very regrettable. But perhaps it is useful that the 'Prehistory' has time to mature in my mind. I am continually having new ideas that force me to make improvements on the entire work.... At present I am completely absorbed by the preparation of my lectures on the historical grammar of Russian and Old Church Slavic" (1923).

"With regard to the history of the Russian language, as with Slavic studies in general, I am above all trying to recognize the forest before the trees. In my opinion this is feasible today. Yet there are few people who make an attempt to do so. Taking a brief look at the history of the development and the divisions of Common Russian, I am amazed at the logical harmony of this survey. . . . Up to the fourteenth century the development of the history of Russian sounds is determined by a single principle: it follows logically from the relationship of the geographical position of the Russian area to the other Slavic languages" (7-12-1923).

"At the present I am extensively applying the methodological procedures I had already used in the sound history of Russian to the sound history of the other Slavic languages, and to a comparative study of the sounds of Slavic. This leads to very peculiar results. The disintegration of Common Slavic offers an entirely new picture. The relationships between the various languages frequently appear in a completely different light. Most important, one always discovers a certain inner logic in the development. Very often the discovery of this logic is a surprise to the scholar himself" (Letter to Durnovo, 2-24-1925).

At the same time Trubetzkoy continued the soudy of other language families, especially those of the Northern Caucasus. He attentively follows the development of general linguistics. Above all he studies and discusses the first concrete attempts of a phonological analysis of language. He warns about certain erroneous views in linguistics, and vehemently condemns the doctrine of Marr, which at that time was undermining linguistic science in Russia.

"The essay by Marr<sup>2</sup> surpasses anything he has so far written.... I am firmly convinced that a critical review of this article should not be undertaken by a linguist but by a psychiatrist. It is unfortunate for linguistics that Marr is not sufficiently insane to be put into an institution; but it is clear to me that he is crazy. This is pure Martynov.<sup>3</sup> Even the format of the article is characteristic of a lunatic. It is terrible that most people have not yet noticed this" (11-6-1924).

While "again seriously" thinking about his *Prehistory of the Slavic Languages*, Trubetzkoy reaches the conclusion that it can only be beneficial if the publication of that book be delayed. "This type of thing must mature slowly" (1-15-1925).

In search of new methods, he tries a new field of investigation—"stylistics and poetry."

"I do not occupy myself any more with linguistics.... I can see that I am giving the lectures on Old Russian literature with much more enthusiasm than the lectures on comparative grammar.... They in no way resemble the usual lectures on Old Russian literature.... You would probably also enjoy it since the formal methods come very much into their own here. But I still cannot consider myself a true formalist, for the formal method for me is only a means to bringing out the spirit of the work.... After grasping the 'literary devices' of the Old Russian writers and the purposes of these literary devices, we begin to understand the work itself. We gradually penetrate into the mentality of the ancient Russian reader and make his viewpoint our own. One can make a series of unexpected discoveries in this area. Seen from this vantage point, the literary

development shows itself in a completely new perspective.... You can see that my attention is channeled in a completely new direction. But at the bottom of my heart I certainly am above all a linguist" (2-18-1926).

The discussion of the possibility of applying the phonological method to the area of diachronic linguistics again leads to Trubetzkoy's plunging himself, and this time definitively, into the problems of linguistics. A long and ardent letter, which I had sent from Prague to Vienna, had brought up the questions that I subsequently developed in the introductory chapters of my "Remarques sur l'évolution phonologique" (TCLP, II). The letter had stressed above all the necessity of bridging the chasm that existed between the synchronic analysis of the phonological system and the history of sounds. Any change in a system of meaning-forming components can only be understood in its relation to such a system. I did not have long to wait for Trubetzkoy's reply.

"I fully agree with your general views. Many things in the history of language appear fortuitous, but the historian cannot be satisfied thereby. Upon a bit of attentive and logical reflection we notice that the general lines of language history are not at all accidental, and that accordingly small details are by no means accidental either. One must only grasp their meaning. The logical character of language development is a result of the fact that 'language is a system.' In my lectures I always try to demonstrate the logic of the development. This is possible not only in the domain of phonetics but also in morphology (perhaps also in the domain of the lexicon). There are examples that lend themselves particularly well to illustration, such as the development of the numerals in the Slavic languages, the development of the conjugation in Russian, etc. (The development of the former depends entirely on whether or not the dual was preserved as a productive category.)

"Ferdinand de Saussure, though he teaches that 'language is a system,' has not dared to draw the consequences from his own theory. This can be explained principally by the fact that such a conclusion would not only have been a contradiction of the traditional conception of language history, but also of the customary ideas about history in general. One does not concede that history has any meaning other than the notorious one of 'progress.' This is a mistaken conclusion, in which meaning is deduced from absurdity. From the viewpoint of the historian, only 'laws' such as the following can be ascertained in the development of language: 'The progress of culture destroys the dual' (Meillet). But, strictly speaking, these laws are neither definitive nor purely linguistic. Yet we are taught by a careful reflection on languages, which is oriented toward an inner logic in their development, that such logic exists, and that a whole series of

purely linguistic laws can be established which are independent of extralinguistic factors such as 'culture,' etc. Naturally, these laws will not tell us anything about 'progress' or 'regression.'...

"The various aspects of culture and the existence of peoples also develop in accordance with an immanent logic, and their own laws have nothing in common with 'progress' either. It is specifically for this reason that ethnology and anthropology do not wish to examine these laws. In the history of literature the formalists have finally begun to study the immanent laws, thus unveiling the meaning and inner logic of literary development. All sciences that deal with development are so neglected methodologically that the 'problem of the day' now is to improve the method of each of these sciences separately. The time is not yet ripe for a synthesis. But there is no doubt about a certain parallelism in the development of the various aspects of culture. Accordingly there must be laws that deny such parallelism. . . . A special science must be created which focuses on a synthetic study of a parallelism in the development of the various aspects of life.

"All this would also be applicable to the problems of language.... Accordingly one may not only ask oneself in the final analysis why a particular language, after choosing a particular direction, has developed in one way rather than in another, but also why a given language, spoken by a particular people, has developed just in this direction and not in another. For example, why has Czech preserved vocalic quantity and Polish the palatalization of consonants" (12–29–1926).

Trubetzkoy immediately recognized the comprehensive revision that would result for all our previous postulates from the application of the phonological method to the history of sounds. "You disconcerted me," he told me in jest when we met, and in the above-mentioned letter he confesses with reference to his *Prehistory of the Slavic Languages*, "I am afraid it is already too late for that."

He realized that a teleological explanation of the origin of sound change could and must reveal many essentially new and important things. But in the beginning he found it difficult to detach himself from the traditional view that useless sound change only created disorder in the system and was due only to "mechanical causes" (1-12-1927).

However, his doubts were soon dispersed. Trubetzkoy replied to my proposal of topics for historical phonology, which were to be read at the First International Congress of Linguists in The Hague in 1928, as follows:

"I am in agreement with your proposal. I would only like to add that in view of the novelty of the problem... it would be desirable to keep the arguments in their simplest and clearest form, and not to be afraid of going into details. Put yourself in the place of a person who has never heard

anything about these questions. Please do not forget that, on the average, linguists are narrow-minded routineers who, furthermore, are hardly used to abstractions.... But this is only a matter of form. With regard to content, 1 am in complete agreement with you. Please add my signature" (10-22-1927).

The success of phonology at the Congress in The Hague encouraged Trubetzkoy. He took part effectively in the activities of the Cercle Linguistique de Prague which then appeared for the first time in the international arena, by preparing for the first International Congress of Slavicists (Prague, September 1929) the first two volumes of the Travaux (TCLP). They contained a series of collective papers devoted to the problems of structural linguistics in general and phonology in particular. Progress in historical phonology requires a great deal of preliminary work in the area of synchronic phonology. A historian by training and predilection, Trubetzkoy begins a brilliant attempt to reconstruct the phonological system of Polabian, an extinct language. However, he is becoming increasingly aware of the necessity to concentrate his efforts on the description of modern languages and on the analysis of their general structural laws. These investigations, which later were to become the center of Trubetzkoy's work, seemed at first to be only an interlude. He announces the most important of his discoveries—the phonological analysis of vowels (subsequently published in TCLP, 1)—as follows:

"This summer I worked little. For the most part I went for walks. The weather was beautiful. I made good progress with my 'Polabian Studies,' but have not yet completed them. In the meantime I have started working on something else which fascinates me. I have compiled all vocalic systems I knew by heart (thirty-four in all), and tried to compare them with each other. I continued this work here in Vienna and now I already have fortysix systems. By and by I will continue my work on them, until I have collected about one hundred languages. The results are extremely strange. All systems can be reduced to a small number of types and can always be represented by symmetrical diagrams (triangles, parallel series, etc.). There are some laws about the 'formation of systems' which can be seen without difficulty . . . I believe that the empirical laws discovered in this way will be of great importance, in particular for language history and reconstruction.... They must be applicable to all languages, for the theoretically reconstructed protolanguages as well as for the various developmental stages of the historically attested languages" (9-19-1928).

From here on the problem of general laws is formulated more and more precisely in the investigations of Trubetzkoy.

"I believe that there are some laws of phonological structure which are actually valid universally, while others are limited to a particular type of morphological and perhaps even lexical structure. Since language is a system, a close link must exist between the grammatical and phonological structure of language. Only a limited number of phonological systems are compatible with one and the same grammatical structure. This is a fact that limits the developmental possibilities and restricts the application of comparative phonology" (2-25-1930).

Another fundamental discovery by Trubetzkoy in the field of phonological structure was soon to follow. This was the observation that one of two terms of a binary opposition "is to be considered as positive, characterized by a specific mark, while the other is simply to be regarded as lacking that mark" (7-31-1930). This discovery was closely linked with the feverish preparations for the First International Phonological Conference which took place in December 1930 in Prague. The conference had a very full program and fruitful discussions. It represented an accounting of the first stage of phonological studies. Trubetzkoy's informative contributions to the discussions fascinated the audience. At the same time the work done at the conference, the enthusiastic letters of linguists such as Meillet and Sapir, and the close cooperation with the Prague Circle made a deep impression on Trubetzkoy. In a letter to V. Mathesius on the occasion of the tenth anniversary of the Prague Circle he referred to the past as follows, when he wrote:

"The various stages of development of the Prague Circle which I have experienced come alive in my memory: first the heroic period, the preparation for the First Congress of Slavicists, the unforgettable days at the phonological conference, and many other wonderful days I have spent with my Prague friends. All these memories are for me linked with a wonderful feeling of excitement. With each contact with the Prague Circle, I felt a new wave of creative joy which died away again and again during my lonely work away from Prague. This stimulation and inspiration are reflective of the spirit of our circle. They emanate from the collaborative efforts of the scholars who, in agreement among themselves, direct their efforts toward the same methodological goals and are inspired by the same leading idea" (November 1936).

While Trubetzkoy continues to develop the theoretical and practical investigations in the field of phonological analysis, he studies the works of his precursors in phonology, especially those of de Saussure and Baudouin de Courtenay. As early as July 18, 1929, he writes:

"In reading Baudouin, I grasp with particular clarity what it is by which he distinguishes himself from us. The ground we have covered since then is indeed much more significant than one would have believed." And on October 27, 1931, he notes in a draft of a rebuttal to his critics:

"I am moving further and further away from Baudouin's system. This is, of course, inevitable, but it seems to me that, if one disregards the later definitions by Baudouin and Ščerba, which in my opinion are often insufficient and inexact, and if one only considers the essence of their systems, in other words, how they applied these systems in practice, one would recognize that our present-day conceptions (those of Jakobson and myself) are a further development of those systems rather than a contradiction of them."

Subsequently, when Trubetzkoy came back to this topic, he ascribed the errors in the phonological attempts of Baudouin's school "to the influence of historical methods and the phonetic conception of the phoneme" (12-3-1937). Of the prephonological studies he appreciates above all the work by the Swiss, J. Winteler: Die Kerenzer Mundart des Kanton Glarus in ihren Grundzügen dargestellt (Leipzig, 1876):

"The book is remarkable for its time. The phonetic nature of sound and the role of sound in a system are here distinguished with surprising precision. He strictly distinguishes between those sounds that are physiologically possible and those sounds that are actually used in a given language with a significative value. In general, the author constantly reaches the borders of phonology. . . . It is evident that many of his thoughts were ahead of his time and were not understood" (1-28-1931).

The spiritual isolation of the Swiss innovator which caught the attention of Trubetzkoy is in marked contrast to the recognition accorded phonology sixty years later in 1936 at the International Congress of Linguists in Copenhagen:

"Generally speaking, I am very much satisfied with the Congress. To be exact, not so much with the Congress itself as with its atmosphere. The sense of isolation which is so oppressive to me in Vienna and handicaps me in my work, it seems to me, is disappearing. It has turned out that we are many.... This is a step forward, compared to Rome [Congress of Linguists, 1933]. And disregarding all other considerations, a change in generation has taken place. Generations always advance by steps. In Copenhagen it was discovered for the first time that we are not alone in being active as an outpost. We are followed by the younger generation which has learned from our work and which can work independently. In any event, the Congress gave me wings. Upon my return I diligently set upon writing my introduction to phonology which had not seemed to make any headway prior to my trip [to Copenhagen]. Ideas are again beginning to take form" (10-5-1936).

This introduction, the first draft of *Principles of Phonology*, had long been conceived by Trubetzkoy. Early in 1935 he noted: "Meillet suggested

that I write a manual of phonology in French which would be published by the Société de Linguistique." Trubetzkoy notes that modern linguistics has left behind its *Sturm und Drang* period, and that his own activity as well as that of his comrades-in-arms has entered a new phase. "In place of a violent storm, an even flood, though still mighty and unrelenting. It appears vexing at first. What is it? Should it be true that youth has passed and that this is the beginning of old age? But in addition to youth and old age there is, after all, also a period of maturity" (1–25–1935).

Trubetzkoy is concentrating his efforts on his main work. He rejects with determination any tendencies to philosophize blindly about the facts apart from actual study. In short, he rejects any tendencies to neglect details in favor of the whole. On the other hand, he severely reprimands the neglect of the whole in favor of details, or of theory in favor of practice. "A mathematician can do without an engineer, but an engineer cannot do without a mathematician" (2-21-1935).

He prepared a card index of phonological descriptions of numerous languages of the world. He attempted to formulate the methods for their analysis with precision and to discover the universal laws of human language behind the particularities of individual languages. He was aware with equal lucidity of the deadly sickness that was draining him of his energy, and of the catastrophe that was befalling Europe. During the last years of his life Trubetzkoy suffered from angina pectoris. He poked fun at the naiveté of his doctors who promised him a long life provided he lived quietly. "How can one fulfill this condition in Europe today?" he added with a smile. Hitler's occupation of Austria was disastrous for Trubetzkoy. He had never attempted to conceal his antinational-socialist views. In an article on the racial question he had subjected the racist theory to devastating criticism. He neither could nor wanted to remain at the University of Vienna. Trubetzkoy's last hope was to emigrate to America to continue his scientific work there. The Gestapo looked for him and subjected him to an impudent house search and interrogation. His files were confiscated. As a direct consequence of this visit, Trubetzkoy suffered a severe heart attack. In the hospital he still hurried to complete his book. He dictated it up to his final days. Except for a final review, the volume was almost completed. Only about twenty pages remained to be written when, on June 25, 1938, Trubetzkoy suddenly died.

<sup>&</sup>lt;sup>1</sup> If I mention a letter that is addressed to somebody else but me, I indicate this.

<sup>&</sup>lt;sup>2</sup> N. Marr, Ob jafetičeskoj teorii (Novyj Vostok, 1924-1925), pp. 303-339.

<sup>&</sup>lt;sup>3</sup> A Russian mental patient at the end of the nineteenth century, who had published a pamphlet: "Entdeckung des Geheimnisses der menschlichen Sprache oder die Offenbarung des Bankrotts der gelehrten Sprachwissenschaft." He tried to prove that all words of human languages can be traced back to the root meaning "to eat."—R. Jakobson.

# APPENDIX IV BIBLIOGRAPHY OF N. S. TRUBETZKOY'S WORKS\*

# COMPILED BY BOHUSLAV HAVRÁNEK TRANSLATED AND ENLARGED BY C. BALTAXE

List of Abbreviations

BSL Bulletin de la Société de Linguistique (Paris)

JevrazChr Jevrazijskaja Chronika (Berlin-Paris)

MSL Mémoires de la Société de Linguistique (Paris)

RESI Revue des études slaves (Paris)

Slavia Slavia. Časopis pro slovanskou filologii (Prague)

SISI Slovo a slovesnost (Prague)

TCLP Travaux du Cercle linguistique de Prague (Prague)

ZslPh Zeitschrift für slavische Philologie (Berlin)

- 1905. Finnskaja pěsn' "Kulto neito" kak pereživanije jazyčeskago obyčaja (*Etnografičeskoje obozrěnije* XVII, 2-3, 1905, pp. 231-233).
- 1906. K voprosu o "Zolotoj Babě" (Etnografičeskoje obozrěnije XVIII, 1-2, 1906, pp. 52-62).
- 1907. V. J. Mansikka: Das Lied von Ogoi und Hovatitsa. Finnisch-Ugrische Forschungen VI, 1906 (Etnografičeskoje obozrěnije XIX, 3, 1907, pp. 124-125), review.

- 1908. Kavkazskija paralleli k frigijskomu mifu o roždenii iz kamnja (= zemlji) (Etnografičeskoje obozrčnije XX, 3, 1908, pp. 88-92).

  Sbornik materialov dlja opisanija městnostej i plemen Kavkaza. Vyp. XXXVII, otd. III, Tiflis 1907 (ibid., pp. 146-151), review.
- 1911. Rededja na Kavkaze (Etnografičeskoje obozrěnije XXIII, 1-2, 1911, pp. 229-238).
- 1913. Stefan Kirovič' Kuznecov. Ličnyja vpečatlenija (Etnografičeskoje obozrěnije XXV, 1-2, 1913, pp. 325-331).
- 1914. O stiche vostočno-finskich pesen (summary of a presentation to Etnografičeskij otdel Obščestva ljubitelej jestestvoznanija, antropologii i etnografii) (*Izveštija Obščestva ljubitelej jestestvoznanija*... 1914).
- 1920. Jevropa i čelověčestvo. Sofija, Posijsko-Bolgarskoje knigoizdateľstvo, 1920, 82 pp. (translated into German and Japanese).

  Predislovije (G. D. Wells: Rossija vo mglě. Sofija, Rossijsko-Bolgarskoje knigoizdateľstvo, pp. iii-xvi).
- 1921. La valeur primitive des intonations du slave commun (*RESI* I, 1921, pp. 171-187).

Ob istinnom i ložnom nacionalizmě (*Ischod k Vostoku*, Sofija, 1921, pp. 71-85).

Verchi i nizy russkoj kul'tury. Etničeskaja osnova russkoj kul'tury (*ibid.*, pp. 86-103).

<sup>\*</sup> Originally published in Études phonologiques dédiées à la mémoire de M. le prince N. S. Trubetzkoy (Prague: Jednota ceských matematiků a fysiků, 1939—TCLP 8).

1922. O někotorych ostatkach isčeznuvších grammatičeskich kategorij v obščeslavjanskom prajazykě (*Slavia* I, 1922, pp. 12–21).

La forme slave du nominatif-accusatif singulier des thèmes neutres en -n- (MSL XXII, 1922, pp. 253-258).

Essai sur la chronologie de certains faits phonétiques du slave commun (RESI II, 1922, pp. 217-234).

Remarques sur quelques mots iraniens empruntés par les langues du Caucase Septentrional (MSL XXII, 1922, pp. 247-252).

Les consonnes latérales des langues caucasiques septrionales (BSL XXXIII, 1922, pp. 184-204).

Religii Indii i christianstvo (Na putjach, Berlin, 1922, pp. 177-229).

Russkaja problema (Na putjach, Berlin, 1922, pp. 294-316).

1923. Les adjectifs slaves en ŭkŭ (BSL XXIV, 1923, pp. 130-137).
Soblazny jedinenija (Rossija i Latinstvo, Berlin, 1923, pp. 121-140).
U dverej. Reakcija? Revolucija? (Jevrazijskij Vremennik III, 1923, pp. 18-29).

Vavilonskaja bašnja i smešenije jazykov (ibid., pp. 107-124).

1924. Les langues caucasiques septentrionales (Les langues du monde, Paris, 1924, pp. 327-342).

Zum urslavischen Intonationssystem (Streitberg-Festgabe, Leipzig, 1924, pp. 359-366).

R. Jakobson, O českom stiche, preimuščestvenno v sopostavlenii s russkim (*Slavia* II, 1923/24, pp. 452-260), review.

1925. Einiges über die russische Lautgeschichte und die Auflösung der gemeinrussischen Spracheinheit (ZslPh I, 1925, pp. 287-319).

Polab. Staup (Hennig B<sub>1</sub>) "Altar" (ibid., pp. 153-156).

Les voyelles nasales des langues léchites (RESI V, 1925, pp. 24-37).

Staroslavjanskoje скврьна (Sbornik v čest' na Vasil N. Zlatarski, Sofia, 1925, pp. 481-483).

Die Behandlung der Lautverbindungen tl, dl, in den slavischen Sprachen (ZslPh II, 1925, pp. 117-122).

Nasledije Čingischana. Vzgljad na russkoju istoriju ne s Zapada, a s Vostoka. Berlin, 1925, 60 pp.

Nas otvet. Paris, 1925, 11 pp.

My i drugije (Jevrazijskij Vremennik IV, 1925, pp. 66-81).

O turanskom elemente v russkoj kul'ture (ibid., pp. 351-377).

Trudy Podrazrjada issledovanija severno-kavkazskich jazykov pri Institute Vostokovedenija v Moskve, vyp. 1-3 (BSL XXVI, 3, 1925), review.

K. H. Meyer, Historische Grammatik der russischen Sprache (Archiv für slav. Philologie XXXIX, 1925, pp. 107-114), review.

1926. Otraženija obščeslavjanskago \*o v polabskom jazykě (Slavia IV, 1925-26, pp. 228-237).

Zur Quellenkunde des Polabischen (ZslPh III, 1926, pp. 326-364).

Studien auf dem Gebiete der vergleichenden Lautlehre der nord-kaukasischen Sprachen (Caucasica, fasc. 3, 1926, pp. 7-36).

Gedanken über den lateinschen a-Konjunktiv (Festschrift für P. Kretschmer, Vienna, 1926, pp. 267-274).

"Choženije za tri morja" Afanasija Nikitina, kak literaturnyj pamjatnik (Versty I, Paris, 1926, pp. 164-186).

1927. Urslav. dŭždžŭ "Regen" (ZslPh IV, 1927, pp. 62-64).

Russ. семь "sieben" als gemeinostslavisches Merkmal (ibid.).

O metrike častuški (Versty II, Paris, 1927, pp. 205-223).

K probleme russkogo samopoznanija. Paris, Jevrazijskoje Knigoizdatel'stvo, 1927, 94 pp.

Vatroslav Jagić, ein Nachruf (Almanach der Akademie der Wissenschaften in Wien, für das Jahr 1927, 1927, pp. 239–246).

K ukrainskoj probleme (Jevrazijskij Vremennik V, 1927, pp. 165-184).

Redakcionnoje primečanije [Introduction to the study by V. Nikitin "Ivan, Turan i Rossija"] (*ibid.*, pp. 75-78), coauthored by P. Savickij.

O gosudarstvennom stroje i forme pravlenija (JevrazChr VIII, 1927, pp. 3-9).

329

Obščejevrazijskij nacionalism (JevrazChr IX, 1927, pp. 24-31).

1928. Ob otraženijach obščeslavjanskogo ę v češskom jazyke (Slavia VI, 1927-28, pp. 661-684).

(Reply to the question:) Etablissement et délimination des termes techniques. Quelle est la traduction exacte des terms techniques dans les différentes langues? (Premier Congrès international des Linguistes, La Haye, 1928, Propositions, and Actes du premier Congrès international de Linguistes à la Haye, April 10-15, 1928, Leiden [1930], pp. 17-18). Quelles sont les méthodes les mieux appropriées à un exposé complet et pratique de la grammaire d'une langue quelconque? Proposition cosigned by R. Jakobson, S. Karcevskij, and N. S. Trubetzkoy, ibid., pp. 33-36, and reprinted in Roman Jakobson, Selected Writings I, Mouton & Co., pp. 3-6.

Ideokratija i armija (JevrazChr X, 1928, pp. 3-8).

N. V. Gogol (Radio Wien, 1928, no. 16).

Otvet D. I. Dorošenku (JevrazChr X, 1928, pp. 51-59).

1929. K voprosu o chronologii stjaženija glasnych v zapadnoslavjanskich jazykach (*Slavia*, VII, 1928-29, pp. 205-807).

Zur allgemeinen Theorie der phonologischen Vokalsysteme (TCLP I = Mélanges linguistiques dédiés au premier Congrès des philologues slaves, 1929, pp. 39-67). (Reprinted in J. Vachek, A Prague School Reader in Linguistics, Indiana University Press, 1964, pp. 108-142.)

Sur la "morphonologie" (ibid., pp. 85-88). (Repr. Vachek, 183-86.)

Problèmes slaves relatifs à un atlas linguistique, surtout lexical.—Problèmes de méthode de la lexicographie slave (*ibid.*, pp. 25-27), theses 7 and 8. = Problémy všeslovanského atlasu linguistického, zvláště lexikálního.—Methodické problémy slovanské lexikografie (I. sjezd slovanských filologů v Praze, 1929, sekce II, these k diskusi, 7. a 8.).

Notes sur les désinences du verbe des langues tchétchéno-lesghiennes (BSL XXIX, 1929, pp. 153-171).

Caucasian languages (Encyclopaedia Britannica, vol. V, p. 54).

Lettre sur les dipthongues du protoslave (TCLP II, 1929, 104).

Polabische Studien (Sitzungberichte der Akademie der Wissenschaften in Wien, Philos.-hist. Kl., Bd. 211, Abh. 4), 167 pp.

1930. Das Münchner slavische Abecedarium (*Byzantinoslavica* II, 1930, pp. 29-31).

BIBLIOGRAPHY

Nordkaukasische Wortgleichungen (Wiener Zeitschrift zur Kunde des Morgenlandes XXXVII, 1930, pp. 76-92).

Über die Entstehung der gemeinwestslavischen Eigentümlichkeiten auf dem Gebiete des Konsonantismus (ZslPh VII, 1930, pp. 383-406).

† Viktor K. Poržezinskij (Slavia IX, 1930-31, pp. 199-203).

T. Lehr-Spławiński, Gramatyka połabska (Slavia IX, 1930-31, pp. 154-164), review.

1931. Die phonologischen Systeme (*TCLP* IV = International Phonological Conference held in Prague, December 18-21, 1930, 1931, pp. 96-116).

Gedanken über Morphonologie (ibid., pp. 160-163). Transl. herein.

Phonologie und Sprachgeographie (ibid., pp. 228-234). Tr. herein.

Principes de transcription phonologique (ibid., pp. 323-326).

Zum phonologischen Vokalsystem des Altkirchenslavischen (Mélanges de philologie offerts à M. J. J. Mikkola = Annales Academiae Scientiarum Fennicae, XXVII, 1931, pp. 317-325).

Die Konsonantensysteme der ostkaukasischen Sprachen (Caucasica, fasc. 8, 1931, pp. 1-52).

Lettre sur la géographie de la déclinaison (R. Jakobson, K charakteristike evraz. jezyk. sojuza, 1931, pp. 51-52).

- 1932. Das mordwinische phonologische System verglichen mit dem russischen (*Charisteria Gvil. Mathesio quinquagenario...oblata*, Prague, 1932, pp. 21-24).
- 1933. La phonologie actuelle (*Journal de Psychologie* XXX, 1933, pp. 227-246).

Les systèmes phonologiques envisagés en eux-mêmes et dans leurs rapports avec la structure générale de la langue (Actes du deuxième Congrès international de Linguistes, Genève 25-29 août 1931. Paris, 1933, pp. 109-113, 120-125).

Charakter und Methode der systematischen phonologischen Darstellung einer gegebenen Sprache. (Proceedings of the International Congress of Phonetic Sciences, Amsterdam, July 3-8, 1932 [Archives

néerlandaises de phonétique expérimentale VIII-IX, 1933], pp. 18-22 = Conférences des membres du Cercle linguistique de Prague au Congrès des sciences phonétiques tenue ..., 1933, pp. 1-5).

Die Entwicklung der Gutturale in den slavischen Sprachen (Sbornik v čest' na prof. L. Miletič, Sofia, 1933, pp. 267-279).

Zur Struktur der mordwinischen Melodien (Sitzungsberichte der Akademie der Wissenschaften in Wien, Philos.-histor. Kl., Bd. 205., Abh. 2., 1933, pp. 106-117).

Il problema delle parentele tra i grandi gruppi linguistici (Terzo Congresso internazionale dei Linguisti, Roma, 19-26 settembre, 1933, and Atti del III Congresso internazionale dei Linguisti, 1935, pp. 326-327).

Mysli ob avtarkii (Novaja epocha, Narva, 1933, pp. 25-26).

1934. Das morphonologische System der russischen Sprache ( $TCLP V_2 = Phonological description of modern Russian$ . Second part), Prague, 1934, 94 pp.

Ein altkirchenslavisches Gedicht (ZslPh XI, 1934, pp. 52-54).

Erinnerungen en einen Aufenthalt bei den Tscherkessen des Kreises Tuapse (Caucasica, fasc. 11, 1934, pp. 1-39).

Die sogenannte Entpalatalisierung der ursl. e und e vor harten Dentalen im Polnischen vom Standpunkte der Phonologie (Księga referatów, II międzynarod. zjazd slawistów, Warsaw, 1934, pp. 135-139).

Peuples du Caucase. Excerpt from a letter of Prince N. S. Trubetzkoy (June 18, 1932) (*The Universal Adoption of the Latin Alphabet*. Paris, Institut International de Coopération Intellectuelle, 1934, pp. 45–48).

Altkirchenslavische Sprache, Schrift-, Laut- und Formenlehre (based on lectures given at the University of Vienna in the winter semester 1932–33 and the summer semester 1933). Vienna, 1934, 142 pp. and 11 pp. of corrections.

G. Dumézil, Études comparatives sur les langues caucasiennes du Nord-Ouest, Paris, 1932.—Recherches comparatives sur le verbe caucasien (*Orientalistische Literaturzeitung*, 1934, pp. 629-635), review.

Quelques remarques sur le livre de M. Dumézil "Études comparatives sur les langues caucasiennes du nord-ouest," n.d., 34 pp.

1935. Anleitung zu phonologischen Beschreibungen. Association internationale pour les études phonologiques (published by the Prague Linguistic Circle), Brno, 1935, 32 pp.

Ob idee-pravitel'nice ideokratičeskogo gosudarstva (JevrazChr XI, 1935, pp. 29–37).

Psaní (S/S/I, 1935, p. 133) [review of "Die Schrift"]

Ke skladbě starého církevněslovanského jazyka (SISI I, 1935, pp. 188–189, and *ibid*. III, 1937, p. 128) [review of J. Stanislav "Dativ absolutný v starej cirkevnej slovančine"].

O poměru hlaholské a řěcké abecedy [summary of a meeting held on 10-6-1934 by the Prague Linguistic Circle] (SISI I, 1935, pp. 135-136).

1936. Die phonologischen Grenzsignale (Proceedings of the Second International Congress of Phonetic Sciences, London, July 22-26, 1935. Cambridge, 1936, pp. 45-49).

Die Aufhebung der phonologischen Gegensätze (TCLP VI, 1936, pp. 29-45). Repr. in Vachek, Prague School Reader, pp. 187-205.

Essai d'une théorie des oppositions phonologiques (Journal de Psychologie XXXIII, 1936, pp. 5-18).

Die phonologischen Grundlagen der sogenannten "Quantität" in den verschiedenen Sprachen (Scritti in onore di Alfredo Trombetti, Milan, 1936, pp. 155-176).

Die altkirchenslavische Vertretung der urslav. \*tj, \*dj (ZslPh XIII, 1936, pp. 88-97).

Die Aussprache des griechischen  $\chi$  im 9. Jahrhundert n. Chr. (Glotta. Zeitschrift f. griech. u. latein. Sprache XXV, 1936, pp. 248-256).

Die Quantität als phonologisches Problem (IV<sup>e</sup> Congrès international de Linguistes, Copenhague, 1936. Résumés des communications, pp. 104-105).

Americká kniha podnětných nápadů o jazyce [review of G. K. Zipf, The Psycho-Biology of Language, 1935] (SISI II, 1936, pp. 252–253).

Ida C. Ward, An Introduction to the Ibo Language. Cambridge, 1936 (Anthropos XXXI, 1936, pp. 978-980), review.

1937. Über eine neue Kritik des Phonembegriffes (Archiv für die vergleichende Phonetik 1, 1937, pp. 129-153).

Gedanken über die slovakische Deklination (Sbornik Matice slovenskej XV, 1937, pp. 39-47).

O pritjažateľ nych prilagateľ nych (possessiva) starocerkovnoslavjanskogo jazyka (Zhornik u čast A. Belića = Mélanges linguistiques et philologiques offerts à M. Aleksandar Belić, Belgrade, 1937, pp. 15-20).

W sprawie wiersza byliny rosyjskiej (*Prace ofiarowane Kazimierzowi Wóycickiemu*. Z zagadnień poetyki, no. 6, Wilno, 1937, pp. 100–110).

Zum Flussnamen Upa (ZslPh XIV, 1937, pp. 353-354).

Zur Vorgeschichte der ostkaukasischen Sprachen (Mélanges de linguistique et de philologie offerts à Jacq. van Ginneken, Paris, 1937, pp. 171-178).

K voprosu o stichě "Pěsen zapadnych slavjan" Puškina (Bělgradskij Puškinskij Sbornik, Belgrade, 1937, pp. 31-44).

Projet d'un questionnaire phonologique pour les pays d'Europe, Prague, 1937, 7 pp.

Erich Berneker. Ein Nachruf (Almanach der Akademie der Wissenschaften in Wien, für das Jahr 1937, 1937, pp. 346-350).

Upadok tvorčestva (JevrazChr XII, 1937, pp. 10-16).

Nová kniha o indoevropské pravlasti (SISI III, 1937, pp. 105-108).

Myšlenky o problému Indoevropanů [summary of a meeting held 12-14-1936 by the Prague Linguistic Circle] (SISI III, 1937, pp. 191-192).

- 1938. Die Quantität als phonologisches Problem (Actes du quatrième Congrès international de Linguistes tenu à Copenhague du 27 août au 1<sup>er</sup> septembre 1936. Copenhagen, 1938, pp. 117-122).
- 1939. Grundzüge der Phonologie (TCLP VII), Prague, 1939, 272 pp.

Wie soll das Lautsystem einer künstlichen internationalen Hilfssprache beschaffen sein? (TCLP VIII, 1939, pp. 5-21).

Aus meiner phonologischen Kartothek (ibid., pp. 22-26 and 343-345).

Zur phonologischen Geographie der Welt (Proceedings of the Third International Congress of Phonetic Sciences, Geneva 1938, 1939, p. 499).

Les rapports entre le déterminé, le déterminant et le défini (Mélanges offerts à M. Ch. Bally, 1939).

Gedanken über das Indogermanenproblem (Acta linguistica I, 1939).

Mysli o indojevropejskoj probleme (JevrazChr XIII, 1939).

Fol'klornoje obščenije meždu vostočnymi slavjanami i narodami severnago Kavkaza (Zapiski Russkago Naučnago Instituta, Belgrade).

Očerki russkoj literatury XVIII-go věka i russkoj poezii XIX-go. Pariž, Russkaja naučnaja biblioteka.

Dostojevskij kak chudožnik. Pariž, Russkaja naučnaja biblioteka.

Beach, D.M. The Phonetics of the Hottentot Language (Anthropos), review.

#### Addenda

Posthumous publications and translations of Trubetzkoy's works

- 1949. Principes de Phonologie, trans. J. Cantineau Paris: C. Klincksieck, 1949.
- 1952. The Common Slavic Element in Russian Culture, ed. Leon Stilman. New York, 1949, 2d rev. ed. 1952. Translated by a group of graduate students of the Department of Slavic Languages, Columbia University, from a study included in a volume of the author's collected writings which appeared in 1927 in Paris under the general title K probleme russkogo samopoznanija.
- 1954. Altkirchenslavische Grammatik, Schrift-, Laut- und Formensystem, von Nikolaus S. Trubetzkoy. Im Auftrage der Akademie hrsg. von Rudolf Jagoditsch. Vienna: In Kommission bei R. M. Rohrer, 1954.
- 1956. Die russischen Dichter des 18. und 19. Jahrhunderts. Abriss einer Entwicklunsgeschichte. Nach einem nachgelassenen russischen Manuskript hrsg. Rudolf Jagoditsch, Graz, H. Böhlaus Nachf. 1956.

- 1960. Translation of *Grundzüge* into Russian: *Osnovy fonologii*, tr. A. A. Xolodovič, ed. S. D. Kacnel'son. Postscript by A. A. Reformatskij. Foreign Languages Publishing House, Moscow, 1960.
- 1964. Dostoevskij als Künstler. The Hague: Mouton & Co., 1964.
- 1968. Introduction to the Principles of Phonological Descriptions. The Hague: Martinus Nijhoff, 1968. Translation of Anleitung zu phonologischen Beschreibungen, 1935, by L. A. Murray, ed. H. Blume, 46 pp.

### INDEX OF TOPICS

Abstract relevancy, 43 "Abstract sounds," 40 f. Accentuation, 87, 183 ff., 195 ff., 277 f., 279 n. 12, 286 f., 288 n. 1, 289 n. 14 Appeal: function of, 14 f., 20 ff., 48, 51, 202 ff. means of, 20 ff., 26 n, 18 phonology of, 15 f., 21 ff. plane of, 15, 27, 51 Archiphoneme, 43, 79 ff., 101, 102, 108, 110 f., 115, 150, 167, 168, 179, 210 n. 29, 228 ff., 230 Arithmetic conception of quantity, 177 Basic series of consonant systems, 123 ff. Boundary position, 275 Boundary signals, 274 ff. negative, 290 ff. nonphonemic, 276 ff., 292 ff. phonemic, 275 ff., 290 ff. Combinations of phonemes, 46, 55 ff., 77 f., 161 f., 170, 242 ff. Combinatory variants. See Variants Conative means, 20 ff., 26 n. 18 Consonants: 92 ff., 140 f., 222 n. 213 flat, 125, 136, 142 mellow, 127 f. plain, 125, 127 ff., 136, 142, 216 n. 126 recursive, 145 f. strident, 127 f. Consonant systems, 122 ff. Correlations: 83 ff., 89 n. 14 neutralizable, 85, 87 f., 100 ff., 133 prosodic, 87, 170 ff. Correlation based on type of expiration. See Correlation of recursion. See also specific correlations Correlation(al) bundle, 86 ff., 132 f., 150 ff., 163 Correlation mark, 85, 101, 115, 129, 146, 151, 152, 162, 163, 178, 189, 219 n. 162, 222 n. 213

Correlation (correlative) pairs, 84 ff., 244 f., 254 n. 6 Correlation of accent (prosodic), 88, 183, 188 ff. Correlation of aspiration, 85 f., 145 f., 148, 152 ff., 158, 161, 219 n. 162, 220 n. 173, 236, 263 Correlation of click (click correlation), 129, 134 ff., 158 Correlation of (based on) close contact (prosodic), 165, 178 f., 181, 189 f., 197, 199 ff., 224 n. 227, 230 Correlation of closeness, 109 Correlation of constriction, 89f., 143, 149 ff., 154 ff., 158, 160, 166 ff., 244 f. Correlation of continuants, 142 Correlation of contrast, 144 Correlation of emphatic palatalization, 131, 236 Correlation of emphatic velarization, 131 f. Correlation of full gutturalization, 137 f. Correlation of gemination: consonantal, 160 ff., 181, 184, 201, 219 n. 161, 224 n. 230, 235, 237 n. prosodic, 179 ff., 183 ff., 198 ff., 224 n. 230 vocalic, 236 Correlation of intensity (or pressure): consonantal, 145 f., 149, 153, 155, 159 ff., 163 f., 181, 184, 219 nn. 161 & 162, 220 n. 173, 234, 237 f.. 246, 254 n. 6, 263 prosodic, 183 ff., 197 Correlation of labialization, consonantal, 87, 100, 132 f., 138, 215 n. 11, 218 n. 155, 231 Correlation of labiovelarization, 137 f. Correlation of liquids, 142 Correlation of muffling, vocalic, 121 f., 169, 187 Correlation of nasalization:

consonantal, 169, 231, 245

vocalic, 118 ff., 122, 254 n. 5

Correlation of nasals, consonantal, 158, 160, 165 ff., 169, 245 Correlation of occlusiveness. See Correlation of constriction Correlation of palatalization, consonantal, 87, 101 f., 129 ff., 215 n. 102, 234, 239 f., 284 Correlation of preaspiration, 146 Correlation of pressure. See Correlation of intensity Correlation of quantity, prosodic, 85, 88, 245 Correlation of recursion, 86 f., 145 f., 152 ff., 219 n. 162, 236, 264 Correlation of release, 146, 153 f. Correlation of retroflexion, 133 Correlation of rounding: consonantal, see Correlation of labialization vocalic, 88, 98 ff., 103 Correlation of seminasals, 169, 231, 245 Correlation of sonants, 141 f. Correlation of stød, prosodic, 179 tr. n., 190, 197 f., 255 Correlation of stops (continuants), 142 Correlation of syllabicity, prosodic, 172, 222 n. 213 Correlation of tension, consonantal, 145, 146, 148, 152 f., 238 Correlation of tone register, prosodic, 183 ff., 188, 203 f. Correlation of tone interruption, prosodic. See Correlation of stød Correlation of tone movement, prosodic, 183, 188 f., 192, 200, 203 f., 227 n. 269, 241 n. 19 Correlation of tongue position, 98 ff., Correlation of voice, 85 ff., 145, 146 f., 149 ff., 153 ff., 219 n. 158, 240, Correlations based on the manner of overcoming an obstruction, 146, 219 n. 158 of the first degree, 140 ff., 150 f. of the second degree, 144 ff., 151 ff., 162, 166, 246 of the third degree, 160 ff. Correlations based on type of contact, prosodic, 189 f. Correlations of resonance, 118 ff., 169, 187 Correlations of timbre: consonantal, 87, 129 ff., 137 f., 218 n.

156

vocalic, 98 ff.

Culminative function, 27 f. Culminative prominence. See Correlation of accent Culminative distinctive prosodic oppositions, 183. See also Correlation of accent; Correlation of tone movement Degrees of obstruction of consonants, 140 ff. Degrees of sonority (aperture) of vowels, 96 ff. Delimitative function, 27 f., 51, 273 ff., 296 Determination of phonemes, 46 ff. Differences of tone (register) distinctive for sentences, 204 ff. Differential properties, prosodic, 95, 182 Diphthongs of movement, 57, 64, 115 ff., 224 n. 227 Diphthongs with a centrifugal direction of articulatory movement, 117, 213 n. 66, 233 with a centripetal direction of articulatory movement, 117, 213 n. 66, Discriminative mark, 10, 44, 76 f., 126 ff., 232 f. Disjunction, 85, 244 Distinctive function, 20, 27 f., 182, 273 Distinctiveness, theory of, 31 ff. Distinctive oppositions, 6, 31 ff., 66 ff., 90 ff., 228 ff. Distinctive (discriminative) property, 36 f., 66 ff., 76, 83 f., 90 ff. Distinctive unit. See Phonological unit Emphatics, 23 Expressive function, 14 f., 20, 23, 26, 48, 204, 205 Expression: means of, 16, 19, 22 ff. phonology of, 15 ff., 23 f. plane of, 51, 15, 27 Frame units for phoneme combinations, 249 ff. Free accent (correlation of accent), 88, 183, 188 ff. Functional classification of phonemes, 242 ff. Functional load of phonemes, 221 n.

204, 256 ff., 268

75 ff., 173

Functioning of the phonemic system,

"h," 138, 140

Indeterminate nasal, 167 f. Indeterminate vowel, 59, 60, 73, 97, 113 f., 120 f., 171 Interchangeable sounds, 31 f., 46 ff.

Langue (language system), 1 ff., 23, 41, 43 Liquids, 138 f. Linguistic consciousness, 38 f., 64, 78, 85, 88, 301 Linguistic geography, 299 ff.

Macro-phonemes, 41 ff. Mark, 10, 19, 51 f., 66 f., 78 f., 95, 116 f., 273. See also Correlation mark; Discriminative mark; Opposition mark; Opposition members

Markedness, 146 f. Micro-phonemes, 41 ff. Mora, 173 ff., 182 Mora-counting languages, 174 ff. Morphonology, 305 ff. Monophonematic evaluation of sounds, 55 ff., 65 nn. 9 & 13, 115 f., 118, 122, 138, 146, 160 f., 170

Neutralization, 65 n. 3, 78 ff., 112, 167 f., 221 n. 206, 228 ff., 242 position of, 78 ff., 89 n. 13, 147, 240 Nondistinctive oppositions. See Oppositions, distinctive

Nondistinctive properties. See Phonologically relevant properties Noninterchangeable sounds, 31 f., 46 ff. "Nuclear sounds." 13

Oppositions, 4, 6, 31. See also specific oppositions bilateral, 68 ff., 79, 83 f., 89 n. 14, 90, 113 f., 124, 130, 133, 138 f., 141, 143 ff., 163, 165, 167, 220 n. 175, 242 f., 245 constant, 77 ff., 90 directly distinctive, 33

distinctive, 6, 31 ff., 66 ff., 90 ff., 228 ff. equipollent, 74 ff., 82, 84, 90, 98 ff., 128, 138, 245, 246 gradual, 74 ff., 81, 89 n. 13, 90, 108,

128, 179 heterogeneous, 69 f., 84, 88 n. 6, 123,

138

homogeneous, 69 f., 84, 88 n. 6

indirectly distinctive, 33 isolated, 70 ff., 83 f., 90, 113, 163, 165 linear, 70, 88 n. 6 multilateral, 68 ff., 83 f., 88 n. 6, 90, 121, 123, 128, 138, 168, 242 neutralizable, 77 ff., 84, 89 n. 13, 90, 108 ff., 115, 124, 129, 168, 172, 228 f., 239. See also Correlations, neutralizable

nondistinctive, 31 f. See also Oppositions, distinctive nonlinear, 70, 88 n. 6

privative, 74 ff., 83 f., 90, 98, 107, 108, 129, 130, 138, 165, 177, 179, 189, 245, 246, 262 f.

proportional, 70 ff., 83 f., 89 n. 14, 90, 99, 124, 129, 141, 144, 165, 167. 245

Opposition based on the direction of articulatory movement, 118 Opposition chains, 70 ff.

Opposition mark, 108, 116. See also Correlation mark

Opposition members: marked, 75 ff., 81, 83, 109, 129, 152, 163, 167, 211 n. 39, 230 f., 239, 262 ff., 275 f.

unmarked, 75 ff., 81, 83, 89 n. 13, 101, 109, 129, 152, 163, 167, 177, 179, 211 n. 39, 230 f., 243, 262 ff., 275 f.

Opposition of accent, 173. See also Correlation of accent

Opposition of aspiration, 154, 262. See also Correlation of aspiration

Opposition of constriction (occlusiveness), 86, 154

Opposition of expiration, 86. See also Correlation of recursion

Coosition of gemination, 160 ff., 287. See also Correlation of gemination, consonantal

Opposition of intensity, 164. See also Correlation of intensity, consonantal

Opposition of nasalization, vocalic, 236. See also Correlation of nasalization, vocalic

Opposition of occlusiveness, 86, 154. See also Correlation of constriction

Opposition of quantity, 172, 178 ff., 236. See also Correlation of quantity

Opposition of rounding, vocalic, 116, 209 n. 13, 232, 237. See also Correlation of rounding

Opposition of syllabicity, 173. See also Correlation of syllabicity

Opposition of timbre, 105, 112 ff., 230, 237 f., 289 n. 11. See also Correlations of timbre

Opposition of tone movement, 180 f., 200 ff., 238 f. See also Correlation of tone movement

Opposition of tone register, 184 ff., 203 f. See also Correlation of tone register

Opposition of voice, 276. See also Correlation of voice

Oppositions based on degree of aperture, 107 ff., 112 f., 233

Oppositions based on degree of sonority, 107 ff., 112 f., 233

Oppositions based on the manner of overcoming an obstruction, 162 f., 262. See also Correlations based on the manner of overcoming an obstruction

Oppositions based on type of contact, 116 f., 178 tr. n., 199. See also Correlations based on type of contact

Oppositions differentiating sentences (syntactically distinctive), 90 f.
Oppositions differentiating words (lexi-

cally distinctive), 90 f.

Paired phonemes, 85

Oppositions of localization, 135 ff., 262 Oppositions of resonance, 118 ff. See also Correlations of resonance

Parole (speech act), 1 ff. Partial systems, phonological, 106, 110 ff., 228 Permissible sound substitution, 19 f. Phoneme inventory, 66 ff., 228, 244, 298 Phonemes, 23, 33 ff., 46 ff., 92 ff. Phonemic boundary signals, 275 ff., 290 ff. Phonemic content, 66 ff., 84 f., 101 Phonemics, 3 ff. See also Phonology Phonemic system, 18, 51, 66 ff., 74 ff., 85, 90, 171, 207 f., 228, 298 Phonetics, 3 ff., 25 n. 10, 91 f. Phonetic variants, 41, 46 ff. See also **Variants** Phonologically distinctive oppositions. See Oppositions, distinctive Phonologically irrelevant oppositions. See Oppositions, nondistinctive

Phonologically irrelevant property, 36 f., 66 ff., 90 ff.

Phonologically nondistinctive oppositions. See Oppositions, distinctive Phonological oppositions. See Opposi-

tions, distinctive

Phonological(ly relevant) property, 36 f., 66 ff., 90 ff. See also Distinctive property

Phonological sieve, 51 f. Phonological statistics, 256 ff.

Phonological system. See Phonemic system

Phonological unit, 33 ff., 41, 44 n. 3, 79, 85, 246

Phonostylistics, 14 ff., 24, 48, 257 ff., 279

Phonology, 3 ff., 27 ff., 91 f.

Phonometry, 6 ff.

Polyphonematic evaluation of sounds, 55, 60 ff., 146, 170 ff.

Position of relevance, 78 ff., 84, 265

Positions of maximal (minimal) phoneme distinction, 240

Properties:

consonantal, 122 ff., 93 ff. prosodic, 92, 170 ff., 201 ff., 228, 222

n. 213, 255 n. 7

vocalic, 94 ff.

Properties based on degree of aperture (saturation, sonority), vocalic, 94 ff., 105 ff., 107 ff., 112 f., 115, 118, 233. See also Oppositions based on degree of aperture

Properties based on the manner of overcoming an obstruction, consonantal, 94 f., 122, 140 ff. See also Correlations based on the manner of overcoming an obstruction

Properties based on type of contact, prosodic, 95, 182. See also Correlation of stød; Correlation of close contact

Properties based on type of differentiation, prosodic. See Differential properties

Properties of lip participation, 103. See also Correlation of rounding, vocalic

Properties of localization:

consonantal, 94 ff., 122 ff., 135 ff., 138, 140, 168, 262. See also Oppositions of localization vocalic, 94 ff., 105 f., 118, 289 n. 11 Properties of resonance:
consonantal, 94 f., 118 ff., 122, 166 ff.,
187. See also Correlations of
resonance
Properties of timbre, vocalic, See

Properties of localization, vocalic

Realization of phonemes, 36 f., 46 ff., 55 ff.

Related series of consonant systems, 125 ff.

Representational function, 14 f., 202 ff., 208

Representation: means of, 23 f. phonology of, 24 f., 42, 202 ff. plane of, 24, 27 f.

Secondary series, 129 ff. Sentence intonation, 202 ff. Sentence pauses, 207 Sentence stress, 205 f. Signifier and signified aspects of parole and langue, 2 ff. "Sound image," 38, 40, 44 n. 4 "Sound intent," 38 Speech act (parole), 1 ff. Speech sound, 7, 10 ff., 37 ff., 44, 65 n. 9. 96 Stable degree of aperture of long vowels, 116 Supplemental closure (clicks), 136 Syllable, 95, 170 ff., 182, 209 n. 6, 222 n. 213

Syllable-counting languages, 177 ff., 182 ff.
Syllable nucleus, 170 ff., 222 n. 213
Synharmonism, 285 ff., 293
Syntagmatic phonology, 226 n. 262, 242, 248 ff.
System of language (langue), 1 ff., 23, 41, 43

Tone movement, differences of, 88, 179 ff., 196 f., 238
"Transitional sounds," 13, 65 n, 7

Unmarkedness, 146 f. Unpaired phoneme, 85

Variants: ancillary-associative function of, 65 n. 4 combinatory, 39 f., 49 f., 53 ff., 60 f., 65 nn. 3 & 4, 78, 88 n. 3, 130, 169, 211 n. 38, 217 n. 132, 276, 284, 287 f., 289 n. 11 optional, 46 ff., 63, 67, 71, 211 n. 38 phonetic, 41, 46 ff. stylistic, 47 f., 256 ff. Vowels, 92 ff., 222 n, 213 "breathy," 121 f. checked, 116 ff. "clear," 98 f., 106 f., 110, 131 "dark," 98 ff., 105, 110, 224 n. 227 "impure," 118, 187 muffled, 121 f. "squeezed," 121 f.

"throaty," 187 Vowel systems, 96 ff.

## INDEX OF LANGUAGES

Language groups, language families, and linguistic "unions" are listed only insofar as their general characteristics are concerned.

Abakan dialects (of Kazakh), 281 Abkhas, 97, 132 f., 245 Abua, 121, 122 Achumawi, 148, 185, 197 Adyghe. See Circassian African languages, 120 f., 124, 129, 132, 166-70, 176, 214 Aghul, 122, 132, 162, 231 Alar (Buryat Mongolian), 276 Albanian, 103, 119, 125, 143, 149, 180, 227 n. 269 Aleut (Unangan), 125, 165, 167 Altai dialects (of Kazakh), 281, 292 American (Indian) languages, 124, 125, 128, 146, 166, 168, 176 Amharic, 152 Andi, 107, 162 Annamese (Vietnamese), 103, 111, 245, Arabic, 105 f., 131 f., 174, 178, 282 Armenian, 222 n. 213, 277, 311 Artshi, 64, 83, 87, 100 f., 107, 132, 162, 192, 220 n. 184, 231, 291 Asian languages, 166 Assyro-Babylonian, 96 Avar, 58, 64, 140, 153, 166 f., 282, 295 Avestan, 150, 313

Baltic languages, 196, 311
Bantu languages, 132, 134, 137 f., 208, 216 n. 126, 219 n. 158, 237, 277
Bashkir, 285
Bats, 131
Bengali, 154, 236, 275
Bulgarian, 53, 59, 64, 81, 114, 149, 170, 172 f., 189, 231, 234, 236, 239 f., 277 f.
Burmese, 71, 119, 132 f., 152, 175, 193, 197 f., 244, 248 f., 282
Buryat (Mongolian), 276
Bushman, 134 ff.

Caucasian languages, 86 f., 125, 166 North, 64, 125, 128, 132, 153, 311, 317 East, 100, 105, 112, 122, 125, 131, 153, 231, 307 West, 97, 125 Ch'ak'ur, 125, 232 Chasta Costa, 165, 167 Chechen, 59, 86, 131, 177 f., 236, 264, 275, 277, 291 Cheremis, 104, 115, 150, 232, 238 Cherkess, See Circassian Chichewa, 107, 139, 144, 152, 166, 169 Chinese, 58, 80, 120, 126, 151, 166, 168, 170 f., 175, 188, 190, 192, 193, 213 n. 73, 222 n. 211, 223 n. 221, 226 n. 256, 282, 308 Chinook, 128, 140, 166 Chukchi, 17, 125, 213 n. 75, 310 Circassian (Adyghe, Cherkess), 60, 64, 87, 97, 132, 140, 153, 239, 311 Classical Greek, 86, 151, 162, 167, 170, 192 f., 239, 242 ff., 276, 291 f. Czech, 22, 54 ff., 58, 61 f., 64, 73, 104, 124 ff., 143, 146, 149, 166, 170-172, 176 ff., 205 f., 208, 214 n. 90, 235, 245 f., 267, 277 f., 319 Dakota, 153, 219 n. 162, 281

Danish, 77, 103, 109, 140, 144, 147, 170, 175, 190, 217 n. 135, 226 n. 265, 291

Darghinian, 162, 231, 277

Dinka, 129, 214 n. 89

Dravidian languages, 129, 214 n. 88

Dungan (Chinese), ix, 132

Dutch, 103, 116, 118, 149 f., 177 ff., 189, 199, 215 n. 93, 227 n. 269, 235, 290

Efik, 121, 170, 176, 185, 281, 291 Egyptian Sudan, dialects of, 131 Enets (Yenisei-Samoyed), 277 English, 42, 50, 56, 63 f., 79, 113, 116 ff., 125, 143, 147, 149, 177 ff., 189, 199, 217 n. 130, 224 n. 227, 233, 235, 248, 251, 281, 283, 291, 293, 296

Erza. See Mordvin
Eskimo, 124 f., 138, 142, 166, 216 n.

126, 281, 292 Estonian, 103, 180, 192, 238, 254 n. 6 Eurasian languages, 215 n. 102 European languages, 125, 202 ff., 208 Evenki (Tungus), 228, 291 Ewe, 121, 185, 223 n. 225

Fante, 109, 121, 204 Finnish (Suomi), 56, 102, 111, 163, 167, 173, 177, 201, 245, 277, 284 f., 290 f., 294 f. Finno-Ugric languages, 98, 237, 285 f.,

307, 309
Fox, 146, 217 n. 138
French, 20, 22, 47, 69, 76, 78, 85, 95, 103, 119, 125, 126, 147, 149, 167, 184, 215 n. 93, 221 n. 204, 222 n. 211, 230, 231, 237, 245, 263 f., 267, 279, 281, 291, 297

Ful (Fulful), 155, 169, 219 n. 158, 22 n. 208

Gaelic. See Scottish Gaelic
Ganda, 99, 112, 175
Georgian, 59, 86, 87, 107, 151, 222 n. 213
German, 20-22, 31 ff., 37-40, 42, 44, 46 ff., 52 f., 55 f., 58, 61, 65 nn. 7
& 13, 66 ff., 75, 79-83, 85, 88 n. 3, 93-95, 103, 109 (Kerenz dialect of Switzerland), 116, 118, 125, 139 f., 143, 147, 149, 172, 177 ff., 184, 189, 195 f., 199, 204 ff., 208, 218 n. 148, 22 nn. 211 & 212, 227 n. 269, 228, 232-235, 245, 249 ff., 254, 255 nn. 10, 12, & 13, 256, 258 ff., 266 f., 277, 279 n. 6, 280, 283, 291, 292, 294 ff., 311

Germanic languages, 196 Gilyak (Nivchic), 73 f., 125, 138, 142, 216 n. 126

Gothic, 311 Greek, Classical, 86, 151, 162, 167, 170, 192 f., 239, 242 ff., 276, 291 f. Modern, 47, 81, 107, 110, 126, 143, 151, 189, 192, 218 n. 142, 236 Middle, 112

Greenlandic. See Eskimo Gweabo, 109, 164 f., 166, 186 f., 254 n. 6 Haida, 107, 125, 151, 245, 291 Hanti (Ostyak), 100 f., 163, 275, 292 Herero, 124, 129, 214 n. 88 Hopi, 146, 179 f., 190, 192, 196, 199, 201, 217 n. 138, 224 nn. 227, 229, & 230

Hottentot, 134, 136 f., 156 ff., 219 nn. 169 & 171, 225 n. 247

Hungarian, 22, 23, 47, 55, 125, 126, 143, 147, 149, 177 f., 201, 214 n. 9, 277, 292

Hupa, 128, 165, 167

Ibo, 109, 120 f., 170, 182, 185, 284 Icelandic, 277

Indic (Sanskrit), 85 f., 129, 133 f., 162, 230, 311, 313

Middle (Prākrit), 174, 178, 180, 245, 254 n. 6, 287

Modern (Indian), 122, 129, 214 n. 88 Indo-European languages, 214 n. 88, 306 f., 314 f.

Ingush, 131 Iranian languages, 313 f. Irish, 149, 169 Italian, 47, 107, 125, 139, 149, 167, 189, 192, 291, 293

Japanese, 26 n. 17, 32, 50, 51, 58, 62 f., 74, 82, 101, 107, 124, 129, 162, 175, 180, 190 ff., 195, 210 n. 19, 215 n. 111, 231, 248, 252, 292

Kabardian, 48, 64, 128, 132, 152 Kalmuk, 277 Kamchadal, 125, 310 Karakirghiz (Kirghiz), 235, 290 Kashubian: Kashub dialects, 120, 190 North (Slovincian), 196, 200, 227 n. 269 Kazakh (Kazakh-Kirghiz), 281 f., 285, 290 Abakan dialects of, 281

Abakan dialects of, 281
Altai dialects of, 281, 292
Kazan Tatar, 285
Kettic, 125
Kinyarwanda, 133, 149
Kirghiz (Karakirghiz), 235, 290
Korean, 49, 63, 87, 88, 132 f., 162, 166, 278, 291 f.
Koryak, 125, 310
Küärik dialect (of Turkic), 292

Kubachi, 132, 162, 231 K'üri (Lezghian), 103, 107, 111 f., 132, 144, 153, 192, 211 nn. 38 & 39, 230, 234 f., 236, 263, 269 n. 14 Kwakiutl, 125, 132, 166

Lak, 105 f., 131, 153, 162, 163, 166, 167, 173, 277, 282 Lamba, 81, 107, 121, 148, 170, 178, 185,

Lapp, 147, 163 f., 181, 221 n. 187, 231, 236, 238, 254 n. 6, 277, 286 f., 291 Latin, 100, 174, 177, 239, 278, 311

Latvian (Lettish), 125, 149, 170, 175, 192, 226 n. 265, 227 n. 269, 238

Lezghian. See K'üri Lithuanian, 125, 129 f., 147, 149, 167, 170, 175, 183, 196, 227 n. 269, 231, 234, 235, 239, 287 Livonian. 226 n. 265, 277

Lonkundo, 184 f., 188

Lusatian-Wendic. See Sorbian

Maidu, 174, 223 n. 220, 277
Maharashtri, 254 nn. 4 & 5, 287
Manchurian languages, 237
Mansi (Vogul), 163, 276, 277
Maya, 107, 148
Mende, 139, 185, 203
Middle Indic (Prākrit), 174, 178, 180, 245, 254 n. 6, 287
Modern Indic, 122, 129
Modern Persian, 106, 211 n. 35
Mongolian, 17, 58, 111, 112 f., 237, 276,

277, 285 Montenegran dialects, 99, 144 Mordvin, 107, 130, 133, 149, 231, 235

Nenets (Yurak-Samoyed), 148, 277, 291, 293

Nganasan (Tavgy-Samoyed), 107, 277, 289 n. 14

Nilotic languages, 121 f. Norwegian, 103, 111, 199 ff., 226 n. 266, 227 n. 269, 235, 291

Nuer, 122, 123, 129, 144, 148, 166, 214 n. 89, 276

Old Persian, 107, 313 Ossetic, 309 Ostyak (Hanti), 100 f., 163, 275, 292 Ostyak-Samoyed (Selkup), 104, 165

Paiute, 174, 223 n. 220, 277, 286 Paleo-Asiatic languages, 125, 310 Pedi, 64, 124, 140, 144, 216 n. 126 Persian, Old, 107, 313 Modern, 106, 211 n. 35 Polabian, 102, 111, 130 f., 174, 210 n. 21, 233, 234, 239, 277, 320

Polish, 56, 59 f., 61, 99, 107, 108, 129, 143, 147, 149, 162, 168, 210 n. 13, 235, 244 f., 277, 299, 300, 307, 316, 319

Portuguese, 168, 189 Prakrit. See Middle Indic

Proto-Slavic, 144, 217 n. 132, 221 n. 207, 289, 313

Romance languages, 196 Romanian, 103, 115, 125, 129, 149, 189 Russian, 18–20, 49–56, 58, 60–64, 71, 76 f., 80, 81, 93, 100, 107, 110, 115, 129, 147, 149, 162, 184 f., 189, 203 ff., 208, 210 n. 15, 222 n. 211, 227 n. 275, 235 f., 269 n. 13, 283 f., 292, 298 f., 301 f., 307, 316 f.

Rutulian, 132, 153, 231

Samoyed, Ostyak- (Selkup), 104, 165 Tavgy- (Nganasan), 107, 277, 289 n. 14

Yenesei- (Enets), 277 Yurak- (Nenets), 148, 277, 291, 293

Yurak- (Nenets), 148, 277, 291, 293 Samoyed languages, 286

Sandawe, 124, 134, 135, 155 f., 219 nn. 167 & 168 Sanskrit, 85 f., 129, 133 f., 162, 230, 311,

313 Scottish Gaelic. 108, 111, 119, 129, 149,

Scottish Gaelic, 108, 111, 119, 129, 149, 199, 236, 275, 277

Selkup (Ostyak-Samoyed), 104, 165 Semitic languages, 126, 131, 306 f.

Serbo-Croatian, 59, 99, 107, 126, 139, 143, 144, 147, 149, 166, 167, 170 ff., 178, 180, 193 f., 197, 203, 208, 217 n. 132, 227 n. 269, 230, 231, 236, 239

Shona, 107, 125, 128, 137 f., 215 n. 101, 218 n. 158

Shor, 292

Siamese (Thai), 103, 170, 175, 193, 248

Sindhi, 153 f.

Slavic languages, 47, 125, 196, 307, 311, 314 ff.

Slovak, 125, 126, 143, 147, 149, 166, 170, 173, 177, 223 n. 215, 230, 277

Slovenian, 47, 115, 119, 123, 150, 167, 175, 178, 190, 193, 221 n. 207, 227 n. 269, 236

Somali, 126 Sorbian (Lusatian-Wendic), 103, 111, 128, 149, 166, 276, 277 Spanish, 47, 189 Sudan languages, 124, 131 Suto, 64, 134 Swahili, 214 n. 88, 216 n. 126, 269 Swedish, 103, 199 f., 202 f., 235, 267, 269 n. 8, 291

Tabarasan, 122, 128, 162, 219 n. 161 Takelma, 209 Tamil, 18, 107, 139, 141 f., 162, 166, 168, 201, 216 n. 129, 220 n. 184, 276, 285, 290, 292, 297 Taos (Tiva), 143, 154, 166, 196 Tatar, 58 Tavgy-Samoyed (Nganasan), 107, 277, 289 n. 14 Teleut, 282, 292 Tibetan, 151 Tigre, 125 Tiva language of the Pueblo of Taos, 143, 154, 166, 196 Tlingit, 58, 107, 123, 125, 140, 165 Tonkawa, 107, 166, 281 Tsimshian, 59, 128, 152, 166, 245 Tübatulabal, 112, 174, 277, 291 Tungus (Evenki), 228, 285, 291 Turanian languages, 238

Turkic languages, 58, 98, 104, 107, 237, 277, 278, 281, 285, 290, 292

Ubyk, 97, 132 Udi, 128, 132 Udmurt (Votyak), 103 Ukranian, 64, 115, 129 f., 133, 143, 149, 160 f., 189 Unangan (Aleut), 125, 165, 167 Uzbek, 62, 99, 278, 285

Venda, 137 Vietnamese (Annamese), 103, 111, 245, 247 Vogul (Mansi), 163, 276, 277 Volga Tatar, 285 Votyak (Udmurt), 103

White Russian, 149

Yami, 80 Yakut, 277, 282 Yenisei-Samoyed (Enets), 277 Yoruba, 121, 221 n. 207 Yukaghir, 21, 310 Yurak-Samoyed (Nenets), 148, 277, 291, 293

Ziryene, 103 Zulu, 64, 107, 124, 137 f., 143, 186 ff., 237, 285