A COMPUTER-BASED INTRODUCTION TO THE MORPHOLOGY

OF OLD CHURCH SLAVONIC

by

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A Computer-Based Introduction to the Morphology of Old Church Slavonic[1]

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Section 1

Introduction

The author's earlier work in the area of computer-based language instruction[2] indicates that this approach to the teaching of foreign languages can successfully replace regular classroom instruction even when the skills to be acquired by the students include the comprehension and production of oral speech. It would therefore not seem unreasonable to hope that CBI would be at least equally successful in teaching "dead" languages, which normally require little or no competence in speaking or oral comprehension.

This consideration in turn permits us to ask whether one of the major disadvantages of most CBI, namely, the relatively high cost of each hour of individual instruction, might not be largely or completely eliminated in the case of such dead languages if the classroom enrollment in the course in question was a relatively small one. Thus, if a Stanford professor with a salary of $20,000 per year gives a one-quarter intro- duction to such a language to a group of four graduate students, the cost could be viewed as the equivalent of one-sixth (one-fifth in many cases) of his salary, i.e., $3,667 (or $4,000). If the course could be suc- cessfully taught on an IMSSS teletype, the total cost for the quarter would currently be less than $1,500. (This cost would remain unchanged

even if the enrollment in the course increased to six or eight students.)

In an attempt to ascertain whether the teaching of low-enrollment "dead-language" courses would indeed prove a practical alternative to classroom instruction, the principal investigator has undertaken the implementation of a computer-based introduction to the morphology of Old Church Slavic (henceforth OCS)--the language of the first Slavic translation of the Bible. This material, which included twenty-four programmed computer-based lessons and supplementary computer-generated drills, constituted the principal means of instruction in a one-quarter course successfully given for regular academic credit to five Stanford graduate students during the winter quarter of the academic year 1972-73. Although the 1972-73 course also included eight final sessions with the instructor, devoted to the reading and analysis of texts, it would appear that most or all of these could be replaced by CBI sessions centering around the recognition and analysis of OCS forms as they actually occur in the texts.

Section 2

Methods

2.1 The Students

The participants in the computer-based course consisted of those five individuals who registered for Slavic 211, Introduction to Old Church Slavonic and Early Russian Texts, during the winter quarter of the academic year 1972-73. No effort was made either to recruit students or to discourage any interested individual from enrolling. Since the fact that the course was largely computer based had not been publicized, it is probable that the enrollment would have been the same regardless of the nature of the course.

This hypothesis is borne out by an examination of the background of the individuals enrolled. Two of the five (henceforth referred to as "A" and "B") were first-year students in the Ph.D. program of the Stanford Department of Slavic Languages and Literatures. Such students

are regularly required to enroll in Slavic 211 at the first possible
opportunity, and only an inadequate control of Russian (revealed on the
placement test administered by the Department to all entering graduate
students) would cause enrollment in this course to be postponed until
the second year. The third student (henceforth "C") represented just
such a case. Required to take intensive remedial work in Russian during
her first year in the Department, this second-year student in the Ph.D.
program would definitely have taken Slavic 211 in any case. Student D,
a first-year student in the M.A. program, was also enrolled in the course
in compliance with the normal requirements for her degree program. Only
Student E, a graduate student in electrical engineering, took Slavic 211
on a voluntary basis. This individual, a French citizen of Russian
parentage, possessed a certain degree of familiarity with computing and
may have been influenced in his decision to enroll by the utilization of
CBI. On the other hand, since he explicitly stated that his original
reason for taking the course was his interest in the origin and history
of the Russian language, it is not at all unlikely that he would have
enrolled in a non-computer-based version of Slavic 211.

In view of the limited enrollment, no attempt was made to have some
of the students take a non-computer-based version of the course during
the quarter in question. However, since the material covered in Slavic
211 changes little from year to year, it is not unreasonable to view
the performance of students who took the non-computer-based course in
earlier years as a rough gauge of the progress of the 1972-73 group
(see Section 3 below).

2.2 The Physical Framework

The computer-based lessons took place in the same classroom at the
Institute for Mathematical Studies in the Social Sciences in which our
computer-based Russian courses have been given. Only teletype stimuli
and responses were utilized. Two of the Model-35 teletypes which had
been used in the Russian courses were provided with a modified Cyrillic
keyboard (see Appendix 1) to enable the student to type OCS responses
containing characters not found in the contemporary Russian alphabet.
(It proved possible to add the required OCS letters without sacrificing

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any contemporary Russian characters other than ё. This was achieved
by (1) eliminating the exclamation point, (2) utilizing the Cyrillic
letter з for the numeral 3 and the letter o for the numeral zero,
and (3) utilizing digraphs containing the element I to render OCS y,
ja, ju and jǫ.

As in the case of the Russian courses, assignment sheets and homework
were regularly left for and picked up by the students in a set of slots,
each of which was assigned to one student. While the principal investigator
was present during the first two computer-based lessons in order to insure
that the students learned how to interact with the system successfully,
no proctor was present during the other sessions. Students having diffi-
culties either reported them immediately to personnel at IMSSS, or con-
tacted the principal investigator either at his home or through the
Department of Slavic Languages.

2.3 The Underlying System

The material for the computer-based sessions as well as the assign-
ment sheets and homework material was typed, corrected and converted to
a transcription system coordinated with the keyboard given in Appendix 1
on one of a number of IMLAC display consoles belonging to IMSSS. The
coding system used in preparing the material for the computer-based
sessions was a small subset of the one used in connection with the
Russian courses and is outlined in Appendix 2. (The limitations on
input coding resulted from inadequacies in the PDP-10 program written
to replace the PDP-1 programs which processed our Russian input. It
is hoped that the present PDP-10 program will soon be replaced by a
more adequate one.)

2.4 Classroom Scheduling

Students were provided access to the computer-based classroom from
8:30 a.m. to 5:00 p.m. Monday through Friday. In order to prevent con-
flicts over teletype use, each student was assigned a teletype for a
period of approximately forty-five minutes for each of the five days
the classroom was available. During the first two weeks, before a second
teletype was modified for use in the OCS course, some difficulties did
arise, when students either did not arrive on time or found a lesson

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too long to finish within the assigned period. As soon as the second
teletype was available, such difficulties largely disappeared.

2.5 Student-Computer Interaction

2.5.1 Presentation of Material

Throughout the course the presentation of material remained essentially
the same: English or OCS material was typed by the teletype. However, it
should be noted that, although each word and rule covered in the CBI lessons
was explicitly introduced to the students during the sessions themselves,
the students were informed well in advance of each lesson which sections
of the H. G. Lunt's Old Church Slavic Grammar (2nd ed., The Hague, 1967)
covered the material to be presented. Consequently, "new" material was
presented at a much faster pace than had been the case in the computer-
based Russian courses, and the ratio of material calling for a typed
response to material involving only passive recognition was much higher
in the OCS course.

2.5.2 Response Evaluation.

Except in the case of fill-in responses, which were evaluated as
originally typed, students were permitted to correct typing errors or
other unintentional mistakes before submitting a given typed response for
evaluation by the computer. As in the case of the Russian courses, cor-
rections could be achieved either by deleting one or more separate
characters from right to left (by striking the "rubout" key for each
character to be deleted) or by deleting the entire contents of the answer
buffer (by striking "control X"). Since most of the OCS responses were
relatively short ones, the "control X" feature could be used much more
effectively than in the case of the Russian courses, where responses
often ran to nearly fifty characters.

Incorrect fill-in responses caused the machine to print out "No,
try again" plus those characters of the student's response which preceded
the first incorrect character. Students at first found this procedure
confusing, since they attempted to type the response over from the
beginning and were consequently credited with a second error by the
computer, which expected only the portion including and following the

first incorrect character. While the students soon learned to pay close attention to the characters typed out after a "Try again" message, it would appear that, in the case of the relatively short responses used in the OCS course, the response-evaluation routine should be modified to accept a correct retyping of the entire original response.

2.5.3 Branching

Although the program-imposed limitations mentioned under 2.3 above precluded the use of computer-generated remedial blocks, it was possible to include in the original input test-dependent remedial blocks providing a more detailed explanation of and/or additional drill on a given rule. However, because of the relatively straightforward nature of most of the material, the OCS sessions made little use of such techniques.

2.5.4 Individualized Drill Sessions

The OCS course differed markedly from the computer-based Russian course in that it made available to the student drills on noun and verb inflection in which the student himself played a major role in selecting both the inflectional categories and the concrete vocabulary items to be drilled.

Thus, the verb-driller not only asked the student to select the verbal stems to be covered but permitted him to include or exclude any of ten different form sets (present tense, aorist forms, imperfect tense, imperative mood, infinitive and supine, and any combination of five participles). In addition he could include or exclude the dual forms and the 3.s., 1.p. and 2.p. of the present, aorist and imperfect; the 3.s., 1.p. and 2.p. of the imperative; the nominative singular neuter and feminine, accusative singular neuter, and nominative plural masculine of active participles; and compound forms of active participles. In the case of the noun drills the student could include or exclude the singular, dual and/or plural number of any noun he selected. Examples of the verb and noun drills are given in Appendix 3.

The verb and noun drills were made available to the students after they had completed the 24 computer-based sessions and had begun to meet twice a week with the instructor for the reading and analysis of texts.

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Since these drills were not a required part of the course, they were largely ignored by the students, despite the fact that the students' active control of OCS morphology tended to degenerate with the passage of time. It would therefore seem advisable that such drills be integrated with the computer-based lessons from the beginning of the course and made a regular part of the required work (see Section 4, below).

2.5.5 Restart Points

All computer-based lessons contained a number of restart points which permitted a student whose progress through a given lesson was interrupted (either at his own request or as a result of technical difficulties) to continue the lesson at a later time, beginning at the last restart point reached before the interruption. (It should be noted that voluntary interruptions were unusual, since the students definitely preferred to reach the end of a given lesson--even an excessively long one--during the same session in which it was begun. However, systems difficulties were frequent enough to cause all of the students to utilize the restart feature at one time or another in order to avoid repeating material covered prior to an involuntary interruption.)

2.6 Supplementary Activities

The computer-based lessons were coordinated with H. G. Lunt's Old Church Slavic Grammar. Students were given assignment sheets indicating the content of future lessons and were urged to familiarize themselves with the appropriate sections of the grammar before taking a given lesson. It should be noted, however, that all of the grammatical material covered in the course was explicitly presented to the students within the computer-based lessons, so that a student could handle a grammar lesson successfully without having read the corresponding passages in Lunt. A sample assignment sheet is given in Appendix 4.

As the course progressed the students were also assigned homework in the form of short OCS passages for translation and analysis. The homework was collected, and, after being corrected by the principal investigator, returned to the students via the set of slots discussed in 2.2 above. Direct contact between the principal investigator and

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the students for the purpose of discussing the homework was relatively rare. A sample homework sheet is given in Appendix 5.

After the sixth week of the course, when all the students but one had completed all the computer-based lessons, the students began to meet with the instructor twice weekly to translate and analyze OCS texts. Since the students were already familiar with OCS grammar they were able to cover a page of material each session, an amount which in previous years would have been covered in three or four separate sessions. As a result, the students ended up covering approximately the same amount of OCS textual material as they would have covered in the regular version of the course.

2.7 The Collection of Data

As a result of system changes we were unable to include in the present project either daily summaries of student progress or the collection of detailed data on student performance, both of which were features of computer-based Russian courses. As a result, feedback on such important factors as the amount of time the students needed to complete a given lesson was obtainable only from conversations with the students themselves. It is hoped that the driver program can be modified in the course of the coming summer to permit the collection of sufficient material for daily summaries when the course is run in 1973-74.

The students in the course were requested to evaluate it on the evaluation sheets regularly employed at Stanford for this purpose. These sheets are reproduced in Appendix 6.

2.8 The Curriculum

A lesson-by-lesson summary of the material covered in the course is given in Appendix 7. The twenty-four computer-based lessons cover practically the entire morphology of OCS except for a few isolated points related to the inflection of single words (e.g., the numerals three, four and ten, the pronoun kyi) or very limited groups of words (e.g., the stems elik-, tolik-, etc.). It also includes coverage of those features of OCS phonology new to students familiar to Russian and an introduction to the problems associated with the replacement of strong, weak and tense jers.

An important feature of the lessons was the fact that they were concerned almost exclusively with the students' ability to reproduce the "ideal" representations of OCS forms being taught. The vast majority of student responses in the CBI sessions consisted of supplying the correct ending of an OCS word. Little or no attention was paid to the problem of form recognition or to the question of the "corrupt" forms so often encountered in OCS texts.

2.9 The Final Examination

As was the case in other years, the primary criterion for the evaluation of the students' progress was a three-hour written examination administered during the regularly scheduled university examination period at the end of the winter quarter. A copy of the final examination is given in Appendix 8.

It should be pointed out that the examination given in connection with the computer-based course was actually a more difficult one than those administered in connection with the regular course. The latter regularly included only material of the type covered in Sections I, II and III. Sections IV and V, which call for a more active control of OCS inflection, were included in the hope of ascertaining whether the CBI sessions had resulted in the students' gaining a firm command of this area.

Section 3

Findings and Analysis

3.1 Results of the Final Examination

The author is aware that the following comments are highly sub-jective in nature. However, in the absence of a satisfactory control group, such impressionistic speculations are the sole way in which he can attempt to evaluate the effectiveness of the course.

All of the students in the course passed the final examination. The letter grades assigned for the course were one A-, three B+'s and one B-. Only the last grade was below the level deemed satisfactory for graduate work at Stanford. (The grades for the non-computer-based

version of the course given in 1971-72 are two A's and three B+'s. Those for 1970-71 are A, A-, B+, C+. It should be noted that one of the B+ grades given in 1971-72 was assigned to a student who had failed the course in 1969-70. The student receiving the A in 1970-71 had previously had a course in OCS at another university and had audited the Stanford course the year before.)

It would appear that the ability of the 1972-73 group to translate OCS passages and to analyze forms in context was on approximately the same level as that of students taking the non-computer version of the course. Of somewhat greater interest was the fact that the CBI group did not do very well on those sections of the examination (IV and V) which called for the generation of OCS paradigms or the analysis of forms out of context. Thus, in the case of three out of five students the grade assigned for whichever of these sections the student chose was lower than the grade assigned to the other sections of the examination. In the other two cases the grade assigned for those sections was identical with the grade assigned for the examination as a whole.

3.2 Analysis of Student Performance in Certain Sections
    of the Examination

It is not surprising that the out-of-context analysis of forms caused difficulties, since this type of analysis was not included in the computer-based lessons, the homework assignments coordinated with those sessions, or the class sessions which took place during the last part of the course. The only conclusion we can draw is the not particularly unexpected one that drilling on the production of paradigms does not automatically prepare the student to analyze individual forms out of context. It follows that if the ability to handle this type of analysis is deemed a desirable skill the computer-based lessons should be modi- fied to include instruction in this skill.

At first glance it would appear to be considerably more difficult to explain why the students did not do better in the production of paradigms. However, it would appear that this problem is directly related to defects in the organization of the course. First of all, the class sessions which occupied the last weeks of the course totally

ignored the production of OCS forms except insofar as this question was directly related to the analysis of a form encountered in the passage being translated. Thus, whatever the students' control of the paradigms may have been at the end of the computer-based sessions it was given little or no direct reinforcement during the class sessions. Indeed, in view of the large number of "incorrect" forms occurring in OCS texts, the analysis of such passages may well have served to weaken the students' control of the "correct" forms taught in the computer-based sessions.

On the other hand, the computer-generated paradigmatic drills, which could have served to strengthen the students' control of the "correct" forms, were not made part of the required course work--a fact which led to their being largely ignored by the students.

Finally, the students had been assured that active control of the paradigms would not be required on the examination (as indeed it was not, since the students did not have to choose Part IV of the examination). As a result, the students had no motivation during the period immediately preceding the examination either to repeat the computer-based lessons or to utilize the computer-generated paradigm drills.

It would thus appear that the relatively poor control of the paradigms resulted from the failure to make such control a required part of the course. The students had no real reason to maintain or improve their competence in this area and probably neglected it once the computer-based lessons were completed. This assumption is easily reconciled with the apparent decline in the students' ability to analyze forms in context, noted by the instructor during the last week of the course. At that time it seemed that students who had previously correctly associated certain forms with the appropriate paradigm were becoming uncertain about such associations or even replacing them with erroneous ones, a development which can be viewed as resulting from the large number of "corrupt" forms encountered in OCS texts.

Section 4

Conclusions

4.1 Goals Achieved and Suggestions for Further Research

The findings discussed in Section 3 indicate that the computer-based
lessons in OCS morphology served as a satisfactory replacement for those
parts of the non-computer-based version of the course which were devoted
to presenting and drilling the inflectional system of the language. It
is clear that this results in a considerable reduction in the number of
hours which the instructor must devote to classroom instruction--from
thirty hours to eight hours. It would, however, appear that the present
course could be made considerably more effective and the amount of class-
room instruction reduced still further by (1) utilizing the computer-
generated form drills as a regular (required) part of the course, (2)
increasing the number of computer-based sessions from 24 to at least 30,
and (3) including in the computer-based lessons material on the analysis
of OCS forms both out of context and within the context of short passages
paralleling in complexity and degree of "corruptness" those found in the
texts themselves. Since the implementation of these changes would result
in a significantly modified instructional program, I shall devote the
following paragraphs to a brief outline of the most relevant charac-
teristics of the new course.

First of all, the modified version of the course would require the
students to utilize the computer-generated form drills as a regular part
of their study of OCS. Instead of being informed that an active control
of OCS forms is not required in the course, students will be required to
display such a control not only on the final examination but also on a series
of weekly tests. The computer-generated drills will be assigned to the
students from the time of their first computer-based lesson in OCS
morphology instead of being made available only after all the lessons
have been completed. The drills available will, of course, increase in
scope and complexity as the students' knowledge grows, but the assigned
drills will also provide for the recycling of material presented at an
earlier period in the course.

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It is hoped that the availability of the drills will make possible the omission of a significant number of form-generation frames from the computer-based lessons. This in turn will permit the insertion into the lessons of material on the analysis of words and phrases and, in the case of some of the lessons, allow us to reduce the run time for the session to a more convenient length.

The inclusion of a greater number of computer-based lessons will also make possible the shortening of excessively long sessions and the inclusion of work on the analysis of OCS forms. In addition, it is hoped that it will make it possible to cover those few details of OCS inflection not covered in the original course and to do enough introductory work in the analysis of single sentences to reduce the number of classroom sessions devoted to the translation and analysis of texts to no more than four.

Finally, the inclusion of material on form recognition should make the course considerably more effective in preparing the students to deal with OCS texts on their own. By calling on the students to analyze both "correct" and "corrupt" forms and passages from the earliest lessons on, the revised computer-based lessons should prove much more helpful than the present ones, which totally ignore this problem.

4.2 Disposal of Course Materials

The computer-based lessons as well as the assignment sheets and homework assignments are presently stored on magnetic tape at the Computer-Based Laboratory of IMSSS. Scholars interested in learning more about this material should contact the Institute.

Appendix 1

OCS Keyboard
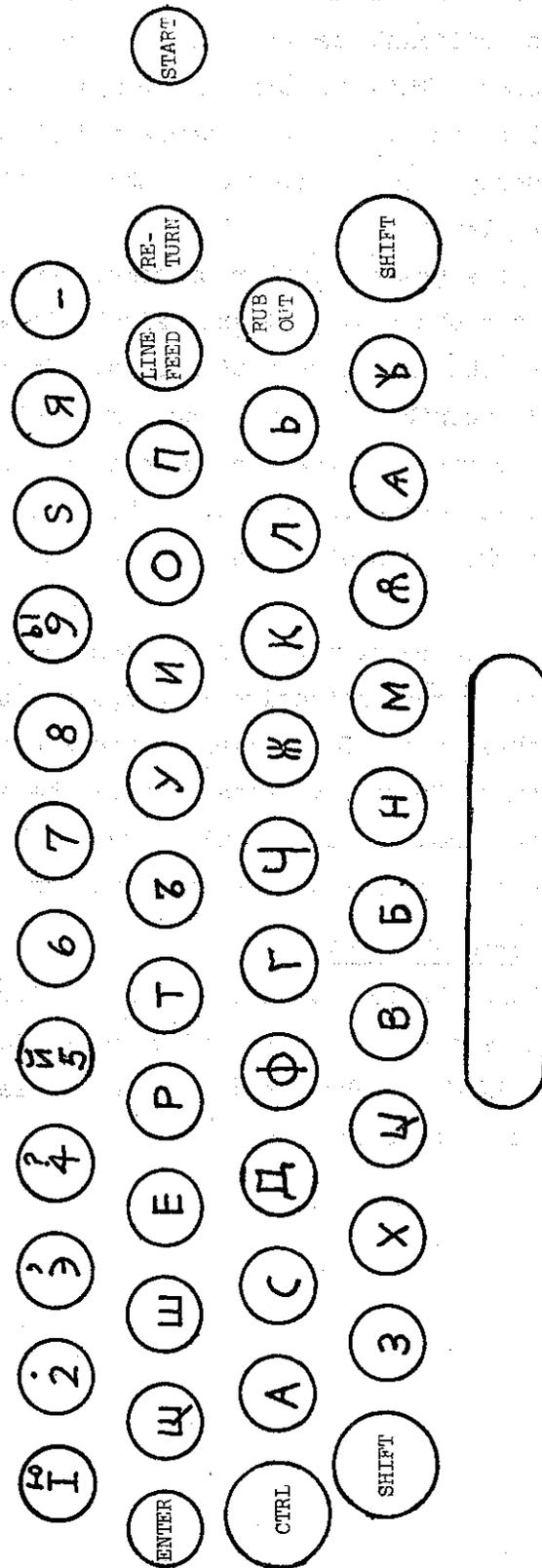
Appendix 2

Outline of Input Coding

The script consists of the following set of basic op-codes:

Teletype output

 TE   type English

> The following text, which begins in English, is to be typed on the teletype.

 TR   type Russian

 RET   returns

> The number following this op-code specifies the number of line-feeds desired for spacing and grouping of material on the teletype at run-time.

Teletype input

 123   This actually represents 16 separate op-codes. The text following the op-code contains one or more sets of parentheses. The material outside the parentheses will be typed by the computer, that inside the parentheses is the required answer, e.g.,

> book is [(kniga)
>
> fill in --[on duma(l), ona duma(la).

 1   is either null or N.   If null, two line-feeds will be generated in the run-code preceding the text in order to space it on the paper; if N, these line-feeds will be suppressed.

 2   is one of "S, L." These represent the two basic ways in which a response may be elicited from the student. S (simple) means that the line will be typed with an underscore to position the response and the teletype will then return and position itself at the underscores, awaiting the student response. This is used for responses to fill in blanks. L (linear) means that the teletype will type up to the desired response and wait for the student to supply the answer. Then it will continue the line to the next response desired. This is used for responses to complete word endings. S-type answers require the student to start over and type the entire desired response when given additional opportunities after an error. L signals the program

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to supply those initial characters of the answer which are correctly typed in. Thus a student, rather than having to start over later, merely needs to try again at the point at which the error occurred.

3   is either E or R and merely indicates whether the text begins in English or in Russian.

Timing and repetition control

WAT   wait n

N specifies a length of time for the program to wait while the student repeats an audio message or says a sentence in Russian.

RST   restart

This marks a restart point to which the lesson will return should system failure cause a student's lesson to terminate abruptly prior to completion.

Program flow

BEG   begin

Marks the beginning of a lesson.

END   end

Marks the end of a lesson.

TST   test

Marks the beginning of a test section.

BLK   remedial block

Marks the termination of the preceding test and the start of material which will be ignored if the student responded correctly to the material in that test.

FIN   end of remedial block

Verb and Noun Drill Examples

ЧИ

ПЛЕАСЕ ТЪПЕ ЪОУР НУМБЕР АНД НАМЕА
О ЧС

ЖОБ 58 ОН ТТІSЭS   ТЧУ МАЪ ЭІ 7Э 9Я49АМ-ПДТ

TYPE NAME OF VERB LIST AND A 'RETURN'.   ДОЧ
WANT ALL CATEGORIES AND FORMS?
TYPE A 'Д' FOR 'YES' OR AN 'Н' FOR 'NO'.   Н
WANT THE PRESENT?
Д
WANT AORIST FORMS?
Н
WANT THE INF. AND SUPINE?
Д
WANT THE IMPERFECT?
Д
WANT THE IMPERATIVE?
Н
WANT PRES. ACT. P.?
Н
WANT PRES. PSS. P.?
Н
WANT PST. ACT. P.?
Д
WANT PST. PSS. P.?
Н
WANT 'L' PTCPL.?
Н
WANT DUAL FINITE FORMS?
Н
WANT THE 3.S., I.P. AND 2.P.?
Н
WANT THE N-A.S. NEU., N.S. FEM. AND N.P. MAS. OF ACTIVE PARTS.?
Д
WANT COMPOUND FORMS OF ACTIVE PARTS.?
Н
TYPE BASIC STEM OF VERB AND A 'RETURN'.
ВЕД
THE PRESENT
TYPE THE 3.P. ВЕДЯТЪ?
I.S. ВЕДЯ

2.S. ВЕДЕШИ
THE INF. AND SUPINE
TYPE THE INF. ВЕСТИ

S UP. ВЕСТЪ

THE IMPERFECT
TYPE THE 3.P. ВЕДѢАХѦ

I.S. ВЕДѢАХЪ

2.S. ВЕДѢАШЕ

PST. ACT. P.
NON-COMP.
TYPE THE NSM. ВЕДЪ

ASM. ВЕДЪШЬ

NSN. ВЕДЪ
ASN. ВЕДЪШЕ

NSF. ВЕДЪШИ

NPM. ВЕДЪШЕ

TYPE STEM AND A 'RETURN'.
ПАДЪ
STEM NOT IN MY LIST

        TYPE STEM AND A 'RETURN'.
ПАД
THE PRESENT
TYPE THE 3.P. ПАДѦТЪ

I.S. ПАДѦ

2.S. ПАДЕШИ

THE INF. AND SUPINE
TYPE THE INF. ПАСТИ

SUP. ПАСТЪ

THE IMPERFECT
TYPE THE 3.P. ПАДѢАХѦ
I.S. ПАДѢАХЪ

2.S. ПАДѢАШЕ

PST. ACT. P.
NON-COMP.
TYPE THE NSM. ПАДЪ

ASM. ПАДЪШЬ

NSN. ПАДЪ

ASN. ПАДЪШЕ

NSF. ПАДЪШИ

NPM. ПАДЪШЕ

TYPE STEM AND A 'RETURN'.
КЛЬН
THE PRESENT
TYPE THE 3.P. КЛЬНѦ
WRONG. START OVER.
КЛЬНѦТЪ

I.S. КЛЬНѦ

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2.S. КЛЬНЕШИ

THE INF. AND SUPINE
TYPE THE INF. КЛАТИ

SUP. КЛАТЪ

THE IMPERFECT
TYPE THE 3.P. КЛЬНѢАХЪ
WRONG. START OVER.
КЛЬНѢАХѦ

I.S. КЛЬНѢАХЪ

2.S. КЛЬНѢАШЕ

PST. ACT. P.
NON-COMP.
TYPE THE NSM. КЛЬНЪ

ASM. КЛЬНЪШЬ

NSN. КЛЬНЪ

ASN. КЛЬНЪШЕ

NSF. КЛЬНЪШИ

NPM. КЛЬНЪШЕ

TYPE STEM AND A 'RETURN'.
Л-ЮБИ
THE PRESENT
TYPE THE 3.P. Л-ЮБЛ-Iѧ
WRONG. START OVER.
Л-ЮБАТЪ

I.S. Л-ЮБЛ-Iѧ

2.S. Л-ЮБИШИ

THE INF. AND SUPINE
TYPE THE INF. Л-ЮБОТИ
WRONG. START OVER.
Л-ЮБИТИ

SUP. Л-ЮБИТЪ

THE IMPERFECT
TYPE THE 3.P. Л-ЮБЛ-IААШ
ДО СВИДАНИЯ

ЧИ

ПЛЕАСЕ ТЪПЕ ЪОУР НУМБЕР АНД НАМЕА
ОЧНС

ЧОУРСЕ ИД МИСТАКЕ

ПЛЕАСЕ ТРЪ АГАИНА

ОЧН

ЧОУРСЕ ИД МИСТАКЕ

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ПЛЕАСЕ ТРЪ АГАИНА

О4СН

Ж05 27 ОН ТТISЭS   Т4У МАЪ ЭI 7Э ISЯSЭAM-ПДТ

TYPE NAME OF VOCABULARY AND A ´RETURN´.   НВО4
TYPE A WORD YOU WISH TO DRILL AND A ´RETURN´.
ПЯТЬ
DO YOU WANT ALL FORMS?
TYPE A ´Д´ FOR ´YES´ OR AN ´Н´ FOR ´NO´.   Н
DO YOU WANT THE SINGULAR?
Н
DO YOU WANT THE DUAL?
Д
TYPE THE N.D. ПЯТИ

G.D. ПЯТЬЮ

D.D. ПЯТЬМА?
DO YOU WANT THE PLURAL?
Д
TYPE THE N.P. ПЯТЬЕ

A.P. ПЯТИ

G.P. ПЯТЬИ

L.P. ПЯТЬХЪ

D.P. ПЯТЬМЪ

I.P. ПЯТЬМИ

DO YOU WANT TO CONTINUE?
Д
TYPE A WORD YOU WISH TO DRILL AND A ´RETURN´.
ГРАДЪ
DO YOU WANT ALL FORMS?
Д
THE SINGULAR
TYPE THE A.S. ГРАДЪ

G.S. ГРАДА

L.S. ГРАДЬ

D.S. ГРАДОВИ
WRONG. START OVER.
ГРАДОВVVVВУ

I.S. ГРАДОМЬ

V.S. ГРАДЕ

THE DUAL
TYPE THE N.D. ГРАДА

G.D. ГРАДОУ

D.D. ГРАДОМА

THE PLURAL
TYPE THE N.P. ГРАДИ

A.P. ГРАДЪI

G.P. ГРАДЪ

L.P. ГРАДЬХЪ

D.P. ГРАДОМЪ

I.P. ГРАДЪI

DO YOU WANT TO CONTINUE?
Д
TYPE A WORD YOU WISH TO DRILL AND A `RETURN`.
РЯКА
DO YOU WANT ALL FORMS?
Н
DO YOU WANT THE SINGULAR?
Д
TYPE THE A.S. РЯКЯ

G.S. РЯКЪI

L.S. РЯЧЬ

D.S. РЯЧЕ

I.S. РЯКОIЯ

V.S. РЯКО

DO YOU WANT THE DUAL?
Н
DO YOU WANT THE PLURAL?
Д
TYPE THE N.P. РЯКЪI

A.P. РЯКЪI

G.P. РЯКЪ

L.P. ?PVPPЯКАХЪ

D.P. РЯКАМЪ

I.P. РЯКАХЪ
WRONG. START OVER.
РЯКАМИ

DO YOU WANT TO CONTINUE?
Н

ДО СЗИДАНИЯ

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Appendix 4

Sample Assignment Sheet

/   ocs lessons

977   Simple declension, Lunt, 60-61. Hard pronominal declension,
        nominative, accusative and masculine singular, Lunt, 52 --
        4.2 --, 54.

978   Remainder of hard pronominal forms. Regular soft pronominal
        declension -- 'your, my'. /Forms of 'he, she, it, they,' with
        and without prepositions. Lunt, 52 -- 4.2,--, 53 -- 4.25 --,
        54.

979   Various irregular pronominal stems, Lunt, 52 -- 4.21, 4.22 --,
        53 -- 4.23, 4.24 --, 54. Singular of anomalous declension,
        Lunt, 61 -- 63.

980   Remainder of anomalous declension, Lunt 61 -- 63. Mixtures
        of two nominal types, Lunt, 63, 64. Personal pronouns, Lunt,
        65.

981   Compound declension, Lunt 55 -- 58.

Appendix 5

Sample Homework Sheet

THIS ASSUMES YOU HAVE COMPLETED LESSON 97S

1. TRANSLATE INTO ENGLISH.

2. IDENTIFY EVERY FORM. FOR NOUNS GIVE CASE, GENDER, NUMBER,
DECLENSION, STEM TYPE AND THE NOMINATIVE SINGULAR IF IT IS
DIFFERENT FROM THE FORM IN THE TEXT. FOR VERBS GIVE,
WHERE RELEVANT, TENSE, PERSON, NUMBER, GENDER, CASE, THE
BASIC STEM, AND, IN THE CASE OF PARTICIPLES, THE N.S.MAS. IF
IT DIFFERS FROM THE FORM IN THE TEXT.

ИСОУСЪ ОТЪВѢШТАЕТЪ ВОИНОВИ ГЛАГОЛ-А -- ЧЬТО ТВОРИШИ ДРОУЖЕ

НЕ ПЬЧѢТЕ СА ПѢНАЅИ А ДОУШЕІѦ

СЛѢПЬЧА ВЕДОМА ЧАДЪІ ИДЕТЕ КЪ ТЕТРАРХОУ

Appendix 6

Student Evaluation Sheets

Lectures

These four questions pertain to your own interest and
participation in the course:

Answer
(Make no response
if you feel the
question is
inappropriate)

1. Did you enjoy this course?

(1) Much more than   (2) More than   (3) Average   (4) Less than   (2)
    average   average   average

2. Was the course presented at the appropriate intellectual level
   for you?

(1) Too difficult (2) Appropriate (3) Too easy   (2)

3. How hard did you work in this course?

(1) Extremely hard   (2) Hard   (3) Average (4) Not very hard   (1)

4. Do you feel that the material presented was worth learning?

(1) Definitely (2) Yes (3) Maybe (4) No   (1)

Rate the lectures on the following:

5. Were clear and well organized:

(1) Outstanding   (2) Good   (3) Fair   (4) Poor   (1)

6. Were intellectually stimulating:

(1) Outstanding (2) Good (3) Fair (4) Poor   (2)

7. In comparison with all other lecturers you have had at Stanford, how
   would you rate this lecturer?

(1) Outstanding (2) Good (3) Fair (4) Poor   (2)

Rate the course assignments: (Papers, problem-sets, readings)

8. Were they valuable in their own right?

(1) Outstanding (2) Good (3) Fair (4) Poor   (2)

9. Were they well integrated with the lectures?

(1) Outstanding (2) Good (3) Fair (4) Poor   (2)

Please identify: _Slavic 211_____
                 Course Department and Number

_Prof. Van Campen_____
        Instructor's Name

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Lectures

These four questions pertain to your own interest and
participation in the course:

Answer
(Make no response
if you feel the
question is
inappropriate)

1. Did you enjoy this course?

   (1) Much more than (2) More than (3) Average (4) Less than
       average   average   average

   ___(2)___

2. Was the course presented at the appropriate intellectual level
   for you?

   (1) Too difficult (2) Appropriate (3) Too easy

   ___(2)___

3. How hard did you work in this course?

   (1) Extremely hard (2) Hard (3) Average (4) Not very hard

   ___(1)___

4. Do you feel that the material presented was worth learning?

   (1) Definitely (2) Yes (3) Maybe (4) No

   ___(1)___

   class meeTings

Rate the ~~lectures~~ on the following:

5. Were clear and well organized:

   (1) Outstanding (2) Good (3) Fair (4) Poor

   ~~(1)~~ (1)

6. Were intellectually stimulating:

   (1) Outstanding (2) Good (3) Fair (4) Poor

   ~~(1)~~ (2)

7. In comparison with all other lecturers you have had at Stanford, how
   would you rate this lecturer?

   (1) Outstanding (2) Good (3) Fair (4) Poor

   ___(2)___

Rate the course assignments: (Papers, problem-sets, readings)

8. Were they valuable in their own right?

   (1) Outstanding (2) Good (3) Fair (4) Poor

   ___(1)___

9. Were they well integrated with the lectures?

   (1) Outstanding (2) Good (3) Fair (4) Poor

   ___(1)___

Please identify: ___Slavics 211___
Course Department and Number

___Van Campen___
Instructor's Name

25

Lectures

These four questions pertain to your own interest and
participation in the course:

Answer
(Make no response
if you feel the
question is
inappropriate)

1. Did you enjoy this course?

   (1) Much more than (2) More than (3) Average (4) Less than
       average   average   average

   (1)

2. Was the course presented at the appropriate intellectual level
   for you?

   (1) Too difficult (2) Appropriate (3) Too easy

   (2)

3. How hard did you work in this course?

   (1) Extremely hard (2) Hard (3) Average (4) Not very hard

   (1)

4. Do you feel that the material presented was worth learning?

   (1) Definitely (2) Yes (3) Maybe (4) No

   (1)

Rate the lectures on the following:

5. Were clear and well organized:

   (1) Outstanding (2) Good (3) Fair (4) Poor

   (1)

6. Were intellectually stimulating:

   (1) Outstanding (2) Good (3) Fair (4) Poor

   (1)

7. In comparison with all other lecturers you have had at Stanford, how
   would you rate this lecturer?

   (1) Outstanding (2) Good (3) Fair (4) Poor

   (1)

Rate the course assignments: (Papers, problem-sets, readings)

8. Were they valuable in their own right?

   (1) Outstanding (2) Good (3) Fair (4) Poor

   (1)

9. Were they well integrated with the lectures?

   (1) Outstanding (2) Good (3) Fair (4) Poor

   (1)

Please identify: _Slavic 211_
                 Course Department and Number

prof. Van Campen
Instructor's Name

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<u>Lectures</u>

<u>These four questions pertain to your own interest and</u>
<u>participation in the course:</u>

1. Did you enjoy this course?

   (1) Much more than (2) More than (3) Average (4) Less than   ( )
       average   average   average   —————

2. Was the course presented at the appropriate intellectual level
   for you?

   (1) Too difficult (2) Appropriate (3) Too easy   ( )
                                                 —————

3. How hard did you work in this course?

   (1) Extremely hard (2) Hard (3) Average (4) Not very hard   ( )
                                                   —————

4. Do you feel that the material presented was worth learning?

   (1) Definitely (2) Yes (3) Maybe (4) No   ( )
                                                    —————

<u>Rate the lectures on the following:</u>

5. Were clear and well-organized:
   (1) Outstanding (2) Good (3) Fair (4) Poor   ( )
                                                    —————

6. Were intellectually stimulating:
   (1) Outstanding (2) Good (3) Fair (4) Poor   ( )
                                                    —————

7. In comparison with all other lecturers you have had at Stanford, how
   would you rate this lecturer?
   (1) Outstanding (2) Good (3) Fair (4) Poor   ( )
                                                    —————

<u>Rate the course assignments:</u> (Papers, problem-sets, readings)

8. Were they valuable in their own right?
   (1) Outstanding (2) Good (3) Fair (4) Poor   ( )
                                                    —————

9. Were they well integrated with the lectures?
   (1) Outstanding (2) Good (3) Fair (4) Poor   ( )
                                                    —————

Please identify: Slavic 211   OCS
           Course Department and Number

        Pr. Vera Campven
           Instructor's Name

<u>Lectures</u>

<u>These four questions pertain to your own interest and
participation in the course:</u>

1. Did you enjoy this course?

    (1) Much more than   (2) More than   (3) Average (4) Less than
         average   average   average

    (2)

2. Was the course presented at the appropriate intellectual level
    for you?

    (1) Too difficult (2) Appropriate (3) Too easy

    (2)

3. How hard did you work in this course?

    (1) Extremely hard   (2) Hard   (3) Average (4) Not very hard

    (2)

4. Do you feel that the material presented was worth learning?

    (1) Definitely (2) Yes (3) Maybe (4) No

    (1)

<u>Rate the lectures on the following:</u>

5. Were clear and well organized:

    (1) Outstanding   (2) Good   (3) Fair   (4) Poor

    (1)

6. Were intellectually stimulating:

    (1) Outstanding (2) Good (3) Fair (4) Poor

    (2)

7. In comparison with all other lecturers you have had at Stanford, how
    would you rate this lecturer?

    (1) Outstanding (2) Good (3) Fair (4) Poor

    (   )

<u>Rate the course assignments: (Papers, problem-sets, readings)</u>

8. Were they valuable in their own right?

    (1) Outstanding (2) Good (3) Fair (4) Poor

    (1)

9. Were they well integrated with the lectures?

    (1) Outstanding (2) Good (3) Fair (4) Poor

    (1)

Please identify:___Slavic 311_____ Old Church Slavic_____
                   Course Department and Number

                   Prof. Van Campen_____
                   Instructor's Name

Appendix 7

Content of OCS Lessons

1. Introduction to the keyboard: Letters typed with fingers in "initial" position and all letters typed with the index fingers. Approximate phonetic value of the OCS jers. Drill questions on pp. 1-3 of Lunt's introduction.

2. All other single letters except for $\mathcal{I}$ and $\underline{S}$. Approximate phonetic value of OCS $\underline{E}$, $\underline{\text{Ш}}$, $\underline{\text{ОУ}}$, $\mathcal{A}$, $\mathcal{A}$ and $\underline{\text{Ѣ}}$. Drill questions on pp. 4-5 of Lunt.

3. The letters $\underline{I}$ and $\underline{S}$. The use of $\mathcal{I}$ in the degraphs $\underline{IA}$, $\underline{IO}$, $\underline{IA}$ and $\underline{\text{ЗИ}}$. Approximate phonetic value of $\underline{S}$. Spelling of 'j plus vowel' combinations after vowels and consonants. Nominative singular, dual and neuter of hard two-fold nouns. Nominative of numeral 'two'. Third singular, dual and plural of present tense.

4. Accusative, genitive and locative of hard two-fold nouns and of numeral 'two'. Replacement of velars in locative singular and plural, nominative dual, and nominative plural.

5. Dative, instrumental and vocative of hard two-fold nouns. Dative and instrumental of numeral 'two'. Replacement of velars in vocative singular. Second singular, dual and plural of present tense.

6. Inflection of soft two-fold nouns with stems in a consonant other than -j-. First dual and plural of present tense.

7. Soft two-fold nouns with stem in -j-. First person singular of present tense. Substitutive softening of stem-final consonants in 1.s.

8. Basic-stems of OCS verbs. Partial restatement of present-tense inflection in terms of basic-stem approach. Representation of stems ending in -j-.

9.   Restatement of remainder of present-tense rules in terms of basic-stem approach. Imperative mood. Two-fold forms of present passive participle.

10.   Present active participle. Feminine two-fold nouns with nominative singular in -i-. The infinitive.

11.   Productive aorist tense and supine.

12.   Non-productive aorists.

13.   Imperfect tense. Review of verb forms.

14.   Past active participle. Drill on verb forms.

15.   Resultative participle. Review of verb forms.

16.   Past passive participle. Drill on verb forms.

17.   Simple nominal declension. Begin hard pronominal declension.

18.   Remainder of hard pronominal declension. Soft pronominal declension. Forms of 'he, she, it', etc.

19.   Irregular and 'mixed' pronominal forms. Begin anomalous declension.

20.   Remainder of anomalous declension. Mixture of anomalous and two-fold declensions.

21.   Inflection of 'eye' and 'ear'. Two-fold forms of neuter -es-stems. Personal pronouns and -sebe-. Hard compound declension of adjectives.

22.   Stem-consonant alternations in compound declension. Soft compound forms. Compound forms of active participles. Productive comparison of adjectives.

23.   Non-productive comparison of adjectives. Deadjectival adverbs. Second and third singular aorist forms in -tĕ-. Forms of 'to be' and 'to have'.

24.   Athematic verbs. Forms of -iti-. Foreign nouns with stems in a vowel. Remnants of old 'ŭ-stems'. Strong and weak jers. Tense and lax jers.

Copy of Final Examination

21 March 1973

SLAVIC 211

FINAL EXAMINATION

Do I and II and at least two other sections.

I. Translate each passage into English.

II. For each underlined word:

A. transcribe the form using either Lunt's or my Latin transcripts.

B. identify the form in question as completely as possible (e.g., for nouns, give declension, declension variant, if any, case, gender, number: for verbs, give tense, person, number, etc.)

C. note any deviations in the given form from the OCS 'ideal' form and explain them in so far as this is possible.

D. give in the same transcription you chose for A,
   1) for nouns -- the nominative singular
   2) for adjectives --- the nominative singular masculine
   3) for pronouns -- the nominative singular (masculine if there are gender differences)
   4) for participles -- the nominative singular masculine and feminine, short and compound, and the basic stem of the underlying verb
   5) for other verb forms --- the basic stem of the verb and the first person singular of the tense in which the given verb occurs.

III. Translate the passage into English.

IV. a) Form the 1.s. and 3.p. of the present, aorist and imperfect and the n.s. mas. and fem., comp. and non-comp. of the active participles of any two of the following· ДѢЛАІ, ВЕД, ВАЗА МОГ.

Where more than one aorist exists, give both the productive and the non-productive forms.

b) Decline in all three numbers: ПѦТЬ, ДЬНЬ, ДЪШТИ, МѦЖЬ

V. Identify the following theoretical forms. Give every possible combination of categories. Indicate all possible declensional types or underlying basic stems.

   a) nouns: БАЦѢ, САТЕ, ЛОДОУ, ТАИ.

b) verbs: ПОНИША, ТАСТЕ, ВРАГѢШЕ, ПЕСТИ.

c) adjectives: ЛОУСЪ, БРЬГОУЕМОУ, ДИЅѢМЬ, ТЕЛѢИ

Materials for parts I and II

1 Съшедъшоу же емоу съ горы, въ слѣдъ его идѫ народи мъноѕи. 2 І се прокаженъ присѫпь кланѣѩ сѧ емоу гла: Ги, аще хощеши, можеши мѧ ишистити. 3 и простеръ рѫкѫ исъ коснѫ и гла, хощѫ: ишисти сѧ! и абие ишисти сѧ отъ проказы. 4 І рече емоу исъ: виждь никомоуже не повѣждь, нъ шедъ, покажи сѧ архиереови, и неси даръ иже повелѣ Моси въ съвѣдѣние имъ. 5 Въшедъшоу же емоу исви въ Каперънаоумъ, пристѫпи къ немѫ сотьникъ, молѧ и 6 гла: ги, отрокъ мои лежитъ і въ домоу ослаблен, лютѣ ѣко страждѧ.

46. І бы по трьхъ дьнехъ. обрѣтосте і въ црькъве сѣдѧшть. по срѣдѣ оучитель і послоушаѭшта ихъ. і въпрашаѭшта ѩ. 47. оужасаахѫ же сѧ вси. послоушаѭште его о разоумѣ. і о отъвѣтѣхъ его. 48. і видѣвъша і дивисте сѧ. і рече къ немоу мати его. чадо чьто твори нама тако. се отцъ твои. і азъ скръбѧшта. іскаховѣ тебе. 49. і рече къ нима. чьто ѣко. іскашета мене. не вѣста ли ѣко ѣже сѫтъ отца моего. въ тѣхъ достоитъ ми быти. 50. і та не разоумѣсте гла іже рече іма.

1. Бысть же въ дьни ты. ізиде повелѣние. отъ кесара авъгоуста. написати вьсѫ вьселенѫѭ. 2. се нап'сание бы. владѫштю с'урнеѭ. курнньию. 3. і идѣахѫ вси кожьдо. нап'сати сѧ въ свои градъ. 4. възиде же іосифъ. отъ галилеѩ. града назаретьска. въ іюдеѭ въ градъ давъ. іже нарицетъ сѧ бит'леемъ. за не вѣаше. отъ домоу і отчьствиѣ дава. 5. написати сѧ съ мариеѭ. обрѫченѭ емоу женоѭ. сѫштѭ непраздьноѭ.

11. Отъвѣща онъ і рече, "Чкъ нарицаемы исъ брьние сътвори і помаза оуи ми. і рече ми, 'іди въ кѫпѣль силоамлѭ і оумы сѧ.' шедъ же і оумывъ сѧ, прозьрѣхъ." 12. рѣшѧ же емоу, "къто тъ естъ?" Гла, "не вѣмь." 13. вѣсѧ і къ фарисеомъ іже бѣ иногда слѣпъ.