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ABSTRACT
          The course described here offers computer-based
instruction (CBI) in the history of the Russian literary language. It
is designed to follow an introductory CPI Slavic course. The object
of the course is to introduce graduate students in Russian literature
to the types of changes that language in general, and Russian
literary language in particular, undergoes in time and to discuss how
these changes vary over a large territory. The most important single
limitation of the CBI system is the speed of presentation of the
materials to the student, which prohibits the asking of questions. In
addition, the course material itself presents certain limitations in
that there are historical gaps in information availability, making
programming difficult. The CBI portions of this course were offered
for the first time to a class of five students during the spring
quarter of 1973. On the final examination students were tested on:
(1) subjects that had been lectured on and reinforced by
supplementary reading; (2) subjects that had been lectured on and
reinforced by CBI material; (3) subjects about which they had only
read; and (4) CBI material not reinforced by lectures. The results,
demonstrated that the material presented in the CBI/lecture
combination was absorbed the best, and generally the performance of
the students was better than in the previous class, which had
depended on lectures and reading alone. As a final assessment, it is
concluded that the CBI material is pedagogically sound. Sample
portions of the programmed lessons and tests are provided.
(Author/LG)

TOWARD A COMPUTER-BASED COURSE IN THE HISTORY

OF THE RUSSIAN LITERARY LANGUAGE

by

Richard Schupbach

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TOWARD A COMPUTER-BASED COURSE IN THE HISTORY

OF THE RUSSIAN LITERARY LANGUAGE[1]

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Slavic 212, The History of the Russian Literary Language, is designed

as a sequel to Professor Joseph A. Van Campen's computer-based Slavic 211,

Introduction to Old Church Slavonic and Early Russian Texts. Computer-

based instruction (CBI) portions of Slavic 212 were offered for the first

time during the spring quarter of 1973.

1. The Students

Four of the five students enrolled in Slavic 212 had completed

Slavic 211 during the previous quarter and were thus familiar with CBI.

The fifth had studied Old Church Slavonic (OCS) at another institution

and had to familiarize herself with the system during the early part of

the course. All five students were primarily interested in Russian

literature; as expected, they were somewhat disoriented at first because

the subject matter of Slavic 212 has to do more with linguistics than

literature, per se. However, as the students progressed, this became

less of a problem.

2. Technical Aspects of CBI

This material is covered in considerable detail in Van Campen (1973,

pp. 2-8).

3. The Course

The nature of the CBI system employed and the subject matter of Slavic 212 place certain limitations on what can and what cannot be programmed. Moreover, this year was the instructor's first experience with CBI and thus, somewhat modest goals were set at the outset. For these reasons, CBI was, and, for the present at least, must remain coupled with lectures for the teaching of the history of Russian. However, as I will show below, the role of the instructor : lecturer will be relatively minor in winter quarter 1974, when the re . sed course is offered.

The object of Slavic 212 is to introduce graduate students in Russian literature to the types of changes that language in general, and the Russian literary language in particular, undergoes in time, and to discuss how these changes vary over a large territory. In order to demonstrate this, I deal with the following subject matter:

1. General theoretical material on the effect of the passage of time on language;

2. Old Russian (OR), by which term is meant spoken and written Russian of the tenth and eleventh centuries;

3. The changes undergone by OR as a result of internal, evolutionary processes;

4. The nature of the interaction of OR and OCS in the formation of the Russian literary language;

5. Analysis of representative texts from various periods up to and including the seventeenth century.

Certain of the areas to be covered are readily amenable to programming for CBI. For example, since the teaching program itself was designed for language instruction, it was most efficient in teaching OR. Moreover, since OCS and OR represent no more than dialects of the same language, I was able to draw on the material in Slavic 211 as a basis for instruction in the morphology of OR. Five such lessons, on the noun, pronoun, adjective, numeral, and verb, were drawn up (see Appendix I). In addition to this material there is an introductory lesson on the differences between the OCS and OR orthographies. The design of these lessons is straightforward and the system is employed, albeit without audio, largely in the manner for which it was designed.

In addition to these lessons, two were composed that concern historical differences between the OR and OCS phonologies and syllable structure. Last, three lessons were drawn up that deal with evolutionary change in OR and Medieval Russian. These five were used to test the efficacy of a language-teaching system for the teaching of language history (see Appendix II).

4. Limitations Intrinsic to the System

One of the major differences between language and historical material is that the former permits the use of short description and query that, in turn, elicit short and completely predictable answers, whereas in teaching history more extensive lecturing is required, and the answers to the questions, far from a single predictable word, or perhaps two, become quite complicated and can be expressed in a variety of ways. With respect to description or lecturing, the most important, single

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limitation imposed by the system is the speed of the Model 35 teletype, i.e., the speed of presentation of the material to the student.

At 10 characters per second, expansive lecturing must be kept to an absolute minimum. As a rule of thumb it was decided that, in order to maintain the students' attention, no more than six 70-character lines (less than 90 words) should be presented to the student without involving him directly in the instruction, i.e., without asking him a question. Note that these few words must contain the question asked as well as the lecture material. Within these limits it was found that a substantial portion of material on selected topics having to do with evolutionary change in OR could be successfully programmed. However, material on the complexities of interaction of OCS with OR and general material on the nature of language change could not be programmed due to the speed of the teletypes.

The problem of the students' answers is annoying, but not crucial. The teaching program cannot analyze an answer; it can only match it against the string of characters that the instructor has programmed as being 'correct'. If, for instance, the answer to a question happens to be "14th century" and the student writes "XIVth century" or "14th cent.", etc., the response is treated as wrong. Thus, since all answers must be predetermined, heavy reliance on multiple-choice and true-false responses is required.

3. Limitations Intrinsic to the Material

The limitations imposed by the material itself, particularly given the bounds of the system, are in many cases considerable. First, the

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historical record of the language is not complete; not everything of interest or importance was recorded or otherwise preserved. Thus there are factual gaps in many arguments, and, most regrettably, similar gaps are occasionally found in the logic of some historical linguists. In a normal classroom situation these factors create only minor problems; however, in developing material for CPT they can take on crucial importance.

In teaching a language using CBI a basic, deductive logic can be employed that is quite simple, for example:

> In grammatical situation X, forms of set Y behave
>
> in a certain Z manner.
>
> Form A belongs to set Y.
>
> Therefore, in situation X, form A behaves in a
>
> Z manner.

Such an argument is convincing, and as we pointed out above, questions based on it elicit short, predictable answers, e.g.,

> Q: In what manner does A behave in situation X?
>
> A: Z.

However, when discussing language change, given that a complete argument can be found and that the logic employed in describing the change is unflawed, we find that that change normally occurs in such a way that a given language item will come under a variety of influences in a given period. Which, if any, of these influences will have a lasting effect on the form is often difficult, if at all possible, to predict a priori. Thus, if we are discussing a given process and wish to follow its activity over a large number of forms and a considerable expanse of

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time, the number of examples that will show the process in its 'pure'
form will tend to be small. Yet this purity of logic and presentation
is essential since the student cannot stop the computer and ask a ques-
tion. The logic and progression of the explanation must not be merely
sound; it must be inescapable. Note further that while the present sub-
ject matter is linguistic in nature, our students' demesne is literature.
Thus forced out of familiar surroundings, they require especially clear
exposition while they familiarize themselves with linguistic processes
and terminology.

Once a logical and sequential thread of an argument is found, lesser
competing processes can be described as corollaries to it. However, the
time and effort that go into winnowing large amounts of historical infor-
mation is considerable (see Appendix III).

The effect of all these limitations, those intrinsic to the system
as well as to the material, was to put considerable demands upon the time
of the instructor and Professor Van Campen, without whose generous help
the material could not have been prepared; furthermore, there were certain
elements of the course that simply could not be programmed. Nonetheless,
this summer I expect to program the remaining changes that occurred in
the OR period (tenth through fifteenth centuries). This represents the
greatest share of changes during the written history of the language.
Fifteenth-century Russian is surprisingly 'modern' in form, at least in
comparison with tenth-century OR.

In addition to this new material, I am organizing a convenient means
of presenting texts for analysis on the teletype. With this new material
a full two-thirds of Slavic 216 will be computer based. The only remaining

material to be covered independently in the lectures will be the intricacies of the interaction of OCS and OR and general material on the nature of language change in time and space. The demands put upon the instructor's time with this arrangement will be minor.

The implementation of the above assumes no changes in the present system. Given a faster teaching apparatus, most, if not all, of the remaining material could be programmed. But this may not be necessary. The use of comparatively slow hardware, while limiting the programming of certain material, requires a clarity and brevity of exposition and a degree of involvement of the student that is not likely to be achieved where its existence is not made imperative by circumstances. Moreover, even if the entire course could be programmed, a certain amount of the instructor's participation would be required for fielding questions and providing moral support for the students.

6. Student Reaction

The students' reaction to the programmed material and to the course as a whole has been favorable (see Appendix IV). There were some preliminary complaints, but by the third week of the quarter, perhaps not coincidentally after the rains stopped, the students became much more at ease with the lessons and the system and the material. After they finished the CBI section of the course, one 2-hour class section was given over to comments on the programmed instruction. Some very valuable suggestions were made: a glossary of all the terminology employed should be prepared, certain sections of one or two lessons could be made more clear, etc. But it was generally conceded that CBI was very helpful: its degree of

organization was singled out for praise, as was the fact that the material could be gone over, in private, as many times as the student wished.

Student complaints had to do with various subjects: frustration at dealing with a preprogrammed machine instead of a presumably more flexible human being. Occasionally the teletype would type one line on top of another. Students were somewhat put out at having to walk all the way over to the Institute for Mathematical Studies in the Social Sciences, particularly during the rains. While one assumes that the students read the material, think about it, decide how to answer, and then type the answer, apparently this is not always so. The cognitive processes can be short-circuited to the extent that the visual stimulus of the teletype printout is answered not by a thought, but merely by a digital response. In other words, the answer to the question "What is the locative singular ending of the noun XXXXX?" is not "the phoneme/grapheme, Y," but merely "right little finger to the lower row." The suggested solution was to include a quiz at the end of every lesson; this prospect will help maintain the students' full attention throughout the lesson. Last, a rather curious and somewhat disturbing circumstance arose with at least two of the students: rather than learn the material on the teletype, they would take a lesson and answer somewhat carelessly, without complete concentration. The primary object seemed to be merely to get a printout of the lesson material to be studied, not as CBI, but as a text at home. Note, these students performed as well as the others on the final examination.

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7. Results of the Final Examination

The results of the final examination (see Appendix V) were encouraging. Reliance on CBI freed me to take up a wide range of subjects that I normally would have little or no time for during the nonprogrammed course. On the final examination the students were tested on subjects that I had lectured on and for which there was supplementary reading, on subjects about which they had only read, on subjects about which I had lectured and for which there was additional CBI material, and last, on CBI material that was not reinforced by lecture material. The students emerged strongest with regard to the lecture/CBI combination; they were also very strong on the material that was presented as CBI alone. The fact that they were able to absorb rather involved linguistic arguments that had been presented on the computer alone was most encouraging. My overall view of their performance is that, all things being equal, they learned more and with greater ease than did last year's class, which depended on my lectures and the reading alone.

The grades awarded for the course were two A's, two A-'s, and one B.

8. Assessment

I was somewhat skeptical of the project when I began. I thought that by working diligently and by coping imaginatively with every problem, I might be able to design the course material in such a way that the students would not lose anything for having been made the subjects of an experiment.

The results exceeded these modest expectations. The rigorous reorganization of the material required for the design of CBI served to

benefit student and instructor as well. But more importantly, student
evaluations of the course material and the results of the final examination
showed very clearly that the CBI approach to the material thus far pro-
grammed is pedagogically sound; it may even represent an improvement over
last year's lecture format.

The limitations intrinsic to the subject matter combined with those
of the system are such that I do not envision the programming of the
entire course and the effective elimination of the instructor. But I
think that this is just as well for a variety of reasons:

1. Class meetings with the instructor serve as an important forum
for comments, questions, and complaints about the CBI.

2. The forced reliance of the system on precomposed answers allows
the student no exercise of creativity; knowledge comes to be almost a
conditioned reflex. It is only in the interchange of a discussion group
that the material may be expanded upon, trea ed in an 'organic' manner.

3. The scope of the CBI material is inflexible; what is in the lesson
is what is to be learned--no more, no less. Nonetheless, the basic, fac-
tual core of the course remains the same from year to year. It is this
material that has been programmed already, or will be finished this sum-
mer. In addition to this, the exercises involving text analysis should
not require change. The existence of this basic corpus and its avail-
ability to the student on an on-call basis will serve to drastically
cut the amount of time required of the instructor of the course.

Finally, another bonus gained from the programming of Old Church
Slavonic and part of the History of the Russian Literary Language is the
establishment of a 'course library' that can be consulted by students.

Experience has taught us that, regardless of mode of teaching, students quickly forget OCS and OR; extensive review is necessary before the Ph.D. general examinations in this area. CBI in OCS and OR will be available to these students largely at their convenience for review. This material by itself should be an effective preparation for the students in this area. We will soon have an opportunity to test this supposition, since four of our graduate students are preparing to take general examinations in the near future. All four have requested use of the CBI material in Slavic 211 and 212 for review.

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APPENDIX I

Sample portions of Lessons 755 and 758,
pronoun and verb morphology, respectively.
Note: The student types the answer, here
provided, in the spaces set off by underline
marks.

BEG   755
TE   THE PRONOUN
        THE SING
        WE HAVE ALREADY NOTED THE DIFFERENCE BETWEEN THE OCS
        AND ORUS NOM IST SING PRN. OCS HAS
LR   _AZЪ_
TE   THE ORUS FORM HAS
        A, INITIAL 'A'
        E, PROTHETIC JOD
SR   _E_
TE   THE ORUS IST SING PRN IS
SR   _IAЗЪ_
TE   NOTE, IA WAS ALSO COMMON.

        IN THE DAT-LOC OF THE 2ND PERS SING AND THE REFLEXIVE
        PRN, WHERE OCS HAD 'E', ORUS HAD 'O'.
        GIVE THE ORUS FORM OF OCS TEБЪ
LR   _TOБЪ_
TE   GIVE THE ORUS DAT-LOC REFLEX PRN
LR   _COБЪ_
TE   NOTE, THE OCS FORMS ALSO OCCURRED IN ORUS.

        IF OCS HAD 'E' FOR ORUS 'O' AS ABOVE AND IF THE OCS
        FORM OF THE DAT-LOC OF THE IST PERS SING PRN WAS MЬHЪ,
        THEN WE CONCLUDE THAT THE ORUS FORM WAS
LR   _MЬHЪ_
TE   NOTE, MЬHЪ WAS ALSO COMMON.

        ORUS FORMS ARE ATTESTED IN WHICH THE FINAL Ъ OF THE
        DAT-LOC OCCURRED ALSO IN THE ACC-GEN. THUS TEБЪ,
        CEБЪ COULD BE
        A, DAT LOC INST
        E, DAT LOC ACC GEN
SR   _E_

TE   GIVEN THE ABSENSE OF NASALS IN ORUS, LIST THE
        FORMS OF OCS
LR   MA _MA_
TE   HOWEVER, EVEN THOUGH A IS WRITTEN, THE ORUS V IS
        NOT NASAL. IT IS A FRONTED
SR   _A_
TE   GIVE THE ORUS FORMS OF OCS
LR   CA _CA_
LR   TA _TA_
LR   MЬHOIA _MЬHOIO_
LR   COБOIA _COБOIO_

TE   THE PARADIGM OF THE IST AND 2ND SING PRN IS -- FILL IN
            THE 2ND PERS

		IST PERS	2ND PERS
LE	NOM	IA3Ъ, IA	_ТЪI_
LE	ACC	МЕНЕ, МА	_ТЕБЕ_, _ТА_
LE	GEN	МЕНЕ	_ТЕБЕ_
LE	LOC	МЪНЪ	_ТОБЪ_
LE	INST	МЪНОIO	_ТОБОIO_
LE	DAT	МЪНЪ, МИ	_ТОБЪ_, _ТИ_

RST   .

TE   THE IST PLUR OCS HAS DATIVE
LR   _НАМЪ_
TE   2ND PERS
LR   _ВАМЪ_
TE   ORUS HAS THESE, BUT НЪI, ВЪI   RE ALSO POSS.
            THUS ORUS НЪI CAN BE
            A, DAT
            E, DAT ACC
SR   _E_
TE   IF ORUS ВЪI CAN BE DAT AND CC, THEN ALL ITS POSSIBILITIES
            ARE
            A, DAT ACC
            E, NOM DAT ACC
SR   _E_
TE   THE REMAINING FORMS ARE THE SAME IN BOTH DIAL'S.

            THEREFORE, THE PARADIGM OF THE IST AND 2ND PERS PLUR
            PRN IS -- FILL IN THE 2ND PERS

		IST PERS	2ND PERS
LE	NOM	МЪI	_ВЪI_
LE	ACC	НАСЪ, НЪI	_ВАСЪ_, _ВЪI_
LE	GEN	НАСЪ	_ВАСЪ_
LE	LOC	НАСЪ	_ВАСЪ_
LE	INST	НАМИ	_ВАМИ_
LE	DAT	НАМЪ, НЪI	_ВАМЪ_, _ВЪI_

TE   THE IST AND 2ND DUAL IS -- FILL IN THE 2ND PERS

		IST PERS	2ND PERS
LE	NOM	ВЪ	_ВА_
LE	ACC	НА	_ВА_
LE	G-L	НАIO	_ВАIO_
LE	I-D	НАМА	_ВАМА_

RST   .

THE LESSON CONTINUES

RUS758

```
BEG      758
TE       THE VERB
         THE ORUS AND OCS VERBS ARE SIMILAR.  THEY
         HAVE THE SAME TENSES, PARTICIPLES, MOODS, ETC. `BUT
         AS ELSEWHERE, THERE IS SOME DIFFERENCE IN THE FORM
         THAT CERTAIN ENDINGS TAKE.  WE ALREADY KNOW THAT
         OCS  Ѧ  CORRESPONDS TO ORUS
LR       _ОУ_
TE       ON THE PHONOLOGICAL LEVEL OCS  Ѧ  EQUALS ORUS
LR       _Ѧ_
TE       HOWEVER, IN THE NOUN AND ADJ. ON THE MORPHOLOGICAL LEVEL
         OCS  Ѧ  CAN GIVE ORUS
LR       _Ь_
TE       IN THE VERB, HOWEVER,  OCS  Ѧ  ALWAYS GIVES ORUS  Ѧ.

         REMEMBER ALSO THE REFLEXES OF ORIGINAL C PLUS JOD.
         THUS WHERE OCS HAS  ВИЖДѦ,  ORUS HAS
LR       ВИ_ЖОУ_
TE       GIVE THE ORUS FORM OF OCS  ХОЖДѦ
LR       _ХОЖОУ_
LR       МОЩИ _МОЧИ_
TE       THE  Щ  IN OCS  ИЩѦТЬ  REPRESENTS
LR       _ЩТ_
TE.      WHILE IN ORUS  ИЩОУТЬ  IT REPRESENTS
LR       _ЩЧ_
TE       IN ADDITION TO THESE CORRESPONDENCES,
         IN THE PRES TENSE
         WHERE OCS HAS  -ТЬ  IN THE 3RD PERS ORUS
         HAS  -ТЬ.   GIVE THE ORUS FORM OF OCS
LR       НЕСЕТЬ   _НЕСЕТЬ_
LR       ВИДИТЬ   _ВИДИТЬ_
LR       НЕСѦТЬ   _НЕСОУТЬ_
LR       ВИДАТЬ   _ВИДАТЬ_
RST      •

TE       THE ONLY OTHER ESSENTIAL DIFFERENCE IN THE PRES
         IS IN THE DUAL.  WHERE OCS HAS SEPARATE 2ND AND 3RD
         PERS. ORUS DOES NOT. E.G.. OCS HAS 2ND PERS
LR       ВѦ ВЕД_ЕТА_
LE       AND THIRD PERS  ОНЬ ВЕД_ЕТЕ_
TE       BUT ORUS HAS THE 2ND PERS FORM IN BOTH THE 2ND AND
         THIRD PERS.  THUS WE HAVE ORUS
LR       ВѦ ВЕД_ЕТА_
LR       ОНА ВЕД_ЕТА_

TE       THE REMAINING FORMS ARE THE SAME IN BOTH DIAL´S, THUS
         THE PRES TENSE  ВЕД- IS

         SING
LR       IАЗЬ ВЕД_ОУ_
```

```
LR        ТЪI   ВЕД_ЕШИ_
LR        ОНЪ   ВЕД_ЕТЬ_

TE        DUAL
LR        ВЪ  ВЕД_ЕВЪ_
LR        ВА  ВЕД_ЕТА_
LR        ОНА ВЕД_ЕТА_

TE        PLUR
LR        МЪI   ВЕД_ЕМЪ_
LR        ВЪI   ВЕД_ЕТЕ_
LR        ОНИ   ВЕД_ОУТЬ_

TE        NOTE, THE THIRD SING AND PLUR ALSO OCCURRED
          WITHOUT FINAL  -Tb.   THUS,  THEY, MASC, ARE
          LEADING  COULD BE AS ABOVE OR
LR        _ОНИ ВЕДОУ_
TE        'HE LEADS' COULD BE AS ABOVE, OR
LR        _ОНЪ ВЕДЕ_
TE        GIVEN NO UNFORESEEN DIFFERENCES BETWEEN ORUS AND OCS
          OTHER TENSES,  ОНЪ ВЕДЕ   COULD BE
          A, PRES OR IMPERF
          E, PRES OR AORIST
SR        _E_
RST       .

TE        THE IST SING OF AN I-STEM, E.G.,   МОЛИТИ  IS
LR        _МОЛЮ_
TE        THIRD PLUR IS
LR        _МОЛАТЬ_
TE        THUS WE HAVE

          SING
LR        IАЗЪ МОЛ_IO_
LR        ТЪI   МОЛ_ИШИ_
LR        ОНО   МОЛ_ИТЬ_

TE        DUAL
LR        ВЪ  МОЛ_ИВЪ_
LR        ВА  МОЛ_ИТА_
LR        ОНЪ МОЛ_ИТА_

TE        PLUR
LR        МЪI   МОЛ_ИМЪ_
LR        ВЪI   МОЛ_ИТЕ_
LR        ОНЪI МОЛ_АТЬ_

TE        WHAT DO YOU SUPPOSE THE THIRD SING OF ДАТИ IS IN ORUS?
TST       I
LR        _ДАСТЬ_
```

BLK

TE WE HAVE -Tb IN THE ATHEMATICS ALSO.

FIN

TE THE REMAINING FORMS ARE THE SAME IN BOTH DIALS.
    CONJUGATE ДАТИ IN ORUS

          SING
LR   IАЗЪ _ДАМЬ_
LR   ТЪI   _ДАСИ_
LR   ОНО   _ДАСТЬ_

IE   DUAL
LR   ВЪ _ДАВЪ_
LR   ВА _ДАСТА_
LR   ОНА _ДАСТА_

TE   PLUR
LR   МЪI _ДАМЪ_
LR   ВЪI _ДАСТЕ_
LR   ОНА _ДАДАТЬ_
RST   •

THE LESSON CONTINUES

APPENDIX II

The content of the eleven lessons programmed is:

751. Orthography, the differences between the OCS and OR phonologies and the respective writing systems.

752. Pleophony, the concept of rising sonority and the difference between its effect on so-called 'tort' groups in OR and OCS where metathesis occurs.

753. Syllabic synharmonism, the causes of the various 'palatalizations' and their different effects in OR and OCS.

754. The noun, OR noun morphology as opposed to that of OCS.

755. The pronoun, OR pronoun morphology as opposed to that of OCS.

756. The adjective, OR adjectival and participial morphology as opposed to that of OCS.

757. The numeral, OR numeral morphology and syntax as opposed to that of OCS.

758. The verb, OR verb morphology as opposed to that of OCS.

759. The fall of the 'jers', the loss of the reduced vowels and its effects upon OR phonology and morphology.

760. The loss of the dual, the effects of the loss of the singular/dual/plural grammatical distinction upon OR morphology and numeral syntax.

761. Changes in the declension system, the change from a declension system based on a variety of declension types to a system based on grammatical gender; the rise of the category of animation.

APPENDIX III

Sample portions of Lessons 759 and 760, the
fall of the 'jers' and the loss of the dual,
respectively. Note the considerable increase
in the amount of narration and multiple-choice,
true-false, etc., questions as opposed to the
material in Lessons 755 and 758 (Appendix I).

RUS759

```
BEG     759
TE        IN THE EARLIEST OCS TEXTS THE 'JERS' OR REDUCED VOWELS
           Ъ, Ь WERE
          A, CLEARLY DISTINGUISHED
          E, LOST IN CERTAIN POSITIONS
SR       _E_
TE        WHEREAS, IN EARLIEST ORUS  Ъ  AND  Ь  WERE RETAINED
          EVEN AT WORD-END, E.G., THE M-N INST SING AND
          DAT PLUR ENDED IN A
          A, VOWEL
          E, CONSONANT
SR       _A_
TE       EVENTUALLY THE JERS FELL IN ORUS AS THEY HAD IN OCS.
          THIS HAPPENED IN DIFFERENT ORUS DIAL'S AT DIFFERENT
          TIMES. IT SEEMS TO HAVE STARTED IN THE SOUTH IN
          THE XITH CENT AND TO HAVE SPREAD THROUGHOUT ORUS
          BY THE XIIITH CENT.

            T  OR  Ф , NOT ALL JERS 'FELL' OR CEASED TO BE PRN-CD.
SR       _T_
TE       SOME BECAME FULL V'S.
           IF  E  IS TO  O  AS  Ь  IS TO  Ъ , AND IF STRONG  Ь
           GAVE  E , THEN STRONG  Ъ  GAVE
SR       _O_
TE        RULE FOR VOCALIZATION VERSUS LOSS OF THE JERS.
             GIVEN A SUCCESSION OF SYLLABLES CONTAINING JERS,
             THEN, COUNTING FROM THE RIGHT, EVERY ODD-NUMBERED JER
            IS WEAK, EVERY EVEN JER IS STRONG. ANY JER IN A SYLL
             PRECEDING A SYLL WITH A FULL V IS WEAK.  STRESSED JERS
             ARE STRONG.
           TYPE  X  AFTER EACH WEAK AND  C  AFTER EACH STRONG JER.
SR       БЬ_X_РЬ_C_РЬ_X_НО
LE       THIS GIVES  _БРЕВНО_.
SR       СЪ_X_НА
LE       THIS GIVES  _СНА_.
TE         WEAK JERS WERE NOT PRN'D, THUS THEY WERE NORMALLY
           NOT WRITTEN.  HOWEVER, WEAK  Ъ  WAS RETAINED ORTHOGRAPHICALLY
           AT WORD-END.
LE       THUS СЪНЪ  GIVES  _СОНЪ_.
LE          ЛЪБЪ  GIVES  _ЛОБЪ_
LE          ЛЬВЪ  GIVES  _ЛЕВЪ_,  ETC.
TE         WEAK  Ь  WAS WRITTEN IN CERTAIN POSITIONS. ALWAYS AT WORD-END.
```

LE   THUS, дьнь GIVES _день_

LE   къназь GIVES _кназь_

TE   WEAK ь WAS RETAINED BETWEEN TWO C'S WHERE THE LEFTMOST
OF THE C'S REMAINED SHARPED.

LE   соудьба GIVES _соудьба_

LE   BUT дьне GIVES _дне_.

TE   ь WAS RETAINED, ALTHOUGH IT WAS WEAK, WHERE IT OCCURRED
BEFORE A V. THUS PRE-FALL свиньіа BECAME

LR   _свиньіа_

TE   NOTE, THE RETENTION OF ь IS PARTICUARLY
COMMON AFTER л.

LE   THUS колокольникъ GIVES _колокольникъ_.

TE   BOTH JERS ARE WEAK, I. E., NOT PRN'CD, BUT WERE
WRITTEN, NONETHELESS.

RST   .

TE   THERE ARE EXCEPTIONS TO THE VOCALIZATION RULE. SOME
INVOLVE ANALOGY WITH OTHER FORMS. E.G., дъска GIVES

LR   _дска_

TE   AND EVENTUALLY тска, цка WITH THE DEVOICING OF 'D'
BEFORE VOICELESS 'S'.
HOWEVER, STRESSED JERS ARE STRONG. THUS, IN THE ACC SING
OF дъска THE STRESS MOVES TO THE 1ST SYLL, CF., вода´,
во´ду.

TE   THUS, THE JER IN дъскоу WAS
A. STRONG
E. WEAK

SR   _A_

LE   дъскоу DEVELOPS TO _доскоу_.

TE   WHEREAS, ASSUMING NO DEVOICING OF THE 'D', THE DAT SING

LE   DEVELOPED TO _дскъ_.

TE   WITH EVENTUAL DEVOICING IT DEVELOPED TO

LR   _цкъ_

TE   WITH DEVOICING THE LOC PLUR BECAME

LR   _цкахъ_

TE   ON THE OTHER HAND, THE PRE-FALL GEN PLUR IS

LR   _дъскъ_

LE   WHICH GIVES POST-FALL _доскъ_.

TE   A PARADIGM WITH CHANGING STEMS WOULD NOT DO, SO
THE STEM OF THE ACC SING WAS GENERALIZED FOR THE WHOLE
PARADIGM.

     LIKEWISE, THE PLACE NAME смольньскъ SHOULD HAVE GIVEN

LR   _смольнескъ_

TE   BUT IT TOOK ITS STEM FROM THE OBLIQUE CASE-FORMS, I.E.,
THE DAT SING WAS смольньскоу WHICH GAVE

LR   _смоленскоу_

TE   WHICH SERVED AS THE MODEL FOR THE EVENTUAL NOM SING, I.E.,

LR   _смоленскъ_

RST
TE   'GIVEN THAT MRUS ДЕРЖАТЬ IS FROM ORUS ДЬРЖАТИ AND
БЛОХА FROM БЛЪХА , WE CAN CONCLUDE THAT JERS
IN SO-CALLED 'TЪPT' GROUPS WERE
A. ALWAYS STRONG
E. COULD BE STRONG OR WEAK

SR   _A_
LE   THUS, WHILE TЪPГЪ GIVES _TOPГЪ_,
TE   THE GEN SING DEVELOPS PROPERLY TO

LR   _TOPГA_
TE   AS OPPOSED TO THE GEN SING OF CЪHЪ WHICH GIVES
LR   _CHA_
TE   THUS, THE JER IN 'JER PLUS LIQUID' OR VICE-VERSA IS STRONG
AS OPPOSED TO CЪHЪ, CЪHA WHERE THE JER IS WEAK IN THE GEN.
GIVE THE POST-FALL FORM OF THE FOLLOWING
LR   TЪPГOBATИ _TOPГOBATИ_
LR   ПЬPBЪ _ПEPBЪ_
LR   BЬPXЪ _BEPXЪ_
LR   CЛЬЗA _CЛEЗA_
LR   BЪЛKЪ _BOЛKЪ_
LR   BЪЛKA _BOЛKA_

RST   .
TE   THE FALL OF JERS HAD SEVERAL MAJOR, LONG-REACHING
EFFECTS ON THE HISTORY OF THE LANGUAGE.
PRE-FALL ЛЬCЪ CONSISTS OF HOW MANY SYLLABLES?
SR   _2_
TE   ITS POST-FALL FORM HAS HOW MANY SYLLABLES?
SR   _I_
TE   THAT SYLLABLE IS OPEN OR CLOSED, O OR U?
SR   _U_
TE   ASSUMING THAT THE FALL DID NOT ALTER THE PITCH
OF THE C'S, THEN Л HAS HIGH OR LOW PITCH,
Ч OR Λ?
SR   _Ч_
TE   C HAS HIGH OR LOW PITCH, Ч OR Λ?
SR   _Λ_
TE   THUS, POST-FALL ЛЬCЪ
A. CONFORMS TO
E. VIOLATES
SYLLABIC SYNHARMONISM
SR   _E_
TE   POST-FALL ЛECЪ CONSISTS OF ONE
A. OPEN
E. CLOSED SYLLABLE
SR   _E_
TE   THE LAW OF OPEN SYLLABLES AND SYLLABIC SYNHARMONISM CEASE
TO BE ACTIVE WITH THE FALL OF THE JERS IN ORUS, I.E.,
BY THE END OF THE
A. XIII C.
E. XIV C.
SR   _A_
RST   .

TE   THUS, XIV-CENT ORUS PHONOLOGY IS RADICALLY DIFFERENT FROM
THAT OF THE XTH CENT AND STRIKINGLY SIMILAR TO THAT OF
MRUS, SINCE AMONG OTHER THINGS, PHONETIC SHARPENING
BECAME PHONEMIC.

```
BEG     76S
TE          IN XITH CENT ORUS AND OCS THE DUAL WAS ALREADY STARTING TO
            WEAKEN, SPORADIC MISTAKES BEGIN TO APPEAR IN THE PRONOUN.
            OTHER DUAL FORMS WERE WRITTEN PROPERLY AT THAT TIME,
            E.G.,   ВЪІ НЕБЕСЬНАІА ЧЛОВѢКА ІЕСТА.
            WHERE THERE IS A MISTAKE IN THE WORD
LR          _ВЪІ_
TE          WHICH SHOULD BE
LR          _ВА_
TE          AS THE USAGE OF THE DUAL BECAME MORE RESTRICTED
            ITS FUNCTION WAS PREEMPTED BY THE
            A. SING
            E. PLUR
SR          _E_
TE          WHILE THE DUAL IS ACTIVE, THE MAJOR DISTINCTIONS WITHIN
            THE CATEGORY OF NUMBER ARE THREE-FOLD 'ONE', 'TWO',
            'MORE THAN TWO', WHICH, WITH THE LOSS OF THE DUAL, WILL
            BECOME
            A. 'ONE', 'MORE THAN ONE'
            E. 'ONE', 'ALL'
SR          _A_
TE          I.E., SING-PLUR.
            CERTAIN NOUNS, BY VIRTUE OF THEIR MEANING, TEND TO OCCUR
            MORE OFTEN IN ONE NUMBER THAN OTHERS.
            OF THE FOLLOWING FORMS, WHICH IS MOST LIKELY TO OCCUR
            IN DISCOURSE?
            A. SING  РОГЪ           'HORN', OF AN ANIMAL
            E. DUAL  РОГА
            O. PLUR  РОЗИ
SR          _E_
TE          BECAUSE THE HORNS OF AN ANIMAL TEND TO COME IN PAIRS.
            SAME QUESTION
            A.  НЕБО               'HEAVEN'
            E.  НЕБЕСЪ
            O.  НЕБЕСА
SR          _A_
TE          SAME QUESTION
            A.  ОВЬЦА              'SHEEP'
            E.  ОВЬЦИ
            O.  ОВЬЦЪ
SR          _O_
TE          IN GENERAL THE DUAL WILL HAVE OCCURRED MOST COMMONLY
            WITH PAIRED OBJECTS.  AS IT WEAKENS, WE CAN EXPECT
            IT TO BE USED LESS AND LESS IN GENERAL AND LESS
            AND LESS CORRECTLY WITH
            A.  НЕБО, ОВЬЦ
            E.  РОГЪ
SR          _A_
TE          THUS, THE FORM OF 'HORN', 'EYE', 'SHOULDER',
            ETC., MOST FREQUENTLY ASSOCIATED WITH THE CONCEPT 'MORE THAN
```

```
            ONE´ BECOMES
            A, THE DUAL
            E, THE PLUR
SR          _A_
RST         .
TE          AS THE DUAL IS TAKEN OVER SEMANTICALLY BY THE PLUR,
            THE GRAMMATICAL DISTINCTION BETWEEN DUAL AND PLUR BECOMES
             BLURRED, SINCE THEY BOTH DESIGNATE ´MORE THAN ONE´, AND
            WITH PAIRED OBJECTS BECOMES OBLITERATED.  THIS CAN LEAD TO
            A, REINSTITUTION OF THE DUAL NUMBER
            E, USE OF THE DUAL FOR THE PLUR WITH PAIRED OBJECTS
SR          _E_
TE          JUDGING FROM MRUS  ГЛАЗА´, РОГА´,  ET AL., THE DUAL ENDING
            THAT SPREAD IS THE MASC
            A, NOM-ACC
            E, GEN-LOC
            O, DAT-INST
SR          _A_
TE          NOTE, THAT THIS IS NOT THE CASE IN ALL SLAVIC LNGS, IN
             SERBO-CROATIAN THE DAT-INST ENDING SPREAD.
RST         .
TE          THE SPREAD OF THE MASC DUAL N-A ENDING WAS REINFORCED BY THE
            FOLLOWING

            IN THE HARD FEM´S THE GEN SING WAS IN
LR          -_ЪI_
TE           THE NOM PLUR WAS
LR          -_ЪI_
TE          HOWEVER, THERE WAS A DIFFERENCE IN THESE ENDINGS WITH
            WORDS LIKE  ВОДА, ЖЕНА.
            A, STRESS
            E, PHONETIC SHARPENING
SR          _A_
TE          IN THE SOFT FEM´S THE GEN SING WAS
LR          -_Ь_
TE          THE NOM PLUR WAS
LR          -_Ь_
TE          HOWEVER, WITH WORDS SUCH AS  ЗЕМЛЯ  THERE WAS, AGAIN,
            A DIFFERENCE IN STRESS.
            IN THE 2-FOLD HARD NEUT´S THE GEN SING WAS IN
LR          -_A_
TE          THE NOM PLUR WAS
LR          -_A_
TE          THE SOFT NEUT´S HAD GEN SING, NOM PLUR
SR          -_IA_
TE          BUT IN WORDS SUCH AS  СЕЛО, ПОЛЕ, ET AL. THERE WAS
            A DIFFERENCE IN STRESS, СЕЛА´, СЕ´ЛА, ПО´ЛIА, ПОЛIА´.
            T OR F, THE SAME IS TRUE OF HARD MASC´S
SR          _O_
TE          THIS GEN SING AND NOM PLUR ARE THE SAME EXCEPT FOR STRESS
```

WITH CERTAIN FEM AND NEUT NOUNS, BUT NOT FOR HARD MASC´S
BECAUSE HARD MASC GEN SING IS IN

LR   -_A_
TE   BUT THE NOM PLUR IS IN
LR   -_И_
TE   HOWEVER, THE NOM-ACC DUAL ENDING OF HARD MASC´S IS A
       STRESSED
LR   -_A_
TE   THUS, IF THAT SAME NOUN HAD AN UNSTRESSED GEN SING
       ENDING, THE SPREAD OF THE N-A DUAL WOULD CAUSE IT TO CORRESPOND
       TO THE ENDING-STRESS SHIFT OF THE OTHER DECL-1YPES, I.E.,
       GEN SING AND NOM PLUR DIFFER ONLY IN
       A. STRESS
       E. HARD VERSUS SHARPED FINAL C
SR   _A_
TE   THUS, OLD DUAL N-A STRESSED A   SPREAD TO NON-PAIRED OBJECTS,
       LIKE ГОРОДѢ. BUT ONLY WHERE THE GEN SING IS UNSTRESSED
       NOTE, EXCEPTIONS ARE RARE, E.G.
       A. РУКАВА
       E. ГЛАЗА
SR   _A_

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

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. 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)
                                                                               _____

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

5. Were clear and well organized:

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

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)
                                                                               _____

<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)
                                                                               _____

                              Slavic 212
Please identify:_____
                      Course Department and Number

                      Schupbach
                  _____
                      Instructor's Name

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   (3)
       average   average   average

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

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

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   (2)

Rate the lectures on the following:

5. Were clear and well organized:

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

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   (3)

9. Were they well integrated with the lectures?

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

Please identify: _____ Slavic 312 _____
         Course Department and Number

_____ Prof. Schupbach _____
         Instructor's Name

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   (3)
        average   average   average

2. Was the course presented at the appropriate intellectual level
    for you?   *at the beginning*   (1)

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

3. How hard did you work in this course?   (1)

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

4. Do you feel that the material presented was worth learning?   (1)

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

Rate the lectures on the following:

5. Were clear and well organized: (3)

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

6. Were intellectually stimulating: (2)

    (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?   (2)

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

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

8. Were they valuable in their own right?   (2)

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

9. Were they well integrated with the lectures?   *learn ges,*   (   )

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

Please identify: ____S/ 2/2_____
                 Course Department and Number

                 prof. Schepard
                 _____
                 Instructor's Name

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   (3)
        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   (2)

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   (2)

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   (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:___Slavics_____
                  Course Department and Number

_____Schumphach_____
              Instructor's Name

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

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   (3)
         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   (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   (3)
                                                                                         ———

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)
                                                                                         ———

<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   (3)
                                                                                         ———

Please identify: H.sotry of Russian Language
                  ———
                  Course Department and Number

                  ————————————Schupbach————————————————————
                  Instructor's Name

APPENDIX V

Final Examination

I. **1/2 hour:**
Briefly describe Henning Andersen's theory of the acquisition of language by one generation from another.

II. (choice of one) Material from Levin, 1/2 hour:

1. Sketch the relationship of the "деловой" and/or "канцелярский язык" to Church Slavonic during the Muscovite period. Give the historical reasons for the nature of their interaction.

2. What arguments does Levin bring forth against the notion that the Russian literary language is historically, natively Russian?

3. Discuss the types and degrees of assimilation of the various types of Old Chruch Slavonisms by the Russians in the Kievan period. Give examples.

III. Answer two of the following, 1/2 hour each:

1. Discuss the nature of the interaction of the o-, jo- and i-stems. What major phonological and morphological events and/or processes played a role in their interaction?

2. What is the relationship of metathesis and pleophony to the principle of "rising sonority"? Give examples.

3. What caused the palatalization of consonants, and how did it become phonemic in East Slavic?

4. Sketch the major phonological and morphological differences between OCS and Old Russian.

5. Indicate those forms in the following passage which are historically (in form, if not fact) Old Church Slavonisms. Comment on the mixture of native East Slavic forms with the latter. Identify the passage according to epoch, genre, and style.

> Я помню море пред грозою:
> Как я завидовал волнам,
> Бегущим бурной чередою
> С любовью лечь к ее ногам!
> Как я желал тогда с волнами
> Коснуться милых ног устами!
> Нет, никогда средь пылких дней
> Кипящей младости моей
> Я не желал с таким мученьем
> Лобзать уста младых Армид,
> Иль розы пламенных ланит,
> Иль перси, полные томленьем;
> Нет, никогда порыв страстей
> Так не терзал души моей!

IV. (One hour) Translate the following passage. Identify it as to period and genre. Comment on the underlined forms.

В си же вре-
мена бысть знаменье на западъ, звѣзда превелика, лучѣ имущи
акы кровавы, въсходящи с вечера по заходѣ солнечнѣмь, и пре-
бысть за 7 дний. Се же проявленье не на добро, посемь бо быша
усобицѣ многы и нашествие поганыхъ на Русьскую землю, си бо
звѣзда бѣ акы кровава, проявляющи крови пролитье. В си же
времена бысть дѣтищь въверженъ в Сѣтомлѣ* сего же дѣтища вы-
волокоша рыболове въ неводѣ, егоже позоровахомъ¹ до вечера,
и пакы ввергоша и в воду: бяшеть бо сиць: на лици ему срамнии
удове², много недѣѣ казати срама ради.

*   a body of water

1   to watch

2   members, characters

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