# American Russian: Language Loss Meets Language Acquisition[1]

Maria Polinsky
University of Southern California
and University of California, San Diego

## Introduction

This paper, which is part of a larger project involving cross-linguistic comparisons, has three related goals. The first is descriptive: the paper attempts to define and partially describe American Russian as a reduced language characterized by a significant level of attrition. In my description of American Russian, I will also distinguish it from several other varieties of Modern Russian and briefly discuss the problems which arise in maintaining such distinctions. The second goal is a continuation of the descriptive task: I will argue that the level of attrition in morphology and syntax is correlated with the level of lexical attrition. This correlation is strongly confirmed by the statistics obtained for American Russian, and allows us therefore to use the level of lexical attrition as a diagnostic in establishing the overall degree of language loss in an individual. The third goal of this paper is to raise a number of general theoretical issues related to the grammatical aspects of language loss. I will not be able to provide solutions to these questions. But I consider it important to state them explicitly, since studies of language loss often fail to recognize parallels between individual languages undergoing attrition and/or parallels between levels of language representation. As a result, many studies of language loss concentrate on the role of structural variables or describe the grammar of a language which happens to be endangered, without actually addressing the changes this language has undergone due to endangerment (see Sasse 1992: 75-7).

Before I move on to the description of American Russian, let me clarify some general notions that will be used in this paper. The notion of language attrition refers to two related phenomena:

(i) first language loss as a result of forgetting the language system by a non-aphasic speaker (most commonly due to the influence of another dominant language, as in emigration);

(ii) the process whereby a given grammar system undergoes a significant reduction (under conditions of immigration) when it is passed from one generation to the next, i.e. incomplete learning of a language system.

Both phenomena result from insufficient access to a given input language (impoverished and heterogeneous input), however, they can be represented by different populations of speakers and may have different language-internal manifestations. Based on the distinction between the two phenomena introduced above, I will distinguish between those semi-speakers who can be characterized as forgetters and those who can be characterized as incomplete learners (see also Sharwood Smith 1989; Sharwood Smith and Van Buren 1991; Van Buren and Sharwood Smith 1985; Sasse 1992).

A language that undergoes attrition for either of the reasons listed above will be designated as reduced and opposed to a full language, i.e., the language characterized by full conventionalized knowledge. (Language death is the end result of language attrition, though language death can also be instant, due to the physical disappearance of all the relevant speakers (Campbell & Muntzel 1989: 182-183).) Studies of reduced languages are often identified with salvage studies; a linguist finds last, terminal speakers of a certain language and documents the final stages of that language. In such a study, however, there is no baseline or control language. Different from this is the emigration scenario, whereby part of a large and healthy speech community moves to a different environment, in which its language is no longer the one of economic, social, political, or cultural prestige and where another language is dominant. In this new setting, the community loses regular contact with the original speech community and adopts, fully or partially, the dominant language. The availability of a "healthy", full version of a language somewhere else provides the linguist studying language loss with a unique opportunity not available in salvage studies of disappearing languages.

Such a comparison is used as the point of departure in this study, where reduced Russian as spoken by some immigrants in the United States will be compared to full Russian. This binary distinction, however, is insufficient. To achieve a more adequate analysis, I will also rely on two other distinctions: the distinction between first and second language (L1, L2) and the distinction between primary and secondary language. L1 and L2 are distinguished by the temporal order of acquisition. The primary and the secondary language are distinguished by the prevalence of usage. Thus, if an individual learns language A as his/her first language and speaks it predominantly throughout his/her adult life, this language is both first and primary. If an individual dramatically reduces the use of the first language, A, and switches to using language B as a more important one, then A is characterized as the first/secondary language, and B becomes the person's second/primary language.

Based on these distinctions, Russian-speaking immigrants in the US can be divided into two further groups: those for whom Russian is first and primary, and those for whom Russian is first and secondary. The former language will be referred to as Émigré Russian, the latter as American Russian. This paper is primarily concerned with American Russian, invoking Émigré Russian only for comparison. Émigré Russian, an important phenomenon in its own right, has been described elsewhere (Benson 1957; 1960; Andrews 1990; 1993a,b; 1994; Polinsky 1996; in press; Lavine 1995). For my purposes, the most important difference between American Russian and Émigré Russian is that the former, but not the latter, demonstrates structural change; that both languages make heavy use of non-native vocabulary is epiphenomenal to this study. Major sociolinguistic differences between Émigré and American Russian are summarized in (1):

(1)       Émigré Russian              American Russian
          first lg                    first lg
          primary lg                  secondary lg
          first generation            non-first generation
             of immigrants               of immigrants
          schooling in the lg         no schooling in the lg

Two other points warrant brief mention here. First, the distinction between Émigré and American Russian can be

developed, and it is quite possible that within each variety, further distinctions can be achieved. Second, the question that has to remain open for now is whether or not American Russian parallels the reduced Russian spoken in other non-Russian speaking countries, where the dominant language is other than English (Israel, France, Finland). Such a future comparison is also important in order to separate those attrition phenomena which are due to the influence of English from those which are more general in nature.

Selecting the baseline (control) language is another important issue, especially if one is dealing with a large language such as Russian. As I will show below, reduced language does not show much dialectal influence; speakers from different geographical areas demonstrate similar patterns of structural attrition.[2] The decision which I had to make in this study was whether to assume Contemporary Standard Russian (CSR) as the baseline, and I ruled against that choice, first because the gap between the spoken language and CSR has by now become quite significant (Comrie, Stone, and Polinsky 1995), and second because speakers of American Russian, by definition, had no exposure to CSR through schooling. Instead, I assumed as the baseline the language represented in a number of studies on Spoken Russian (Zemskaja 1973; 1981; 1983).[3] Since data on this variety is insufficient, I supplement it by a selection of native speakers' judgments and questionnaires.

A brief note on the speakers of American Russian is in order here.[4] Altogether, 20 speakers are included in this study. Of these, one speaker left Russia when she was 16; she was 89 at the time of the interviews (Ga). Another speaker (To) was 18 years old when he found himself in a DP camp in Europe after World War II. He has been living in Canada and the US since 1950, and his estimated period of disuse of the language (lapse period) was 40 years. Only one speaker, Pe, was born in this country, to a third-generation Russian family. Overall, the average age of leaving the L1 Russian environment was 9, the average time outside the L1 community was 17 years, and the average lapse period was 7 years. Relevant information is summarized in Table 1.

To recapitulate, the main focus of this paper is American Russian, a reduced language spoken by those who abandon Russian for English and as a result demonstrate a significant loss or restructuring of their grammar.[5]

Table   1.   Speakers of American Russian

| speaker | age left L1 community | years outside L1 community | lapse period (period of disuse) |
|---|---|---|---|
| B(m) | 7 | 11 | 0 |
| G(m) | 6 | 16 | 2 |
| K(m) | 9 | 17 | 4 |
| Ko (m) | 10 | 10 | 2 |
| Ma (m) | 7 | 17 | 7 |
| Na (m) | 7 | 8 | 0 |
| P(m) | 8 | 9 | 0 |
| Pe(m) | 0 | 21 | n/a |
| S(m) | 9 | 12 | 4 |
| To(m) | 18 | 47 | 40 |
| Z(m) | 11 | 12 | 2 |
| Zh (m) | 9 | 18 | 8 |
| A(f) | 5 | 12 | 0 |
| E(f) | 7 | 14 | 2 |
| Ga(f) | 16 | 73 | 25 |
| I(f) | 7 | 11 | 5 |
| Le(f) | 7 | 13 | 0 |
| M(f) | 9 | 12 | 5 |
| N(f) | 12 | 3 | 0 |
| Sv (f) | 5 | 12 | 0 |

# 1. Major structural characteristics of American Russian

The description given here is by no means exhaustive and should be viewed as a very general overview of major differences between American Russian on the one hand, and Émigré Russian and baseline Full Russian, on the other. For lack of space, I will have to omit a number of issues, one of the important ones being code-switching and code-mixing.[6] In this section, for expository purposes, I will be treating structural features of American Russian as categorical; as I will then show in section 2, all these features are distributed to a degree, which is to be expected under language change (especially contact-induced change).

## 1.1. Case loss

To simplify matters only slightly, Full Russian maintains a six-case system (nominative, accusative, dative, genitive, instrumental, prepositional). American Russian abandons this case system; importantly, the loss of the case system is systematic and can be represented in terms of a case shift rule (below).

Loss of the instrumental. In Full Russian, the verbs *byt´* 'be', *stanovit´sja* 'become', *ostavat´sja* 'remain', *umirat´* 'die', can assign either the nominative or the instrumental case to the predicative nominal and predicative adjective (Comrie et al. 1995: 127ff.; Wade 1992: 108). These verbs and verbs of motion also take predicative adjectives, again either in the nominative or in the instrumental. With predicates in the future tense, Full Russian shows a preference for the instrumental case on the predicative nominal (Comrie et al., 1995: 117-122; Wade 1992: 108; Timberlake 1993: 862). In American Russian, predicative nominals and predicative adjectives are always used in the nominative. For example, with the verb BE in the future ((2), second clause of (3)), the predicative noun/adjective shows up in the nominative; in the first clause of (3), the predicate appears in the nominative after the infinitive of BE (*byt´*), which is not possible in Full Russian. Also note that, in contrast to (3), instrumental is obligatory with the infinitive BE in Full Russian.

| (2) | on | budet | zvezd-a | | | |
|-----|-----|-------|---------|---|---|---|
|     | he  | will be | star-NOM | | | |
|     | 'He will be a movie star.' | | | | | |
| (3) | ona | xočet | byt´ | model´ | i | ona |
|     | she | wants | to be | model:NOM | and | she |

```
budet       tonk-aja              dlja    èto
will be      thin-NOM:FEM          for     that:NOM
'She wants to be a model and so she is trying to lose weight
for that.'
```

In standard Russian, the instrumental case is <u>required</u> for predicative nominals and predicative adjectives in the argument structure of such verbs as *pomnit´* 'remember', *znat´* 'know', *zastavat´* 'find', *sčitat´* 'consider', *nazyvat´* 'name; call', *predstavljat´ sebe* 'imagine', *voobražat´* 'imagine', *ostavljat´* 'leave behind', *videt´* 'see', *naxodit´* 'find', *rastit´* 'raise; bring up', *vospityvat´* 'bring up; educate', *poseščat´* 'visit' (Wade 1992: 165). Structurally, these verbs can be analyzed as governing a small clause with its subject in the accusative and its predicate in the instrumental. For example:[7]

```
(4)   a.  my       sčitali     [SCee          skučn-ym
          we       considered   her:ACC        dull-INSTR:MASC
          čelovek-om]
          person-INSTR
          'We considered her a bore.'
      b.  oni      vospitali    [SCrebenk-a kaprizn-ym]
          they     brought up   child-ACC capricious-INSTR
          'They brought up the child naughty.'
```

In American Russian, the adjective in the transitive verb construction is invariably in the nominative:

```
(5)   ètot     gorod ja videl [SCon         grjazn-yj]
      this     city  I   saw    it:NOM dirty-NOM
      'I saw this city as it was dirty.'
```

Example (5) invites an alternative analysis, according to which the sentence results from the linkage of two coordinate clauses, as in (6):

(6) [CP[IP ètot gorod ja videl] & [IPon       grjazn-yj]]

If American Russian were not characterized by excessive and often unpredictable pausing (Polinsky 1996), the choice between the analyses in (5) and (6) could be determined on the basis of the pause, but this is impossible. Assuming the small clause analysis of

(5), this example points to two other features of American Russian, namely, the erosion of the accusative (the NP and the adjective in the small clause are in the nominative, unlike the respective forms in the full language, which must be in the accusative), and the elimination of the null element (*ètot gorod* governs *on*, while in the full language the trace must be empty). The accusative-nominative distinction and the absence of the empty trace will be discussed below.

In Full Russian, another common function of the instrumental is to encode the passive agent. In American Russian, no spontaneous passives were attested; even when translation elicitation was used, speakers translated English passives by active clauses. This suggests that the overall passive construction, not just the coding of the passive agent, is lost.[8]

Attrition of the genitive. In Full Russian, the genitive has a large number of uses, which cannot be summarized in this paper (for a detailed discussion of genitive marking, see Chvany 1975; Babby 1980; Pesetsky 1982; Neidle 1988, and also L1 acquisition studies cited below). Of the numerous instances of genitive assignment, this paper will concentrate on the lexically governed genitive, genitive of negation, genitive of possession, and count form. The first two types constitute rather weak features in the full language: while standard grammars prescribe the use of genitive after verbs of emotional perception, aim, request, or achievement, as in (7), even Full Russian speakers often replace that genitive by the accusative (Zemskaja 1983: 109-11):[9]

(7)  tri      mesjaca    on     ne žil,      a liš´       ožidal
     three    months     he     not lived    but only     waited
     arest-a
     arest-GEN
     'He spent three months not really living but, rather,
     anticipating his own arrest.'

American Russian then develops the tendency already present in Full Russian. In American Russian, the lexically-governed genitive disappears, being replaced by the accusative (in the speech of more proficient semi-speakers) or nominative (in lower proficiency semi-speakers).[10] Thus:

378

(8)     v Chicago  vse       boitsja          prestupnik-i
        in         all:PL    is afraid:3SG    criminal-NOM:PL
        'In Chicago, everybody is afraid of criminals.'

The genitive of negation is also optional in Full Russian, where it varies with the nominative or accusative, depending on the grammatical relation of the respective nominal. The genitive of negation remains obligatory after the negative existential predicate *net/ne byt'*. In American Russian, the genitive of negation is lost entirely, thus:

(9)     a. ja  ne     čitaju  russkaja             kniga
           I   not    read    Russian:NOM:SG      book:NOM:SG
           'I don't read Russian books.'
        b. u   nee    net     muž
           by  her    no      husband:NOM
           'She has no husband.'

Example (9b) also includes the phrase *u nee* 'by her', where the pronoun is in the genitive. The *u*-phrase (the preposition *u* 'by, at' and the genitive nominal) is one of the few environments where the genitive is retained by American Russian speakers, however, I suggest that this retention be interpreted as a frozen form or a chunk, rather than a preposition-governed genitive. This is confirmed by the fact that the genitive *u*-phrase, as in (9b), the nominative *u*-phrase (10), and the calque of the English *have*-construction (11) cooccur in the speech of one informant.

(10)    u   švejcarsk-ie        ljudi              mnogo    banks
        by  Swiss-NOM.PL        people:NOM.PL      many
        'The Swiss have many banks.'
(11)    i    èta      ženščina   ona    imela
        and  this     woman      RP     had
        sekretnaja    žizn'
        secret:NOM    life:NOM
        'This woman had a secret life.'

Statistically, the percentage of genitive *u*-phrases within the total pool of possessive constructions elicited from each speaker ranges from 29 (for the most proficient semi-speaker) to 8 (for a semi-speaker with a very poor command of the language).

The prepositionless genitive of possession, a solid feature both in CSR and Full Russian, is very rare in American Russian. Instead, speakers use circumlocution or juxtapose the name of the possessor and the name of the possession, for instance:[11]

(12)    moj    učitel'    kniga
        my    teacher    book
        'my teacher's book'

One context in which the genitive is well-preserved is the genitive governed by a numeral; this refers both to a form occurring after the numerals 1.5-4 (resembling the genitive singular) and the form occurring elsewhere, resembling the genitive plural. Even the poorest speakers in my sample maintained the genitive when asked to count using a numeral and a noun. These forms are retained because of their highly specialized function as count forms (Zaliznjak 1967; Babby 1984; Mel'čuk 1985; George Fowler, p.c.). In a sense, this retention can be compared to the adverbial-like retention of some prepositional phrases—the count form is not associated directly with the overall declension paradigm of a given noun. Moreover, the subjects use the correct count form when they count in isolation but often fail to use it in spontaneous speech, which suggests a discrepancy between various instances of on-line production.

Loss of prepositional obliques. American Russian abandons all preposition-governed obliques, replacing them by preposition with nominative, a combination non-existent in Full Russian. An example of that was given above, in (10). Some other examples are:

(13)    ja pridu    s moj        boyfriend
        I    will come  with my:NOM
        'I'll bring my boyfriend.'
(14)    pered    naš        dom        est' bol'šoe    lawn
        in front of our:NOM  house:NOM is    big
        'There is a big lawn in front of our house.'
(15)    moj    deduška    byl na    mirov-aja        vojn-a
        my    grandfather was on    world-NOM    war-NOM
        'My grandfather fought in World War (II).'
(16)    i        on pošel k  roditeli  # foster parents
        and    he went to  parents:NOM
        'He went to the foster parents' house.'

(17) v Rossii        oni       dumajut # možno
in Russia:PRP  they      think      is possible
lečit´      bez        vrač
be treated  without    doctor:NOM
'In Russia, they think one can be treated without the doctor's help.'

(18) v    kitajskij              restoran              oni     edjat
in Chinese:NOM          restaurant:NOM   they    eat
paločk-ami
chopstick-INSTR:PL
'In a Chinese restaurant they eat with chopsticks.'

Again, as shown by (17) and (18), some prepositional obliques are retained, most likely as frozen forms. Such retention varies from speaker to speaker, which underscores their random character.

Argument case shift. Assuming that in Full Russian the main verbal arguments are commonly encoded by the nominative, the accusative, and the dative, American Russian restructures this system in the following way:

(19)       Full Russian                        American Russian

nominative ⎤                          nominative
accusative  ⎦

dative                                      accusative

In other words, subject and direct object do not differ in the formal expression, and the accusative marking is retained as the marking of the second object. For example:

(20) ja prinesla    tebja              pictures
I  brought      2SG:ACC/GEN
'I brought you pictures.'

(21) papa        rasskazal   devočk-u    istori-ja
Daddy       told          girl-ACC     story-NOM
'Daddy told the girl a story.'

The dative remains more or less stable with the first person pronoun, for example:

(22)    pozvoni    mne    zavtra
    .    call    me:DAT    tomorrow
    'Call me tomorrow.'

Better retention of the dative with pronouns may be indicative of a general tendency observed in different languages under attrition; pronominal paradigms are retained longer than the nominal ones.

The argument case system of American Russian undergoes the following shift:

(23)    Dative $\Rightarrow$ Accusative $\Rightarrow$ Nominative   (argument case shift)

This shift characterizes the changes undergone by the cases that encode major grammatical relations, in particular, the direct and indirect object (the subject case, which is mostly the nominative, remains unchanged). Other cases, which primarily encode adjuncts, also disappear, and their functions are assumed by the nominative.

As a result, American Russian develops a two-case system (nominative and accusative). While the nominative becomes the multifunctional case, the accusative is specialized as the case of the indirect object and in some instances is used to encode the direct object. The resulting case system may be represented as follows:

(24)    American Russian case system
    **Core arguments:**

| | |
|---|---|
| SUBJ/SINGLE OBJ | NOM |
| SECOND OBJ | ACC |

**Peripheral arguments/**    Preposition + NOM
**Adjuncts**

The encroachment of the nominative on other case forms is actually found in Full Russian (Zemskaja 1973: 256-62), but in spoken Full Russian this nominative is, first of all, optional, and second, clearly denotes the topic. In American Russian both these features become irrelevant, and the nominative is much more widespread.

Another important question, of course, is whether the dramatic reduction of cases in American Russian can be explained by the influence of English, with its extremely shallow case distinctions, or

by simplification resulting from the general process of language decay (Campbell and Muntzel 1989; Sasse 1992). An ideal testing situation would be one in which Russian is influenced by a language with a richer case system. If in such a hypothetical situation Russian speakers also used a reduced case system, language death processes would emerge as a valid explanation for reduction. For the lack of such a testing situation, both solutions mentioned here remain entirely speculative.

## 1.2. Changes in verb forms

Attrition of agreement. Subject-verb agreement is consistently disappearing, as illustrated in (25), (26). The most proficient semi-speakers have about 66 per cent correct agreement, and the lowest percentage in my sample was 30 per cent correct agreement (speaker Na). The loss of agreement does not seem to distinguish between agreement in gender, number or person. Another question is which verbal forms are used when a semi-speaker makes an error; the most common ones are third person singular (any tense), infinitive, and first person.

(25)    moi     roditeli    oni        kupil
          my      parents    RP:3PL    bought:PAST:3SG
          rugoj      dom
          another    house
          'My parents bought another house.'

(26)    deti        guljat´        tam
          children    walk:INF      there
          'The children went for a walk there.'

The loss of agreement is clearly related to the destruction of conjugation paradigms, a process parallel to the loss of declension.[12]

Loss of verbal reflexives. Many verbs that have the reflexive ending -sja/-s´ are used without it, cf. the use of *rodila* , which in Full Russian means 'gave birth' instead of *rodilas´* 'was born':

(27)    ja    xoču    posmotret´ mesta   gde    ja rodil-a
          I     want    see:INF     places   where   I was born-PAST.FEM
          'I would like to see where I was born.'

As with several other loss processes described here, the attrition of the reflexive is gradual, and speakers of American Russian also retain a number of reflexively marked verbs, especially those which do not have a non-reflexive counterpart (*smejat´sja* 'laugh', *nravit´sja* 'be pleasing').

English clearly influences the loss of reflexives as American Russian has a combination of a transitive verb and object in lieu of the reflexive:

(28)  ja  pričesyvaju    moi    volosy tože    večerom
       I   comb          my     hair   also    in the evening
      'I comb my hair in the evening, too.'

Overall, the general decline of reflexive forms in American Russian poses an interesting question: can this loss of reflexives be explained entirely by the influence of English, where morphological reflexivity is absent, or is this a more general tendency of human language, or both? An indirect argument in favor of the influence of English comes from American Swedish: while Full Swedish has a developed system of reflexive marking, American Swedish loses it (Hasselmo 1974: 161).

Loss of subjunctive. The subjunctive forms with *by* are not used in American Russian. Instead, one finds whatever verbal forms a given semi-speaker uses (present, past, infinitive, imperative, as in (37) below), for example:[13]

(29)  ja  ne xočet      čto     papa  skazat´     tak
       I   not want:3SG  that    daddy say:INF     so
      'I don't want my dad to say that.'
(30)  esli   ja  rasskazyvaju    o      ix    žizn´
       if     I   tell:PRES:1SG    about  their life
       ty          plakala
       you:2SG     cried:PAST:FEM
      'If I told you about their life you would cry.'

As example (29) shows, the subjunctive conjunction *čtoby* is replaced by the indicative complementizer *čto*. There is a slight tendency to use more past tense forms (without *by*) in lieu of subjunctive, which shows that the mood form is undergoing gradual simplification rather than abrupt loss (cf. Silva-Corvalan 1994 for a similar process in Los Angeles Spanish).

Aspect restructuring. In brief, the changes in the aspect system are as follows. The opposition between perfective and imperfective forms is lost; most verbs become either lexicalized perfectives or lexicalized imperfectives. Which aspect is lexicalized depends primarily on telicity: verbs of achievement and accomplishment are clearly favored in the perfective form, hence the use of *sdelat'* 'do', *smoč'* 'be able to', *napisat'* 'write', *pročitat'* 'read', *otdat'* 'give', *vzjat'* 'take' in the place of their imperfective correlates (cf. (31); verbs that do not imply a natural limit, such as processes and states, are lexicalized in the imperfective form, cf. (32).[14] Some examples:

(31)  kogda  my      žili v  Louisiana  ja smogla
      when   we      lived in           I could:PERF
      pročitat'   russkie   knigi
      read:PERF Russian    books
      'When we were living in Louisiana I could still read Russian books.'

(32)  esli    ja xotel       exat'         v East Coast
      if      I wanted:SUBJ go:IMPERF    in
      moj    mat'    ne razrešat'        menja
      my     mother  not let:IMPERF     me:ACC
      'If I wanted to go to the East Coast my mother wouldn't let me.'

## 1.3. Syntactic change

Reflexives. American Russian speakers have a very low percentage of reflexive anaphors (*sebja* and *svoj*), and regularly replace them by personal pronouns, for example:[15]

(33)  ètot car   ja kupit'  dlja   mene
      this       I  buy     for    me
      'I bought this car for myself.'

A possible interpretation of such examples could be that semi-speakers lack on-line binding of reflexives. However, the problem is deeper than that; when offered actual Russian examples involving reflexives, American Russian speakers fail to co-index a reflexive with a possible antecedent. This is demonstrated by the following interview excerpt:

(34)    Investigator: Translate
        Petja<sub>i</sub>  pokazal    Lene<sub>j</sub>      svoju<sub>i/*j</sub>   fotografiju[16]
        Petja    showed     Lena:DAT self's   picture:ACC
        Speaker:    "Petja showed Lena the picture".
        I:    Who was in the picture?
        S:    I don't know.
        I:    Do you know whose picture that was? — S: No.

This suggests that semi-speakers lack the actual knowledge of reflexivization rules rather than just fail to perform in accordance with these rules (see Grimshaw and Rosen 1990 on arguments for distinguishing knowledge of rules and performance factors). I will return to this issue in section 3.1.

Clause-internal resumptive pronouns. I am using the term resumptive pronoun in a restricted sense, to denote a pronoun co-indexed with the subject of the same clause. Resumptive pronouns are extremely common in American Russian, cf. (35) and also (11), (25) above.

(35)    moja    sestra   on učit    v   law school
        my      sister   RP studies in
        'My sister goes to law school.'

The widespread use of resumptive pronouns can be linked, to some extent, to the loss of agreement; as verbal agreement deteriorates, there arises a need for some other grammatical mechanism marking the relation between subject and predicate. However, there must be some other reason for the rise of the resumptive pronoun because verbal agreement is lost only in the least competent speakers, while the resumptive pronoun is used by all the speakers of American Russian. In a preliminary way, I would like to suggest that resumptive pronoun occurs as a real subject, while the NP with which it is co-indexed is not a subject but a topic, occupying a much higher position in sentence structure. Another hypothesis which needs to be tested against the material of languages under attrition is the non-configurational syntax. Under that analysis, full NPs occurring in American Russian sentences should be treated as adjuncts, not as arguments.

The use of resumptive pronouns under attrition is also documented for reduced versions of Hungarian (Fenyvesi 1994),

Tamil, Kabardian, Armenian, Lithuanian, Polish (Polinsky 1994c; 1996), which makes this feature even more noteworthy.

Reference-tracking. In maintaining coreference across clauses, American Russian consistently avoids using the null copy. Instead, either a pronominal copy is used or a full NP is repeated, thus:

(36)  on$_i$     smotrel   kino    i      on$_i$    dumal ...
      he      watched   movie   and    he      thought
      'He was watching the movie and was thinking (about this).
(37)  Tanja   včera    ona    prixodi   i   togda   Tanja videl
      Tanja   yesterday  RP    came       and then   Tanja saw
      'Yesterday Tanja came here and saw this.'

The loss of the null copy is certainly related to the development of a resumptive pronoun at the level of clausal syntax. Overall, it seems that the elimination of null copying is due to the general increase in redundancy rules observed in American Russian: the speaker, who lacks confidence that the message will be parsed and decoded properly, introduces more "instructional" elements that are supposed to guide the hearer in the processing.

Relative clauses. In lieu of Full Russian relative clauses with *kotor-*, American Russian juxtaposes two clauses, of which the second one serves as a description of a noun in the first clause:

(38)  ja   znat'    odna        devuška   i      ètot
      I    know:INF  one:FEM:NOM  girl:NOM  and    this
      devuška   on rodilsja         v    japonija
      girl      RP was born:MASC    in   Japan:NOM
      'I know a [Russian] girl who was born in Japan.'

Other syntactic changes in American Russian which won't be discussed here but which are relevant for the statistical analysis below include absence of verbal gapping, attrition of control structures (which are replaced by juxtaposed constructions), loss of passive and impersonal, frozen SV/SVO word order, and abnormal pausing where a pause intervenes between the elements of a single constituent, for example, between a preposition and a noun (Polinsky 1996). The major differences between American and Full Russian (including the ones just summarized) are listed in Table 2.

It seems that the decline of null copying, relativization, the loss of gapping, and the emergence of highly frequent resumptive

Table 2. Structural variables differentiating Full Russian and American Russian

| variable | Full Russian | American Russian |
|---|---|---|
| predicate nominal case | INSTR(NOM) | NOM |
| preposition-governed case | other than NOM | NOM |
| possessive construction | u-phrase + BE | HAVE clause |
| case of the nominal in existential negative clause (net) | GEN | NOM |
| case of the recipient | DAT | ACC |
| reflexive verbs | with -sja | without -sja |
| subjunctive | yes | no |
| aspectual pairs | yes | no |
| modifier-head agreement | yes | no |
| resumptive pronoun | sporadic | yes |
| null copying across clause | yes | no |
| verbal gapping | yes | no |
| control structures | yes | no |
| relativization | with kotor-/čej | juxtaposition |
| passive | yes | no |
| word order | variable | fixed |

pronouns are indicative of one and the same general tendency, namely, to use redundant elements in speech. This tendency, known as overuse, elaboration, or overmarking (Berman and Slobin 1994: 318-20, 372-3), is also characteristic of language acquisition and of adult uneducated registers. Though this paper does not deal with discourse phenomena in detail, it is there that one finds further evidence for various types of overmarking, such as redundant conjunctions and tail-head linkage (recapitulation of the final clause of the preceding discourse segment in the beginning of the following sentence or segment).[17] The increasing redundancy of expression makes up for the loss of agreement and inflectional forms.

Another reason for overmarking under attrition probably has to do with the overall diminished language competence. The study of pauses suggests that American Russian speakers are only capable of producing and controlling relatively small speech segments, at the level of a phrase or very short clause (Polinsky 1996). They have enormous difficulty in combining these small segments into larger ones, such as longer clauses, sentences, and paragraphs. The redundant expression reflects these speakers' inability to combine phrases and short clauses into higher-level units. In a sense, it is as if the speakers surveyed here maintain rules allowing them to construct plausible clauses and clause constituents but hardly have any grammar left which would allow them to put clauses together into sentences and texts.

This account is consistent with the distinction between structural proficiency, which is related to the morphosyntax of a language, and rhetorical proficiency, which allows one to link smaller units into larger sentential or textual segments (Berman and Slobin 1994: 597). What this account adds to the existing descriptions of language attrition is another dimension of gradual attrition: not only does attrition result in differential marking on some items or categories, but it is also modular in affecting different language capabilities at a different rate.

## 2. Measuring attrition

In the previous section, I purposely avoided the issue of variation in American Russian. In fact, all the structural characteristics accompanying attrition are displayed in a gradual manner; each speaker exhibits a certain number of their occurrences but also retains a number of occurrences which are consistent with the

grammar of Full Russian. This is not surprising; it is well established that grammatical categories do not change wholesale across the board for all speakers. It is, in fact, typical of a moribund language to show fluctuations within a single category and to exhibit gradual and variable diffusion (Dorian 1981; Silva-Corvalan 1994). What is unclear, however, is to what extent the actual variation within each characteristic is representative of the overall language attrition and how the individual characteristics listed above are related to one another.

## 2.1. Correlation between structural variables

To test whether or not grammatical variables are correlated, I obtained statistics on those variables for which sufficient data were available, namely subject/verb agreement, relativization, coreferential reduction (use of a null copy and pronominalization), adpositional oblique forms of nominals, subjunctive, and null copying across clause. For each variable, fifty tokens were transcribed for each speaker (where the number of tokens obtained from an individual speaker was more than 50, the first fifty tokens for each speaker were transcribed).[18] Within each variable, the percentage of correct constructions (constructions which are grammatical according to the full language grammar) was calculated for each speaker. For example, if a speaker used correct agreement in 15 cases out of 50, this speaker's agreement percentage is 30. The relevant percentages are represented in Table 3.

The percentages of correct constructions within each variable were then analyzed using the DataDesk statistical package. To determine whether two variables are correlated, regression analysis is usually performed and the Pearson coefficient of correlation is computed. However, this coefficient is a measure of the strength of the linear relationship between two variables. In our case, there is no reason prima facie to assume the linearity of relationships. For example, Figure 1 plots two correlated pairs of structural variables (resumptive pronoun and agreement; subjunctive and agreement); though there is a solid correlation between these variables, it is not linear (notice a sharp rise in the higher percentages).

Since there is at least a potential for non-linear relationships between individual variables, their relationship was correlated using the Spearman coefficient of correlation. The results of the computations for American Russian are presented in Table 4. As the

Table 3. American Russian: Lexical proficiency indices and percentages of correct grammatical forms

| Sp | Vocab | AGR | No RP | Cond | Null Copy | Relative Clause | PRP Oblique |
|----|-------|-----|-------|------|-----------|-----------------|-------------|
| B  | 86.5  | 60  | 20    | 28   | 27        | 18              | 12          |
| G  | 82    | 54  | 10    | 19   | 11        | 22              | 10          |
| K  | 88.5  | 74  | 36    | 44   | 36        | 15              | 18          |
| Ko | 90    | 72  | 32    | 37   | 28        | 36              | 34          |
| Ma | 74    | 32  | 12    | 12   | 14        | 17              | 0           |
| Na | 77    | 30  | 12    | 10   | 13        | 18              | 0           |
| P  | 86    | 64  | 10    | 20   | 26        | 33.5            | 8           |
| Pe | 69    | 3.5 | 5     | 11   | 8         | 4               | 0           |
| S  | 88.5  | 66  | 28    | 32   | 35        | 42              | 10.5        |
| To | 75.5  | 15  | 10    | 25   | 18        | 38              | 12.5        |
| Z  | 84    | 50  | 14    | 13   | 23        | 51              | 10          |
| Zh | 89.5  | 84  | 24    | 36   | 33        | 55              | 20          |
| A  | 77    | 36  | 16    | 11   | 15        | 26              | 4           |
| E  | 89    | 68  | 30    | 56   | 37        | 44              | 20          |
| Ga | 72    | 22  | 12    | 18   | 25        | 37              | 19          |
| I  | 88.5  | 68  | 18    | 36   | 39        | 24.5            | 22          |
| Le | 90.5  | 66  | 20    | 47   | 21        | 74              | 24          |
| M  | 88.5  | 72  | 22    | 33   | 29        | 78.5            | 14          |
| N  | 90    | 70  | 18    | 41   | 21        | 85              | 30          |
| Sv | 75    | 42  | 6     | 12   | 6.5       | 11              | 0           |

Vocab - Lexical proficiency index, measured on the basis of a 100-word list;
AGR - correct use of subject-verb agreement;
No RP - absence of a clause-internal resumptive pronoun;
Cond - correct use of conditional (subjunctive);
Null copy - null copying across clause;
Relative clause - correct relative clause;
PRP Oblique - correct use of preposition-governed obliques.

Table 4. American Russian: Spearman Rank Correlation Coefficients (major variables)

| | Vocabulary | Agreement | Absence of RP | Subjunctive (Conditional) | Null Copy | Relative Clause | Prp-governed obliques |
|---|---|---|---|---|---|---|---|
| Vocabulary | 1.000 | | | | | | |
| Agreement | 0.882 | 1.000 | | | | | |
| Absence of RP | 0.792 | 0.811 | 1.000 | | | | |
| Subjunctive | 0.874 | 0.813 | 0.760 | 1.000 | | | |
| Null Copy | 0.638 | 0.733 | 0.805 | 0.727 | 1.000 | | |
| Relative Clause | 0.629 | 0.451 | 0.419 | 0.540 | 0.394 | 1.000 | |
| Prp-obliques | 0.798 | 0.688 | 0.672 | 0.877 | 0.649 | 0.633 | 1.000 |
| TL1 | 0.285 | 0.263 | 0.322 | 0.374 | 0.408 | 0.602 | 0.534 |
| TL2 | -0.394 | -0.291 | -0.153 | -0.065 | -0.099 | -0.113 | -0.077 |
| Lapse | -0.178 | 0.020 | 0.116 | 0.100 | 0.346 | 0.137 | 0.206 |

TL1 - Time left L1 community
TL2 - Time outside L1/in L2 community
Lapse - Lapse period (period of disuse of L1)

Absence of RP

50
40
30
20
10

Count

30.0

22.5

15.0

7.5

20  40  60  80
Agreement
a

20  40  60  80
Agreement
b
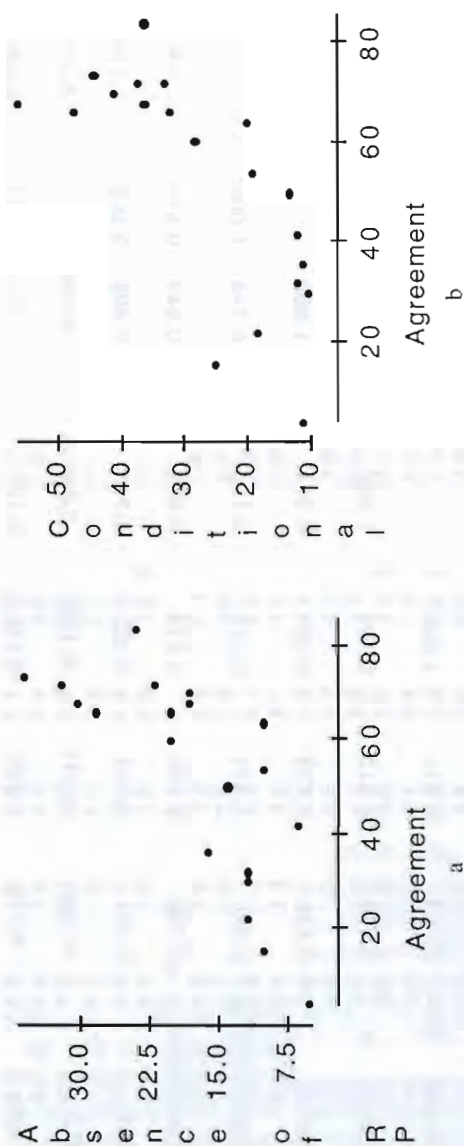
Figure 1. American Russian: Correlated structural variables
a  correlation between the absence of a resumptive pronoun and correct agreement
b  correlation between the correct use of conditional and correct agreement

table shows, there is a positive correlation between the individual measures of structural attrition. Certain structural variables are clearly correlated more strongly. Thus, agreement, coreferential reduction, and absence of resumptive pronouns are correlated in a strong positive manner. The other set of variables which are strongly correlated includes conditional and adpositional obliques.

This clustering of variables is significant; the first set of variables clearly represents the syntactic component, while the second set includes two variables which represent morphosyntax. Though its correlation with other variables is generally positive, relativization shows weaker correlations altogether. This can be explained by a less obligatory nature of relative clauses; the use of a relative clause is often optional, and a relative clause is a rhetorical device rather than a structural necessity of a language. That is, if speakers do not know how to use a relative clause, they can easily avoid it without making a mistake, but if speakers do not know how to use agreement, there is no way to avoid it without an error.

## 2.2. Correlation between lexical and structural variables

All the variables discussed so far represent knowledge of the grammatical component. The next question which naturally arises is whether or not the decline in grammatical knowledge is necessarily accompanied by a decline in lexical proficiency. In this subsection, I will show that the loss of grammar and lexical loss are related.

As a formal criterion for estimating lexical attrition, the subjects were tested for their ability to translate 100 words of the basic vocabulary list (the Swadesh list) from their primary language into the reduced language.[19] This statistical procedure is very similar to the one employed in historical linguistics; translations elicited from a given speaker are compared to the full language list (obtained from dictionary translations and then checked with at least one full speaker). One point is deducted for a wrong translation or for a blank answer. If a word is translated by the correct root but the choice of the word form is incorrect (for example, if the singular is translated as the plural), half a point is deducted. The total number of erroneous forms is then deducted from the number of items on the list (100); the result is taken as the numerical value of a speaker's vocabulary (lexical) proficiency (Lex). Thus, $Lex = 100 - N_{wrong}$.

This procedure has its drawbacks. First, one might object that there is a certain degree of arbitrariness in taking off points for the

wrong forms, including wrong citation forms. However, any language (either documented or not) has established citation forms for major word classes. In Full Russian, citation forms are codified by dictionaries and promoted by schooling. The very absence of the standard citation form indicates a dissociation from the dominant linguistic environment, and this can lead to attrition. Second, the basic vocabulary list was apparently designed for non-urban cultures; the speakers interviewed in this study commonly stumbled over words such as 'bark', 'louse' or 'ashes'. Though these are not particularly common concepts for a thirty-year old in New York or Chicago, any competent speaker of the language would certainly know these words. Related to this third problem is the issue of the baby vocabulary; if subjects left the full language environment as very young children, is it legitimate to expect them to use an adult word (e.g. for breast or belly)? This paper does not offer a universal solution to this problem; however, since some baby words were attested, the ad hoc decision was taken to deduct just half a point for the use of a baby word if a subject left the full language environment before age six.

The advantages of the basic vocabulary measure are its simplicity and good potential for comparability across speakers; unlike some lexical measures such as type per token ratio, the basic vocabulary test is independent of the interview length and discourse situation.

None of the American Russian speakers surveyed had a complete basic vocabulary list. The lexical proficiency indices for each speaker are given in the left-hand column of Table 3. The lexical proficiency measure established for each speaker was correlated with the structural measures discussed in the previous subsection. These correlations are shown in Table 4 above; correlated pairs are plotted in Figure 2.

As the results indicate, there is a positive across-the-board correlation between the maintenance (loss) of vocabulary and maintenance (loss) of grammar. Thus, high percentages of grammatical features (correct subject-verb agreement, absence of the resumptive pronoun, correct use of conditional, null copying across clause) are directly related to higher lexical proficiency scores. Importantly, this correlation is not bound to one variable but is reiterated across the variables.
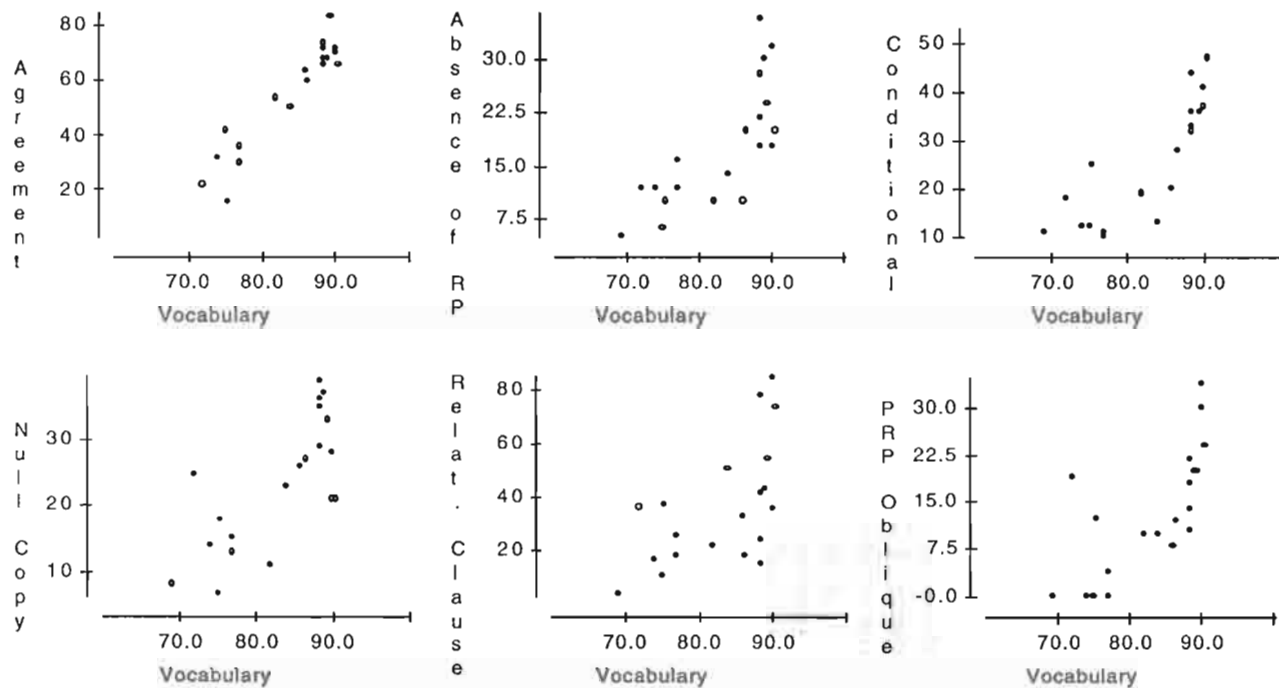
Figure 2. American Russian: Correlations between grammatical and lexical proficiency

This positive correlation constitutes an important finding in itself; it shows that non-aphasic attrition has consistent manifestations in various language components.

Finally, this correlation has an important practical ramification. Since there is a general correlation between lexical and grammatical loss, the more easily establishable measure of lexical loss can serve as a preliminary indication of the overall lexical and grammatical loss.[20] Accordingly, the simple lexical production test proposed here can be used as a tool for preliminary evaluation of a language undergoing attrition.

## 2.3. What about sociolinguistic variables?

We also need to examine the relationship between the degree of language loss and the length of time spent by a speaker outside the respective language community. To this end, I computed the correlations between the lexical variable (as representative of overall language loss) and the three temporal variables listed in Table 1 (time in the L1 community, time outside the L1 community, and period of disuse). The results are plotted in Figure 3.

There is no correlation between the degree of loss and the lapse period. There is a positive correlation between the maintenance of a reduced language and the time spent in the reduced language community, and this finding is consistent with the findings by Lavine (1995: 34). Despite this correlation, there is no significant difference between those speakers who were born into a L1 community and those speakers who were born in the US; similarly there is no difference between those who left the L1 community before age 7 and those who left after that age.

Contrary to Lavine's findings (1995: 34), there is a very weak inverse correlation between the maintenance of a reduced language and the time spent outside the L1 community. The difference between his findings and mine may have to do with the general level of language attrition demonstrated by individual subjects. Lavine, as well as a number of other students of attrition, deal with much more competent speakers than the speakers surveyed here. These competent speakers would probably score above the best speakers in my sample; this, in turn, confirms that there are multiple degrees of attrition, from very minor to drastic, which may be affected by different sets of sociolinguistic factors.
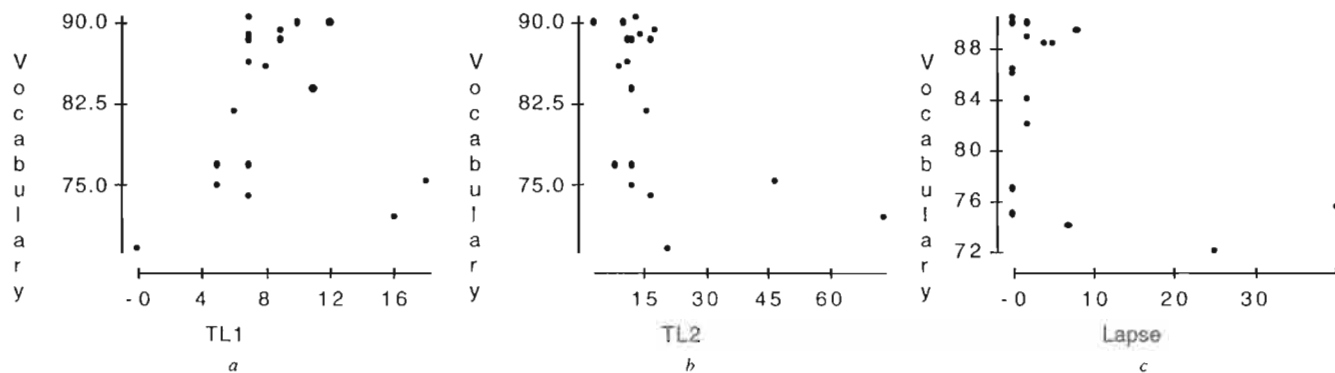
Figure 3. American Russian:   Correlations between lexical proficiency and sociolinguistic variables
a          lexical proficiency and time spent in L1 community
b          lexical proficiency and time spent outside L1 community
c          lexical proficiency and lapse period

# 3. Attrition and acquisition

## 3.1. Forgetters and incomplete learners

One of the relevant questions in the study of attrition in non-aphasic subjects is whether the attrition is related to incomplete learning or to forgetting of the original system. Many speakers in my sample would qualify as incomplete learners (ILs), as they either left Russia as young children or were born in this country. However, two speakers (Ga and To) left the full language community as young adults, and due to their advanced age, can possibly be considered forgetters (FGs).

The first indication that these two types of speakers do not show significant difference in attrition comes from the data on pausing (Polinsky 1996). The pausing experiment involved one possible FG (To) and one possible IL with a high proficiency score (Le); both showed significant differences in dealing with a familiar and unfamiliar discourse topic but did not differ from each other. Next, the statistics on the loss of structural features demonstrated by Ga and To do not set them apart from the other speakers (See Tables 3, 4).[21]

Going back to Table 3, the absence of differences between the two groups seems particularly interesting given that most structural features in Table 3 constitute basic deeply entrenched phenomena which are learnt as a very young speaker and should be retained well regardless of circumstances of language use. Such basic features include prepositional obliques, possessive construction, dative of the addressee, aspect, agreement, and probably reflexive anaphors.[22]

In theory, FGs and ILs should differ in the so-called threshold phenomena (which are learnt later and require certain threshold of usage in order to be maintained), while maintaining basic phenomena (data on a young Russian attriter presented by Turian and Altenberg 1991 support this conclusion). However, the speakers in my sample are generally poorer speakers than those surveyed in many other attrition studies, and in their speech, both threshold and basic phenomena are destroyed. Thus, we are dealing with a more severe level of attrition, whose consequences are yet to be determined. One of the consequences is, however, apparent: severe attrition does not result in a random loss of linguistic knowledge but rather, in a systematic increase of analyticity and a

high level of overmarking, which is indicative of increasing redundancy of expression.

Still, one significant difference between the FGs and ILs has to do with acceptability judgments. All subjects were asked a series of questions involving acceptability judgments and forced choice, and the FGs did better at making acceptability judgments than the ILs. In fourteen sets of examples involving forced choice (two sets on person/number agreement in the verb; gerund control; gender agreement; mobile stress in the inflectional paradigm; lexical choice; lexical choice related to register variation; subjunctive form; ambiguous reflexive; prepositional oblique; predicate adjective; deictic vs. pronominal reference; active vs. passive; reflexive verb), Ga chose the correct form in seven sets, the incorrect in five and gave 'I don't know' only in two (14.2% no choice); To chose the correct form in nine sets, the incorrect in two and gave 'I don't know' in three (21.4% no choice). Meanwhile, the rest of the speakers had an average incidence of no choice at 7.5 sets for a subject, which is over 50 percent of the forced choice sets.

This bifurcation suggests that there may indeed be a significant difference between FGs and ILs which is reflected in their passive skills and eventually in their competence, rather than in their actual language production. Although this is an extremely preliminary finding based on a crude test it is worth investigating. If indeed this finding is sustained by further study, it may open a new dimension in the comparison between FGs and ILs. The implications are quite clear: if indeed, FGs differ from ILs in maintaining a better language system, though not displaying it in speech production, a series of diagnostic tests geared to a specific language system can distinguish the two groups early on and allow us to study each group in its own right.

## 3.2. Attrition and acquisition: Questions for further study

The purpose of this section is to establish some preliminary directions of inquiry into the relationship between acquisition and attrition. The seductive "inverse parallelism" between these two domains was suggested early on by Jakobson (1941; 1968). The reasoning behind this inverse parallelism is quite simplistic: what goes in first, goes out last. In my opinion, the situation is much more complex, and in this section, I would like to contrast several

processes which confirm the acquisition/attrition parallelism with several others which do not.

A major parallel between acquisition and attrition consists in the correlation between lexical and grammatical proficiency (see section 2.2 and Fig. 2 above). As shown by a series of independent experiments, the levels of lexical and grammatical maturity in L1 learners are closely related (Bates et al. 1993; Pan et al. 1995). This is just one of multiple indications that the study of first language acquisition and first language loss can be mutually beneficial.

Another parallel is the early loss of the genitive of negation in existential constructions of American Russian (example (9b) above) and the late acquisition of this genitive by monolingual Russian children (Babyonyshev et al. 1994a, b; Avrutin 1994). However, an explanation for this parallel is still to be sought. The explanation in terms of the maturation of A-chains is problematic in the light of L1 unaccusatives in Italian which are acquired early and with few errors (McKee 1992; Ruth Berman, p.c.). Language-internally, American Russian totally lacks other constructions which make it possible to test the maturation of A-chains (for example, passive), and it is unclear if the absence of these constructions can be interpreted as evidence against chains. Next, the percentages of errors are different: American Russian speakers use the genitive of negation with *net* in 32% of cases (average), while the average for Russian children is 48% (Babyonyshev et al. 1994a).

The discrepancies between acquisition and attrition have to do with the loss of basic grammatical phenomena. Assuming the "first in—last out" view, American Russian speakers should be expected to show a better retention of such features as agreement, prepositional case marking, prepositional obliques, possessive construction, dative of the addressee, aspect, and probably some other features that are acquired early. The statistics presented above, however, showed that these phenomena are not retained and undergo significant attrition. The attrition of basic phenomena is not different from the attrition of such presumably threshold phenomena as relativization, genitive of negation, or control structures. This certainly diminishes the attraction of the Jakobsonian hypothesis; on a more serious note, this shows that correspondences between language acquisition and attrition (if any) may be obscured by additional factors.

## Conclusions

The main focus of this paper has been language attrition, but equally important to me was demonstrating that a study of attrition allows us to raise even more fundamental questions and that language loss should not be considered the monopoly of sociolinguistic studies, which it has often been. To recapitulate, this study was particularly concerned with severe attrition, whereby speakers do not use the language unless specifically prompted and their ability to communicate and process information in that language is limited.

With regard to structural characteristics of attrition, the three major findings of this study are as follows:

(i) the loss of grammatical system is non-random, and obeys specific principles, most clearly, the increased redundancy of expression;[23]

(ii) the attrition or retention of individual grammatical features correlates with the attrition (or retention) of other grammatical features;

(iii) there is a solid positive correlation between the loss of grammar and the loss of vocabulary.

In studies of language decay, the dramatic loss of language (whereby a semi-speaker cannot maintain a narrative, demonstrates serious structural loss, and often resorts to code-switching) is associated with a non-systematic knowledge of chunks and frozen expressions (Sasse 1992: 63-4). The findings in this study, especially finding (i), question this view of serious attrition and suggest that even significant language loss has a principled grammar of is own.

Next, a significant change in acceptability judgments from a full language to a reduced language suggests the following question: does attrition, at least at the level described here, affect performance (obedience to linguistic rules) or the rules themselves? If the rules remained intact, one would expect the subjects in this study to demonstrate acceptability judgments similar or identical to those of fully competent speakers. The inflation of judgments observed in actuality suggests that the very system of linguistic rules, not just performance, also undergoes attrition in severely reduced language varieties. However, there are also individual differences within this more general phenomenon that are suggestive of the distinction between incomplete learners of a language who, indeed, lack competence in a linguistic system, and forgetters of a language who,

402

depending on the level of attrition, may lose the ability to produce the language on-line but may still maintain the system as such in a better way than the first group. This latter finding also points to various other parallels between studies of L1 attrition and L1 acquisition that merit further exploration.

## Notes

1  I am grateful to Henning Andersen, Elaine Anderson, David Andrews, Elizabeth Bates, Vladimir Belikov, Ruth Berman, Wayles Browne, Bernard Comrie, Hana Filip, Ed Finegan, Natasha Kondrashova, Ron Langacker, Suzanne Romaine, Carmen Silva-Corvalan, and Alan Timberlake for discussion of various points of this paper. The people I am most grateful to are speakers of American Russian who not only provided me with most wonderful language data but, often unknowingly, made me question various fundamental assumptions about language.

Abbreviations: IMPERF - Imperfective; INF - Infinitive; PERF - Perfective; RP - Resumptive Pronoun; # - pause. In examples, code-switched items are underlined.
2  This is one feature that distinguishes American Russian from Émigré Russian; as shown for the latter by Andrews (1993b) and Lavine (1995), the geographical origins of an individual speaker may play a role in language change.
3  This choice is certainly not without limitations, primarily because the informants in the project were interviewed in the 1960-1970s and were all highly literate, educated speakers of Moscow Russian (see Comrie et al. 1995).
4  For a more detailed description, see Polinsky (1994c; 1996; in press).
5  I am omitting a general description of speakers of American Russian and the discussion of elicitation techniques, which have to be adjusted to the limited proficiency situation. These issues are covered in full detail in Polinsky (1994c; 1996; in press).
6  Code-switching is a widespread phenomenon in both immigrant varieties mentioned here; no systematic study of code-switching in Russian has been done so far.
7  The construction illustrated in (4) is less frequent than the construction with the intransitive verb and predicative adjective or predicative nominal.
8  The loss of preposition-governed instrumental will be discussed below, together with other preposition-governed obliques.
9  Note though that certain verbs retain the lexically-governed genitive in the spoken full language. The verb *ožidat´* is one of them. Overall, the acceptability of variation between the accusative and the genitive depends on the individual verb.
10  The continuum of semi-speakers is discussed in Polinsky (1994c; 1996).
11  The opposite order (possession-possessor) has not been registered. The non-occurrence of that order may be due to two separate factors: the influence of the English order (*my teacher's book*) or the iconicity of the order in (12) whereby the possessor, mentioned first, establishes a frame (in the Fillmore sense, cf. Fillmore 1985) within which the possession is unambiguously recoverable.
12  The loss of verbal agreement is clearly paralleled by the loss of gender agreement in modifiers (for some examples, cf. (32)). This feature of American Russian is beyond the scope of this paper.

13  See also (32).

14  For details, see Polinsky (1994a; in press).

15  Cf. also *moi volosy* in (28) above. In Full Russian, a possible, though not felicitous counterpart of (28) should have *svoi*.

16  The indices show the interpretation according to the syntax of Full Russian.

17  On tail- head linkage, see Longacre (1983; 9). On tail-head linkage under restricted competence, see Polinsky (1994c; in press).

18  As Table 2 shows, the list of structural characteristics differentiating American Russian from Full Russian is more extensive. However, for several other variables the overall number of tokens elicited from an individual speaker can be rather low; these variables are not included into the statistics in Tables 3 and 4. The actual number of occurrences for such low-score variables is given in Polinsky (1994c; in press).

19  Thus the procedure was similar to the one used by Dorian (1981); Dorian, however, used the long version of the Swadesh list (225 words).

20  Note that this paper does not concern itself with changes and loss in the sound system; that system might require a different approach altogether.

21  The FGs clearly skewed the sociolinguistic variables, particularly due to the long period of the disuse of Russian (see the outliers in Fig. 3 a-c) but this seems to be a trivial fact.

22  Acquisition studies which demonstrate that these features are learned early include Gvozdev (1949), Avrutin (1994) for Russian; Slobin (1985) for a cross-linguistic overview; Bloom et al. (1994) for binding and coreference mostly in English; Grimshaw and Rosen (1990), Bloom (1995). Avrutin (1994) discusses the acquisition of the Russian subjunctive.

23  Cf. Turian and Altenberg (1991) for a similar conclusion, though based on a less dramatic case of attrition.

## References

Andrews, David (1990). "A Semantic Categorization of Some Borrowings from English in Third-Wave Émigré Russian", in M. H. Mills, ed., *Topics in Colloquial Russian*, 157-173. New York: P. Lang.

Andrews, David (1993a). "American-Immigrant Russian: Socio-Cultural Perspectives on Borrowings from English in the Language of the Third Wave". *Language Quarterly* 31, 3/4:1-24.

Andrews, David (1993b). "American Intonational Interference in Émigré Russian: A Comparative Analysis of Elicited Speech Samples". *Slavic and East European Journal* 37: 162-77.

Andrews, David (1994). "The Russian Color Categories *sinij* and *goluboj*: An Experimental Analysis of Their Interpretation in the Standard and Émigré Language". *Journal of Slavic Linguistics* 2: 3-21.

Avrutin, Sergey (1994). *Psycholinguistic Investigations in the Theory of Reference*. Ph. D. Diss., MIT.

Babby, Leonard (1980). *Existential Sentences and Negation in Russian*. Ann Arbor: Karoma.

Babby, Leonard (1984). "Prepositional Quantifiers and the Direct Case Condition in Russian", in M. Flier & R. Brecht, eds., *Issues in Russian Morphosyntax*, 12-36. Columbus: Slavica.

Babyonyshev, Maria, Ronald Fein, Jennifer Ganger, and Sergey Avrutin (1994a). "Maturation of A-Chains: Preliminary New Evidence from the Acquisition of Russian Unaccusatives", *Proceedings of SCIL IV*. Rochester.

Babyonyshev, Maria, Ronald Fein, Jennifer Ganger, David Pesetsky, Kenneth Wexler, and Sergey Avrutin (1994b). "Maturation of Syntax: New Evidence from the Acquisition of Unaccusatives in Russian". *Paper presented at the 19th Annual Boston University Conference on Language Development.*

Bates, Elizabeth, Philip Dale, and Donna Thal (1993). "Individual Differences and Their Implications for Theories of Language Development". *Project in Cognitive Neurodevelopment. Technical Report* 9304. San Diego: UCSD.

Benson, Morton (1957). "American Influence on the Immigrant Russian Press". *American Speech* 32: 257-263.

Benson, Morton (1960). "American-Russian Speech". *American Speech* 35: 163-174.

Berman, Ruth, and Dan I. Slobin (1994). *Relating Events in Narrative: A Crosslinguistic Developmental Study.* Hillsdale, N.J.: Lawrence Erlbaum Associates.

Bloom, Paul (1994). "Recent Controversies in the Study of Language Acquisition", in M. A. Gernsbacher, ed. *Handbook of Psycholinguistics*, 7-56. San Diego: Academic Press.

Bloom, Paul, Andrew Barss, Janet Nicol, and Laura Conway (1994). "Children's Knowledge of Binding and Coreference: Evidence from Spontaneous Speech". *Language* 70: 53-71.

Campbell, Lyle, and Martha Muntzel (1989). "The Structural Consequences of Language Death", in N. Dorian, ed. *Investigating Obsolescence,* 181-196. Cambridge: Cambridge University Press.

Chvany, Catherine (1975). *On the Syntax of Be-sentences in Russian.* Cambridge: Slavica.

Comrie, Bernard, Gerald Stone, and Maria Polinsky (1995). *The Russian Language in the Twentieth Century.* Oxford: Oxford University Press.

Dorian, Nancy (1981). *Language Death. The Life Cycle of a Scottish Gaelic Dialect.* Philadelphia: University of Pennsylvania Press.

Fenyvesi, Anna (1994). *Language Contact and Language Death in an Immigrant Community: The Case of Hungarian.* M. A. Thesis. University of Pittsburgh.

Grimshaw, Jane, and Sara T. Rosen (1990). "Knowledge and Obedience: The Developmental Status of the Binding Theory". *Linguistic Inquiry* 21: 187-222.

Gvozdev, Aleksandr N. (1949). *Formirovanie u rebenka grammatičeskogo stroja russkogo jazyka.* Moscow: Izd. Akademii ped. nauk RSFSR.

- Hasselmo, Nils (1974). *Amerikasvenska.*(Skrifter utgivna av Nämnden för svens språkvård, 51).Stockholm.

Jakobson, Roman (1941). *Kindersprache, Aphasie und allgemeine Lautgesetze.* Uppsala: Almquist & Wiksell.

Jakobson, Roman (1968). *Child Language, Aphasia and Phonological Universals.* The Hague-Paris: Mouton.

Lavine, James (1995). *Morphosyntactic Change in Contracting Russian of American Emigration.* Ms. Harvard University.

Longacre, Robert E. 1983. *The grammar of discourse.* New York: Plenum Press.

McKee, Cecile (1992). "A Comparison of Pronouns and Anaphors in Italian and English Acquisition." *Language Acquisition* 21: 21-54.

Mel'čuk, Igor (1985). *The Surface Syntax of Russian Numerical Expressions.* (Wiener slawistischer Almanach, 16). Wien.

Neidle, Carol (1988). *The Role of Case in Russian Syntax.* Dordrecht: Kluwer.

Polinsky, Maria (1994a)."What Happens When You Lose Aspect". *Paper presented at the UCLA Symposium on Aspect, May 1994.*

Polinsky, Maria (1994b). "The Grammar of Case Loss: American Russian". *Paper presented at AATSEEL, San Diego, December 1994.*

Polinsky, Maria (1994c). "Structural Dimensions of First Language Loss". *Chicago Linguistic Society. 30th Regional Meeting. Parasession on Variation*: 257-76.

Polinsky, Maria (1996). "Cross-Linguistic Parallels in Language Loss", in G. Bills, ed. *Language Loss.*

Polinsky, Maria (in press). "Russian in the US: An Endangered Language", in E. Golovko, ed., *Russian in Contact with Other Languages.*

Sasse, Hans-Jürgen (1992). "Language Decay and Contact-induced Change: Similarities and Differences", in M. Brenzinger, ed. *Language Death: Factual and Theoretical Explorations with Reference to East Africa,* 59-80. Berlin-New York: Mouton de Gruyter.

Sharwood Smith, Michael (1989). "Crosslinguistic Influence in Language Loss", in K. Hyltenstan and L. Obler, eds. *Bilingualism Across the Lifespan,* 185-201. Cambridge: Cambridge University Press.

Sharwood Smith, Michael, and Paul Van Buren (1991). "First Language Attrition and Parameter Setting Model", in H. W. Seliger and R. M. Vago, eds., *First Language Attrition,* 139-50. Cambridge: Cambridge University Press.

Silva-Corvalan, Carmen (1994). "The Gradual Loss of Mood Distinctions in Los Angeles Spanish". *Language Variation and Change* 6: 255-72.

Slobin, Dan I.,ed. (1985). *The Crosslinguistic Study of Language Acquisition,* vol. 1. Hillsdale: Lawrence Erlbaum Associates. Timberlake, Alan

(1993). "Russian", in B. Comrie and G. Corbett, eds., *The Slavonic Languages,* 827-886. London: Routledge.

Turian, Donna, and Evelyn P. Altenberg (1991). "Compensatory Strategies of Child First Language Attrition", in H. W. Seliger and R. M. Vago, eds., *First Language Attrition,* 207-226. Cambridge: Cambridge University Press.

Van Buren, Paul, and Michael Sharwood Smith (1985). "The Acquisition of Preposition-stranding by Dutch Learners of English". *Second Language Research* 1, 2:18-46.

Wade, Terence (1992). *A Comprehensive Russian Grammar.* London: Blackwell.

Zaliznjak, Andrej A. (1967). *Russkoe imennoe slovoizmenenie.* Moscow: Nauka.

Zemskaja, Elena A., ed. (1973). *Russkaja razgovornaja reč´.* Moscow: Nauka.

Zemskaja, Elena A., ed. (1981). *Russkaja razgovornaja reč´ Obščie voprosy. Slovoobrazovanie. Sintaksis.* Moscow: Nauka.

Zemskaja, Elena A., ed. (1983). *Russkaja razgovornaja reč´. Fonetika. Morfologija. Leksika. Žest.* Moscow: Nauka.