

Examining the effect of reduced input on language development: The case of gender acquisition in Russian as a non-dominant and dispreferred language by a bilingual Turkish-Russian child

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Abstract:

Aims and objectives/purpose/research questions: The main research question we seek to answer in the present study is: “What effect does reduced input in non-dominant and dispreferred language have on the acquisition of Russian gender morphology by a bilingual Turkish-Russian child: Is it still sufficient for its monolingual-like development or can it cause incomplete acquisition of Russian gender morphology, at least, in some domains?”

Design/methodology/approach: This study is a longitudinal case study.

Data and analysis: The main source of data collection is video and audio recordings. Twenty-five recordings are available. They cover the period of between two years and 11 months (2;11) and 4;0. The data are examined in terms of the availability of masculine, feminine and neuter form-related genders, as well as availability of feminine and masculine semantic-related genders of nouns and pronouns in the first-, second- and third-person contexts. We look into whether the data of the bilingual child is marked with deviations from monolingual Russian data and/or incomplete acquisition of gender in any domain.

Findings/conclusions: The findings of the present study, on the one hand, supports the view that, by and large, reduced to a certain degree input is still sufficient for monolingual-like language development; on the other hand, it demonstrates that reduced input may lead to non-monolingual-like and/or incomplete acquisition and, therefore, appears to be a main factor determining the development of a language and accounting for ‘its strengths and weaknesses’.

Keywords: child bilingualism, non-dominant and dispreferred language, reduced input, gender acquisition, Russian.

Introduction

This study deals with a case of bilingual first language acquisition (BFLA) where the communicative environment, status and input of the two languages are very different: one is the dominant language of the community, and the preferred language of the child and the family, while the other language is dispreferred by the child and its input comes mainly from one single source. Often in the literature, the language that is acquired in the environment of another language and which is dispreferred by the child is referred to as a weak or weaker language (Bonnesen, 2006; Döpke, 2000; Schlyter, 1993; Schlyter & Hakansson, 1994). However, Meisel (2007), addressing the status of the “weaker” language, pointed out that neither dominance nor preference refers to properties characterizing the linguistic knowledge of a bilingual child and that is why the terms “non-dominant”, “dispreferred” and “weaker” should not be used interchangeably. Only in the case of incomplete acquisition of one of the languages, that is failure to acquire certain grammatical knowledge, we can define a language in BFLA as a weaker one (Meisel, 2007). The question of whether non-dominant and/or dispreferred language in BFLA can also be a weaker language is of theoretical importance in language acquisition research because incomplete acquisition of certain properties of a language in BFLA will indicate that reduced input is likely to impose limitations on language development and that there is a certain threshold of input necessary for complete language acquisition (see also Bonnesen, 2006, Meisel, 2007).

Several studies so far (Bonnesen, 2006; Döpke, 2000; Schlyter, 1993; Schlyter & Hakansson, 1994) have looked into the acquisition of the non-dominant and/or non-preferred language in BFLA and provided evidence that the acquisition of the language may be marked with constructions that are uncommon or that are used more often and more persistently than in monolingual or balanced bilingual acquisition. However, the fact that these norm-deviant constructions are observed simultaneously with the incriminated patterns and only temporarily allowed the scholars (Bonnesen, 2006; Döpke, 2000; Meisel, 2007) to argue that these atypical constructions can be interpreted only as indicators of delay in the language development and they are unlikely to be regarded as a piece of evidence supporting the view that reduced input may result in non-monolingual-like and incomplete language acquisition. Along with it, however, Meisel (2007) admitted that though the available evidence does not

support the claim that the development of the so-called weaker language is likely to be marked with non-monolingual-like and incomplete acquisition, it does not provide data to exclude it, either, leaving the “particularly important issue” (Meisel, 2007, 496) of whether or not the reduced input in the course of the exposure to the primarily linguistic data during the optimal age period can impose limitations on the language making capacity, open.

In this article we examine the effect that reduce input may have on development of the non-dominant and dispreferred language; particularly, we investigate whether reduced input in the non-dominant and dispreferred language of a bilingual Turkish-Russian child is still sufficient for its monolingual-like language development or whether it may result in its incomplete acquisition, at least, in some domains. In the study, clearly dominant language of the community, and preferred language of the family and the child is Turkish. Russian is the first language of the child’s multilingual mother. But as a result of the language preference in the wider context, the Russian input for the child is highly restricted, and the usage is confined to mother-child interaction in the family setting. We are interested in exploring what happens to the child’s Russian, specifically gender morphology, when the input and usage are so limited. We focus on the development of gender morphology for the reason that grammatical gender has been universally defined as a vulnerable domain for acquisition failure, and several studies among the range of different languages, including Russian, investigating gender development in different acquisitional contexts (e.g. Alarcon, 2011; Hulk & Cornips 2006; Montrul, 2004; Polinski, 2008; Popova, 1973; Prevost, 2004, 2009) provided evidence that for both monolingual and bilingual learners, the production of gender is marked with numerous errors and remains non-target-like at a relatively late age.

The main research question we seek to answer in the present study is: “What effect does reduced input in non-dominant and dispreferred language have on the acquisition of Russian gender morphology by a bilingual Turkish-Russian child: Is it still sufficient for its monolingual-like development or can it cause incomplete acquisition of Russian gender morphology, at least, in some domains?”

Whilst it may be necessary here to use terms such as “failure” and/or “incomplete acquisition” to describe non-production of expected or required forms, we by no means imply any sort of incapability of the child to acquire them.

The article is structured as follows: first, we will provide a description of the Russian gender morphology and summarize studies investigating the acquisition of Russian gender morphology by monolingual children, which will be used as the normative data for comparison. Then, the study will be introduced. The main body of the article will deal with the analysis of the use of Russian gender in the Turkish-Russian participant’s data. Finally, the findings will be discussed and conclusions will be drawn.

Russian gender

Gender in the Russian language is of semantic-formal nature, which means that grammatical gender is assigned by semantic and formal rules: semantic rules are applied to animate nouns and pronouns denoting/ referring to humans, while formal rules are applied to nouns denoting inanimate objects and animals (Ceytlin, 2005; Comrie, 1987; Timberlake, 1993).

There are two semantic-related genders in Russian, masculine and feminine, and all animate nouns and pronouns denoting/referring to humans are given semantic-related gender according to their biological sex. For example, the word *мужчина* [*mužčina*] (*man*) is a masculine noun because according to its semantics, the word denotes a male; on the other hand, the word *сестра* [*sestra*] (*sister*) is a feminine noun because it denotes a female.

Similarly, the personal pronouns *я* [*ja*] (*I*) and *ты* [*ty*] (*you*) require either masculine or feminine gender agreements depending on whether the speaker and the interlocutor is a male or a female.

In contrast, form-related gender, masculine, feminine and neuter, depends on the declension type of a noun (Ceytlin, 2005; Comrie, 1987; Corbett, 1982; 1991;

Timberlake, 1993). In Russian, declension type of a noun and form-related gender are largely isomorphic – the members of a given declension as a rule condition the same agreement and belong to the same gender. Table 1 presents the major declension classes of Russian nouns (Corbett, 1982; Corbett, 1991; Corbett & Fraser, 1993)*. Russian nouns of declension type 1 are masculine, nouns of declension types 2 and 3 are feminine and nouns of declension type 4 are neuter (see Table 1).

TABLE 1 IS HERE

Form-related gender and declension of most Russian nouns can be determined according to their phonological form in the nominative case. Nouns ending in a non-palatalized consonant are masculine and belong to declension type 1, nouns ending in *-a* [-a], *-я* [-ja] are feminine and belong to declension type 2, nouns ending in *-o* [-o], *-e* [-e] are neuter and of declension type 4.

However, there are nouns in Russian, those ending in a palatalized consonant, which can be either masculine of declension type 1 or feminine of declension type 3, and the gender of such nouns cannot be determined relying on their phonological properties.

Further, Russian has a particular group of nouns denoting people, called nouns of common gender (such as *неряха* [nerjaha] (*sloven*), *обжора* [obžora] (*glutton*), *etc.*). These nouns, as a rule, end in *-a* [a] or *-я* [ja] (endings specific for feminine) but they follow the rule of semantic-related gender and manifest grammatical features either of masculine or feminine nouns, depending on the biological sex of their referent.

Additionally, some nouns including those denoting professions or occupations may also refer both to men and to women. Though according to their phonological form, such nouns (e.g. *филолог* [filolog] (*linguist*), *педагог* [pedagog] (*teacher*), *близнец* [bliznec] (*twin*)) may belong to declension type 1, which are of masculine form-related gender, they follow the rule of semantic-related gender and manifest gender assignment according to the biological sex of their referent, either masculine or feminine.

Finally, gender use in animate non-proper nouns (those denoting animals), such as *пчела* [*pčela*] (*bee*), *леопард* [*leopard*] (*leopard*), does not follow the rule of semantic-related gender in the Russian language but it is generally based on the morpho-phonological properties of the nouns.

The Russian gender is manifested in the agreements of nouns and pronouns with adjectives, participles, demonstratives, possessive pronouns, past tense verbs, and some numerals, as well as in the substitution of the nouns with corresponding personal pronouns (see Table 2).

TABLE 2 IS HERE

Acquisition of Russian gender by monolingual Russian children

Studies investigating gender acquisition by monolingual Russian children (Ceytlin, 2000, 2005; Gvozdev, 1961, 1981; Popova, 1973) reported that acquisition of semantic-related and form-related genders differ greatly.

Precisely, acquisition of form-related gender is more difficult for Russian children, it has been recorded to be marked with numerous errors and not completed till the age of 7;0 (Ceytlin, 2000, 2005; Gvozdyev, 1961, 1981; Popova, 1973; Rodina & Westergaard, 2012). Popova (1973) in her study of the acquisition of form-related gender by monolingual Russian children examined agreements of inanimate nouns with verbs in the past tense in the production of 55 monolingual Russian preschool children between ages of 1;10 and 3;06. The findings of the study revealed great variations in the acquisition of form-related gender within the monolingual group. Popova (1973) stated that “gender agreement was established only in 13 children (24%; age 1;10-3;06) ... and the remaining 42 children (70%; age 1;10-3;05) ... did not yet use correct gender agreements” (p. 271).

Scholars looking into acquisition of form-related gender in Russian by monolinguals reported that initially, form-related gender is presented only by two genders:

masculine and feminine genders, and neuter gender is not available in the child's speech (Ceytlin, 2000, 2005; Gvozdev, 1961; Popova, 1973).

Since initially Russian children master canonical cases, by contrasting nouns with *-a* [*-a*] ending to the nouns without any ending, and form the gender system only with two cases, feminine and masculine, they tend to make numerous mistakes in the gender assignments of inanimate nouns that do not end in *-a* [*-a*] or in a non-palatalized consonant (Ceytlin, 2000, 2005; Gvozdyev, 1961, 1981; Popova, 1973; Rodina & Westergaard, 2012).

Among all the form-related genders, neuter gender is acquired the latest and it causes a lot of difficulties to Russian children (Ceytlin, 2000, 2005; Gvozdev, 1961, 1981; Popova, 1973). The main reason for this is that the unstressed ending *-o* [*-o*] of neuter nouns is pronounced as *-a* [*-a*] in Russian and coincides with the nominative case ending of the feminine gender, while in the oblique cases, the declension of neuter nouns coincides with that of masculine nouns (Ceytlin, 200, 2005).

Regarding error patterns in the use of form-related gender observed in the data of monolinguals, during the first stage, Russian children tend to overuse feminine gender in place of masculine and neuter, however, with age this tendency declines and after the age of 3;0 they start overusing masculine gender, while the correct gender use (about 25%), remains on approximately the same level. Popova (1973) defined several stages of form-related gender acquisition by monolingual Russian children:

1. Predominance of feminine gender in agreement;
2. Predominance of masculine gender in agreement;
3. Confusion between both genders;
4. Correct gender use (p. 280).

In contrast to the acquisition of form-related gender, the acquisition of semantic-related gender does not cause difficulties to monolingual Russian children and can be defined as error-free after the age of 3;0 (Ceytlin, 2000, 2005; Gvozdev, 1961, 1981). It depends on the child's cognitive development, specifically his or her ability to distinguish between biological sexes, male or female, which, as a rule, develops by

the age of 3;0 and after this age Russian monolingual children do not make errors in the use of the semantic-related gender (Ceytlin, 2000, 2005; Gvozdev, 1961, 1981). The only type of error that was reported in monolingual Russian acquisition of semantic-related gender is overuse of feminine gender in the first-person context observed in the production of monolingual Russian boys before the age of 3;0. This error pattern is related to the predominant frequency of feminine gender forms in children's environment as the majority of baby caretakers are women. With further developing ability to distinguish between biological sexes, the overuse of feminine semantic-related gender in the first-person context disappears and after the age of 3;0, acquisition of semantic-related gender by Russian monolinguals was reported to be completed and their use of the semantic-related gender error-free.

To sum up the findings of the above reviewed studies, Table 3 provides the summary of tendencies observed among monolingual Russian preschool children related to gender acquisition.

TABLE 3 IS HERE

The study

The participant

The subject of the present study is S., the son of the first author. S. was born in Ankara, Turkey and he is the only child of the family. From birth, S. has heard two languages, Turkish and Russian. However, Turkish has been the dominant and preferred language in the child's linguistic environment. S.'s father, a native speaker of Turkish, always addresses him only in Turkish. Turkish has been also used for communication among the members of the family. Besides, S. constantly heard Turkish from Turkish friends, relatives and people outside during visits to public places. At the age of 2;0, S. started attending playgroups where he played with Turkish children for about three hours three times a week. S.'s Russian input has come from the mother, who never sticks to the one-parent-one-language approach and addresses S. in both Russian and Turkish. However, from the birth, S. has been read Russian books regularly. S has never been to Russia but his Russian relatives have visited Turkey two-three times a year for two to three weeks from the time when S. was 10 months old. As a result of such an imbalance between the languages in the

environment, S. has always used Turkish as the preferred language of communication. At the age of 1;07, S.'s first words appeared, predominantly in Turkish with few exceptions in the form of indeterminate utterances, which with the further language development were clarified to be Turkish as well. At the age of 2;0, he started to produce two-word utterances in Turkish, and four months later, S. turned into a talkative Turkish-speaking child. Yet, in everyday family interaction, it was clear that S. was also able to understand Russian. But he persistently refused to produce a single word in Russian. In order to trigger S.'s Russian language production, monolingual Russian relatives were invited to come to Turkey for about 6 weeks when S. was age 2; 04. It was a real push for S.'s Russian language development and the child started to speak in Russian, though he would still prefer to communicate in Turkish whenever possible and his Russian communication has been mostly limited to his interaction with multilingual mother.

Data collection and transcription

The main source of data collection was video and audio recordings. Twenty-five recordings are available. They cover the period of between 2;11 to 4;0. The recordings were made once every two weeks for at least 30 minutes each time (De Houwer, 1990). The recordings were made in the Russian language context when the child was addressed in Russian. The child was recorded in different situations, such as at home, in a friend's house, at the hotel, at the seaside, in shops, at the airport, and with different interlocutors - Russian monolinguals only, Russian monolinguals and Russian-Turkish bilinguals together, Russian-Turkish bilinguals, Russian-Turkish bilinguals and Turkish monolinguals together, and Russian monolinguals and Turkish monolinguals together. Although S. was aware that a recording was being made, he was not aware that his Russian was of particular interest and he did not mind being recorded. All the recordings were transcribed as soon as possible after the event using the CHAT format of CHILDES and later double-checked by two other native speakers of Russian for the present study.

Data analysis

The analysis of gender morphology in the present study is based on examining agreements of the nouns and pronoun *я* [ja] (I), *ты* [ty] (you), *он* [on] (he), *она* [ona] (she) and *оно* [ono] (it)-NEUT, with adjectives, participles, adjective pronouns, numerals and verbs in the past tense, as well as replacements of the nouns with the pronouns *он* [on] (he, it)-MASC, *она* [ona] (she, it)-FEM, *оно* [ono] (it)-NEUT, which indicate the correct or incorrect acquisition of the three genders in Russian (Ceytlin, 2000, p. 117). The incorrect use of gender was identified if at least one of the following conditions is fulfilled:

1. The use of an incorrect gender agreement of a noun or a pronoun with adjectives, participles, adjective pronouns, numerals and verbs in the past tense. For instance, the use of the above mentioned parts of speech in masculine with a feminine noun as presented in Example 1, or the use of a feminine agreement with the personal pronoun *ты* [ty] (you) when addressing a male interlocutor as Example 2 illustrates.

Example 1:

* <i>Мой</i>	<i>кровать</i>	* <i>большой.</i>
* <i>Мoj</i>	<i>krovat'</i>	* <i>bol'soj.</i>
[*My-POSS-PRON-MASC-NOM	bed-N-FEM-NOM	*big-ADJ-MASC-NOM]

“*My bed is big*”.

CORRECT:

<i>Моя</i>	<i>кровать</i>	<i>большая</i>
<i>Moja</i>	<i>krovat'</i>	<i>bol'saja</i>
[My-POSS-PRON-FEM-NOM	bed-N-FEM-NOM	big-ADJ-FEM-NOM]

“*My bed is big*”.

Example 2:

ADDRESSING A MALE:

<i>Ты</i>	* <i>пошла?</i>
<i>Ty</i>	* <i>pošla?</i>
[You- PRON-2 PERS-SG-NOM	*go-V-PAST-FEM]

«Are you leaving?»

CORRECT:

ADDRESSING A MALE:

<i>Ты</i>		<i>пошел?</i>
<i>Ты</i>		<i>pošel?</i>
[You- PRON-2 PERS-SG-NOM		go-V-PAST-MASC]

«Are you leaving?»

2. Substitution of a noun with a personal pronoun of an incorrect gender. To illustrate, the use of the masculine personal pronoun referring to a female or a noun of the feminine gender as shown in Example 3.

Example 3:

*Он	<i>хорошая</i>	<i>девочка.</i>
*Он	<i>horošaja</i>	<i>devočka.</i>
[*He-PRON-MASC-NOM	good-ADJ-FEM-NOM	girl-N-FEM-NOM]

“She is a good girl”.

CORRECT:

<i>Она</i>	<i>хорошая</i>	<i>девочка</i>
<i>Она</i>	<i>horošaja</i>	<i>devočka</i>
[She-PRON-FEM-NOM	good-ADJ-FEM-NOM	girl-N-FEM-NOM]

“She is a good girl”.

3. Alteration of the gender of a noun by using endings of another gender. For example, addition of a canonical ending of feminine gender *-a* [-a] to a masculine noun as illustrated in Example 4.

Example 4:

<i>У</i>	<i>меня</i>	<i>*одна</i>	<i>*листочка.</i>
<i>У</i>	<i>menja</i>	<i>*одна</i>	<i>*listočka.</i>
[At	me-PRON-1PERS-	*one-NUM-FEM-NOM	*list-N-MASC-NOM

SG-GEN

with FEM ending]

“I have one sheet of paper”.

CORRECT

<i>У</i>	<i>меня</i>	<i>один</i>	<i>листочек.</i>
<i>U</i>	<i>menja</i>	<i>odin</i>	<i>listoček.</i>
[At	me- PRON-1PERS-SG-GEN	one-NUM-MASC	list-N-MASC-NOM]

“I have one sheet of paper”.

Results

Form-related gender in S.’s production

In order to access the overall picture of form-related gender use by the Turkish-Russian child within the examined period, the number of total and correct form-related gender assignments was calculated for every recording session. For this purpose, all nouns defining inanimate objects and animals were identified and their agreements with adjectives, participles, numerals and verbs in the past tense as well as replacements of them with the pronouns *он [on]* (*he, it*)-MASC, *она [ona]* (*she, it*)-FEM, *оно [ono]* (*it*)-NEUT were identified. Table 4 presents the number of total and correct form-related gender assignments found in every recording session.

TABLE 4 IS HERE

The data analysis showed that there are 984 form-related gender assignments and 865 of them are correct, which makes 88% of correct use of form-related gender. Relying on the results of the monolingual data analyses presented in the study of Popova (1973), the percentage of the correct use of the three form-related genders in S.’s production suggests that the bilingual child’s language behaviour in the domain is similar to 24% of the best-performing monolingual Russian preschool children who took part in the research (Popova, 1973) and demonstrated correct form-related gender use in 75-100% of all the gender agreements found in their production. Thus, S. appeared to reveal a better performance related to the use of form-related gender assignments in his non-dominant and non-preferred language than the majority of his monolingual counterparts reported in the study of Popova (1973).

The data analysis revealed that all the three form-related genders are available in S.'s data. Figure 1 illustrates the distribution of gender assignments found in S.'s corpus among masculine, feminine and neuter genders.

FIGURE 1 IS HERE

As figure 1 shows, the percentage of neuter gender assignments produced by the bilingual child is significantly lower than those of masculine and feminine genders. The same tendency was recorded in the language behaviour of monolingual Russian children, who are known to acquire neuter gender the latest and to be less productive and accurate when using it in comparison with masculine and feminine genders (Ceytlin, 2000; Gvozdyev, 1961, 1981; Popova, 1973).

Further, the use of each of the three form-related genders, masculine, feminine and neuter, in S.'s data was focused on separately. The data analysis revealed that there are 460 masculine assignments found in S.'s data and 438 of them are correct, which makes 95% of the correct use of form-related masculine gender. The majority of the masculine nouns found in the data belong to canonical cases of masculine gender: those are ending in a non-palatalized consonant. There are only 7 non-canonical nouns of masculine gender available in the S.'s recordings, and the child uses correct gender assignments for all of them. Feminine gender assignments appear in the child's production 467 times and 372 of them are correct, which makes 80% of the correct use of form-related feminine gender. The majority of the feminine nouns found in the data belong to canonical cases, those are ending in *-a [-a]*. There are only 4 non-canonical nouns available in the S.'s recordings and the child uses correct gender assignments for 2 of them. The data analysis revealed that there are 57 neuter gender agreements found in S.'s data and 55 of them are correct, which makes 96% of the correct use of form-related neuter gender.

Thus relying on the separate analysis of the three Russian genders in S.'s data, it could be suggested that S. uses form-related gender assignments for the majority of feminine, masculine and neuter nouns found in his data correctly. However, similarly

to his monolingual counterparts, S. tends to use nouns of neuter form-related gender and non-canonical nouns not often.

As the last step of the form-related gender analysis, the errors made by S. were investigated for the general pattern of gender overuse. Figure 2 presents the pattern of gender overuse in the child's production during the period from 2;11.09 to 4;0.02.

FIGURE 2

As it is apparent from Figure 2, during the whole investigated time S. tends to overuse masculine gender. In the incorrect gender agreements, masculine gender is used for both feminine and neuter genders. The gender overuse pattern that S. reveals is similar to that of monolingual Russian children at this age, who were also reported to overuse masculine gender when they were mistaken in the gender use (Popova, 1973).

To sum up the findings of the data analysis related to the use of form-related gender in the Russian language by the Turkish-Russian child, the following conclusions could be drawn:

1. The high percentages of correct form-related gender use obtained in the overall and separate analysis of the three Russian genders suggest that S. has acquired the use of form-related gender and, moreover, the child has performed better in the domain than the majority of monolingual children before the age of 3;06, as his language behaviour in the domain is similar to 24% of his monolingual Russian counterparts who were reported to be able to form correct gender agreements in more than 75% of all the gender agreements (Popova, 1973).
2. The pattern of distribution of gender assignments among masculine, feminine and neuter nouns is similar to that reported in the monolingual research.
3. S., similarly to monolingual Russian children, does not use nouns of neuter gender and non-canonical nouns often in his production.

4. The pattern of gender overuse revealed in S.'s data is the same with that of monolingual Russian children after the age of 3;0.
5. The acquisition of form-related gender has revealed no failure in any domain and can be defined as monolingual-like.

Semantic-related gender in S.'s production

In order to assess the overall performance on semantic-related gender use of the Turkish-Russian child within the examined period, the number of correct and incorrect semantic-related gender assignments was calculated for every recording session. For this purpose, all gender assignments related to the speaker (first person context), interlocutor (second person context) and all the nouns defining humans as well as proper names were identified. Table 5 presents the number of total and correct semantic-related gender assignments found in every recording session.

TABLE 5 IS HERE

The data analysis showed that there are 549 semantic-related gender assignments and 455 of them are correct, which makes 83% of correct use of semantic-related gender. It is interesting to notice that S.'s overall performance on semantic-related gender use is not any better than his overall performance on form-related gender use: the latter was determined to be of 88% correct; moreover, the semantic-related gender use is slightly worse. This finding contradicts the general assumption about gender acquisition pattern and rate found in the Russian monolingual research according to which Russian children after the age of 3;0 are still apt to make numerous errors in gender use but nearly all of their mistakes are observed in form-related gender agreements, while semantic-related gender acquisition is considered to be error-free and completed by this age (Ceytlin, 2000, 2005; Gvozdev, 1961; 1981). It is necessary to point out that the lower percentage of correct semantic-related gender use might be due to the delay in the acquisition of semantic-related gender. If it is the case, the initial recording sessions would be expected to be with the lowest percentage of correct semantic-related gender use, followed by increasing percentage of correct semantic-related gender use during the further recording sessions. Therefore, in order to determine whether S.'s pattern might be similar to that of monolingual Russian

<i>S. (3; 01. 25</i>	<i>Da, ja</i>	<i>tebe</i>	<i>*govorila.</i>
	[yes, I-PRON-1PERS-SG- NOM	you-PRON-2PERS-SG- DAT	*say-V-PAST- FEM
<i>S. (3; 01. 25</i>	<i>“Yes, I said it to you”.</i>		

Though the errors of the kind are rare in comparison with the number of the correct uses of semantic-related gender assignments in the first-person context and they can be considered as occasional, it is necessary to say that monolingual Russian boys till the age of about 3;0 are also known to overuse feminine assignments in the first-person context, which was suggested to be linked to the predominance of women in the children’s environment during the early periods of their childhood (Ceytlin, 2000, 2005). Therefore, the few mistakes in the first-person gender assignments made by S. are consistent with language behaviour of monolingual Russian children.

Further, the use of semantic-related gender in the second-person context was investigated. For this purpose, all instances of gender agreements with the adjectives, numerals, verbs, participles referring to the interlocutor the child addresses were taken into analysis and correct and incorrect gender agreements in the second-person context were calculated for every recording session. Table 6 presents the use of semantic-related gender in the second-person context found in S.’s data.

TABLE 6 IS HERE

The data analysis revealed that there are 91 instances of semantic-related gender use in the second-person context and only 29 of them are correct (28 masculine and 1 feminine), which makes 32%. The percentage of semantic-related gender use occurred to be rather low, which suggests that S. encounters a lot of difficulties related to semantic-related gender when he addresses his interlocutor. Moreover, as it is evident from Table 6, there are 15 out of 23 recording sessions (no semantic-related gender use in the second-person context was recorded during two sessions) when the child uses semantic-related gender in the second-person context completely incorrectly, which suggests that S. might have failed in semantic-related gender acquisition in Russian in the second-person context. On the other hand, in the other 8 recording sessions the child demonstrates rather a good level of semantic-related

gender use in the second-person context with mean of 76% including 4 sessions when the percentage of correct gender use is equal to 100%. Further, in order to find out whether the child's errors in this domain are of any systematic pattern or whether they are chaotic, the pattern of semantic-related gender overuse in the second-person context was examined. Figure 4 displays the distribution of masculine and feminine gender overuse in S.'s semantic-related gender use in the second-person context.

FIGURE 4 IS HERE

Figure 4 displays that all the instances of semantic-related gender incorrect uses in the second-person context in the child's production are the cases when feminine gender is replaced with masculine gender, which means that S. uses masculine gender agreements when addressing both male and female interlocutors. Example 6 and example 7 are typical cases of masculine semantic-gender use in the second-person context found in the child's data:

Example 6:

S. (3; 02. 25) addressing *Трактор зеленый, ты привез.*
his uncle:

S. (3; 02. 25) addressing *Traktor zelenyj, ty privez.*
his uncle:

[Traktor-N-	green-ADJ-	you-PRON-	bring-V-PAST-
MASC-NOM	MASC-NOM	2PERS-SG-	MASC
		NOM	

S. (3; 02. 25) addressing *"It is a green tractor, you brought it".*
his uncle:

Example 7:

S. (3; 07, 21) addressing *: Да, *видел? Здесь сломанная, ты *видел?*
his female interlocutor:

S. (3; 07, 21) addressing *Da, *videl? Zdes' slomannaja, ty *videl?*
his female interlocutor:

[yes,	*see-V-	here	broken-	you-PRON-	*see-V-PAST-
	PAST-		PART-NOM	2PERS-SG-	MASC
	MASC			NOM	

S. (3; 07, 21) addressing *"Yes, did you see? It is broken here. Did you see?"*

his female interlocutor:

The absolute overuse of masculine semantic-related gender in the second-person contexts makes it clear why in some of the recording sessions S. demonstrates absolutely incorrect use of semantic-related gender in the second-person context, while in some other recording sessions the child does not make a single error in the use of semantic-related gender when addressing his interlocutor: when communicating with a male, the child makes no errors in semantic-related gender addressing his interlocutor; in contrast, when communicating with a female, his speech is marked with numerous errors because of the absolute masculine semantic-related gender overuse.

In this respect, the bilingual child's behaviour seems to be different from that of his monolingual Russian counterparts because, to our knowledge, the persistent overuse of masculine gender in the second-person context was not recorded in the production of monolingual Russian children even at the very early stages of their language development.

Thus relying on the data analysis of the semantic-related gender use in the second-person context, it seems possible to suggest that S. has failed to acquire the use of feminine semantic-related gender in the second-person context as he tends to substitute it with masculine whenever he addresses a female interlocutor.

Finally, the analysis of semantic-related gender use in the third-person context was based on gender agreements between animate nouns and pronouns denoting/referring to humans and different parts of speech, such as adjectives, numerals, verbs in the past tense, participles, as well as substitution of nouns denoting humans with the personal pronouns were taken into account and correct and incorrect semantic-related gender uses were calculated. The data analysis revealed that there are 226 instances of semantic-related gender use in the third-person context and 200 of them are correct, which makes 88%. The data analysis showed that among the 200 instances of correct semantic-related gender use in the third-person context, 92 belong to feminine gender and 108 to masculine gender. Thus taking into consideration the high percentage of correct semantic-related gender use in the third-person context and relying on the criteria suggested by Brown (1973), according to which a phenomenon is considered

to be acquired if it appears at least in 90% correctly in three sequential recordings, it could be concluded that S. has acquired the use of semantic-related gender for the third person. The instances of semantic-related gender overuse in the third-person context found in S.'s data occurred to be bidirectional, that is the child replaces masculine gender with feminine and vice versa, though the overuse of masculine gender happens more often.

To sum up the findings of the data analysis related to the use of semantic-related gender in the Russian language by the Turkish-Russian child, the following conclusions could be drawn:

1. S. has acquired the use of semantic-related gender use in the first- and in the third-person contexts.
2. S. makes a lot of errors in the use of semantic-related gender in the second-person context, the pattern of which differs from those reported in monolingual Russian acquisition.
3. The child has revealed an absolute tendency to overuse masculine gender when addressing his female interlocutor, which suggests that he has failed to acquire the use of feminine semantic-related gender in the second-person context.
4. Acquisition of semantic-related gender in the second-person context by S. is suggested to be different from that of his monolingual Russian counterparts and incomplete.

Discussion and conclusion

The analysis of the Russian gender acquisition by S. in the Turkish-dominant environment revealed that the bilingual child has acquired the use of the Russian form-related gender and demonstrates a very good performance in the domain if compared with monolingual Russian children. The distribution pattern of the correct form-related gender assignments among masculine, feminine and neuter nouns and the error patterns appearing in S.'s production are also similar to those typical for monolingual children after the age of 3;0. Similarly to his monolingual counterparts, S. was found to use neuter and non-canonical nouns not often. All in all, S.'s language

behaviour in the domain of the Russian form-related gender allows us to conclude that despite the reduced input in and restricted use of Russian, the acquisition of form-related gender can be defined as complete and monolingual-like.

In contrast, the analysis of the semantic-related gender use in S.'s production revealed that S. has acquired the use of semantic-related gender in the first- and third-person contexts but he has failed in the acquisition of feminine gender in the second-person context as his performance in the domain is marked with absolute overuse of masculine gender when addressing a female interlocutor. Since the existing research evidence has provided no records of such an error pattern in the semantic-related gender use among monolingual Russian children, S.'s acquisition of semantic-related gender in the second-person context suggests to differ from that of his monolingual Russian counterparts and be incomplete.

In language acquisition research, there have been three factors pointed out that could account for non-native-like and incomplete language acquisition. Those are the age of the first exposure to a language, cross-linguistic influence and reduced input (Meisel, 2011). Dealing with bilingual first language acquisition excludes the issue of the onset of acquisition as a factor that might be responsible for any deviation. Secondly, the pattern of gender use observed in S.'s production (monolingual-like acquisition of form-related, and semantic-related gender in the first and third-person contexts with absolute overuse of masculine semantic-related gender in the second-person context) cannot be explained as due to the transfer from the dominant and preferred Turkish language because gender is neither overtly expressed in nouns (or pronouns), nor does it affect agreement in the Turkish language (Kornfilt, 1997, p. 530).

The non-monolingual-like and incomplete acquisition of semantic-related gender by S. is likely to be related to the input S. has been receiving in his Russian, which generally has been limited to his interaction with the second person. This is a pattern of communication that is rather unique to the present case. The gender choice in the second-person contexts in S.'s communications with other Russian speakers when the latter address S. is, naturally, of masculine gender. Living in the non-Russian linguistic environment, S. has had very few opportunities to observe interaction between other people in Russian, particularly when a female person is addressed by

others. Apparently, the few communications when at least one of the interlocutors is female (for example, S.'s mother, grandmother or female friends), S. has had a chance to witness, occurred to be not enough for the correct interpretation of semantic-related gender use in the second-person contexts. As a result, till the age of 4;0, S. was not able to acquire semantic-related gender use in the second-person context completely and revealed gender acquisition pattern that differs from monolingual Russian children. At the age of 4;02, the gender use in the second-person context was explained to the child explicitly. To finalize the discussion about possible factors responsible for the non-monolingual-like use of semantic-related gender by the bilingual child in his non-dominant and dispreferred language, it is necessary to say that by recording the non-monolingual-like and incomplete acquisition in semantic-related gender till the age of 4; 0, we do not exclude possibility that later, with further (even reduced) exposure to the Russian language and developing cognitive development, S. might have acquired the use of feminine gender in the second-person context by himself without any explicit explanations. But even in that case, quantitative and qualitative deviation from monolingual norms in the form of the delay, distinct error patterns and sequence of gender acquisition would have been recorded.

Now returning to the research question we seek to answer, it could be concluded that the acquisition of gender in Russian in most domains (form-related masculine, form-related feminine, form-related neuter, semantic-related first person and semantic-related third person) by the bilingual Turkish-Russian child follows the monolingual norms, which means that reduced input in non-dominant and dispreferred Russian language is still sufficient for monolingual-like acquisition and which supports the universal pattern of language development. However, the acquisition of Russian semantic-related gender in the second person context by the bilingual participant was revealed to be incomplete and different from that of his monolingual counterparts. This finding may suggest that the reduced input pattern occurred to have influenced the development of the Russian gender, resulting in non-monolingual-like and incomplete acquisition of the semantic-related domain in the second-person context.

The failure to acquire the use of feminine semantic-related gender in the second-person context at a time when all the other domains of form-related and semantic-

related gender are mastered, notwithstanding the input limitation, may indicate the existence of a certain minimum input threshold necessary for complete monolingual-like language acquisition. When the quantity of input is reduced below the threshold, like in the domain of semantic-related gender in the second person context in this study, the input reduction may lead to incomplete and non-monolingual-like acquisition; however, when input is reduced but still satisfies the threshold, like in the acquisition of the other gender domains by S., the development of the non-dominant and dispreferred language is likely to follow monolingual-like pattern.

To summarize, the present study, on the one hand, supports the view that reduced to a certain degree input is still sufficient for monolingual-like language development; on the other hand, it demonstrates that reduced input may lead to non-monolingual-like and incomplete acquisition and, therefore, appears to be a main factor determining the development of a language and accounting for ‘its strengths and weaknesses’.

*In this study, we use the four-declension paradigm suggested by Corbett (1982), Corbett (1991), Corbett & Fraser (1993); however, it is necessary to note that traditional scholars, among others Aronoff (1994), Vinogradov (1972), Stankiewicz (1968), distinguish three declensions attributing nominative nouns with *-o*, *-e* endings and with zero ending to the same declension type. Such a three-declension system is taught in Russian school and high educational institutions. Zaliznyak (1967), in contrast, distinguishes only two declensions in Russian.

We use the four-class declension system in the analysis because this system is likely to be more explicit to non-native speakers of Russian as it allows to derive gender from a declension type, without specifying an additional feature in the lexicon (Corbett, 1982; 1991; Corbett and Fraser, 1993).

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Abbreviations used in examples:

ADJ	Adjective
DAT	Dative
FEM	Feminine gender
GEN	Genitive
MASC	Masculine gender
N	Noun
NOM	Nominative
NUM	Numeral
PAST	Past tense
POSS	Possessive
PRON	Pronoun
SG	Singular
1PERS	1 st person
2PERS	2 nd person

Table 1: Major noun declension classes of Russian

Noun	I. Закон	II. Комната	III. Кость	IV. Вино
	[Zakon] (Law)	[Komnata] (Law)	[Kost'] (Bone)	[Vino] (Wine)
<i>Singular</i>				
<i>Nominative</i>	Закон [Zakon]	Комнат-а [Komnat-a]	Кость [Kost']	Вин-о [Vin-o]
<i>Genitive</i>	Закон-а [Zakon-a]	Комнат-ы [Komnat-y]	Кост-и [Kost'-i]	Вин-а [Vin-a]
<i>Dative</i>	Закон-у [Zakon-u]	Комнат-е [Komnat-e]	Кост-и [Kost'-i]	Вин-у [Vin-u]
<i>Accusative</i>	Закон [Zakon]	Комнат-у [Komnat-u]	Кость [Kost']	Вин-о [Vin-o]
<i>Instrumental</i>	Закон-ом [Zakon-om]	Комнат-ой [Komnat-oj]	Костью [Kost'u]	Вин-ом [Vin-om]
<i>Prepositional</i>	Закон-е [Zakon-e]	Комнат-е [Komnat-e]	Кост-и [Kost'-i]	Вин-е [Vin-e]

Table 2: Gender agreement in the Russian language

		Masculine	Feminine	Neuter
<i>Adjective</i>	Big	Больш-ой [Bol'sh-oj]	Больш-ая [Bol'sh-aja]	Больш-ое [Bol'sh-oe]
<i>Participle</i>	Thinking	Думающ-ий [Dumajuš-ij]	Думающ-ая [Dumajuš-aja]	Думающ-ее [Dumajuš-ee]
<i>Demonstrative</i>	This	Этот [Ëtot]	Эта [Ëta]	Это [Ëto]
<i>Possessive pronoun</i>	My	Мой [Moj]	Моя [Moja]	Мое [Moje]
<i>Past tense verb</i>	Made	Сделал [Sdelal]	Сделал-а [Sdelal-a]	Сделал-о [Sdelal-o]
<i>Numeral</i>	First	Перв-ый [Perv-yj]	Перв-ая [Perv-aja]	Перв-ое [Perv-oe]
<i>Personal pronoun</i>	It	Он [On]	Она [Ona]	Оно [Ono]

Table 3: Summary of tendencies among monolingual Russian preschool children related to gender acquisition

<i>Tendency</i>	<i>Age</i>
<i>Form-related gender</i>	
<i>Heterogeneity in the rates of form-related gender acquisition among monolingual Russian children (Popova, 1973)</i>	<i>1;10-3;06</i>
<i>Only 24% of monolingual children are reported to produce correct form-related gender agreements in more than 75% (Popova, 1973)</i>	<i>1;10-3;06</i>
<i>Numerous errors in form-related gender (Gvozdev, 1961; Ceytlin, 2000, 2005; Popova, 1973)</i>	<i>After 3;0</i>
<i>Overuse of feminine form-related gender (Popova, 1973)</i>	<i>Before 3 0</i>
<i>Overuse of masculine form-related gender (Popova, 1973)</i>	<i>After 3;0</i>
<i>Difficulties with gender assignment of nouns that morpho-phonological cues contradicts their gender (Ceytlin, 2000, 2005; Rodina & Westergaard, 2012)</i>	<i>Till 7;0-8;0</i>
<i>Semantic-related gender</i>	
<i>Overuse of feminine semantic-related gender in the first-person context</i>	<i>Till 3;0</i>
<i>Accurate use of semantic-related gender in all the three-person contexts (Gvozdev, 1961; 1981; Ceytlin, 2000, 2005)</i>	<i>After 3; 0</i>

Table 4: Use of form-related gender in S. 's production

<i>Age</i>	<i>Total</i>	<i>Correct</i>	<i>Age</i>	<i>Total</i>	<i>Correct</i>
2; 11. 09	39	30	3; 06. 02	33	25
2; 11. 23	22	21	3; 06. 26	70	53
3; 0. 12	10	9	3; 07. 08	16	15
3; 01. 10	8	8	3; 07. 21	96	90
3; 01. 25	67	46	3; 08. 06	44	42
3; 02. 08	26	24	3; 08. 21	30	28
3; 02. 25	20	20	3; 09. 07	35	28
3; 03. 06	24	12	3; 09. 16	104	103
3; 03. 13	29	27	3; 10. 0	52	50
3; 04. 09	46	40	3; 10. 25	47	47
3; 04. 19	39	36	3; 11. 09	67	60
3; 05. 06	10	8	4; 0. 02	35	30
3; 05. 19	15	13			

Table 5: Use of semantic-related gender in S.'s production

<i>Age</i>	<i>Total</i>	<i>Correct</i>	<i>Age</i>	<i>Total</i>	<i>Correct</i>
2; 11. 09	8	7	3; 06. 02	5	5
2; 11. 23	7	6	3; 06. 26	15	14
3; 0. 12	5	4	3; 07. 08	15	14
3; 01. 10	7	6	3; 07. 21	36	20
3; 01. 25	14	10	3; 08. 06	27	23
3; 02. 08	14	11	3; 08. 21	34	24
3; 02. 25	24	23	3; 09. 07	42	42
3; 03. 06	8	8	3; 09. 16	50	50
3; 03. 13	48	34	3; 10. 0	35	27
3; 04. 09	1	1	3; 10. 25	55	49
3; 04. 19	19	11	3; 11. 09	24	20
3; 05. 06	21	15	4; 0. 02	23	23
3; 05. 19	12	8			

Table 6: Use of semantic-related gender in the second-person context

<i>Age</i>	<i>Total</i>	<i>Correct</i>	<i>Age</i>	<i>Total</i>	<i>Correct</i>
2; 11. 09	1	1	3; 06. 02	2	2
2; 11. 23	1	0	3; 06. 26	2	1
3; 0. 12	1	0	3; 07. 08	2	1
3; 01. 10	1	0	3; 07. 21	16	0
3; 01. 25	3	0	3; 08. 06	4	0
3; 02. 08	1	0	3; 08. 21	12	4
3; 02. 25	5	4	3; 09. 07	1	1
3; 03. 06	0	0	3; 09. 16	15	15
3; 03. 13	3	0	3; 10. 0	7	0
3; 04. 09	0	0	3; 10. 25	3	0
3; 04. 19	4	0	3; 11. 09	2	0
3; 05. 06	1	0	4; 0. 02	0	0
3; 05. 19	4	0			

Figure 1.: Distribution of gender assignments among masculine, feminine and neutral genders

■ Masculine gender ■ Feminine gender ■ Neutral gender

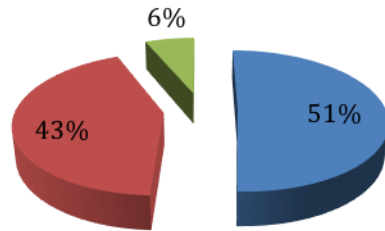


Figure 2.: Form-related gender overuse in S.'s production

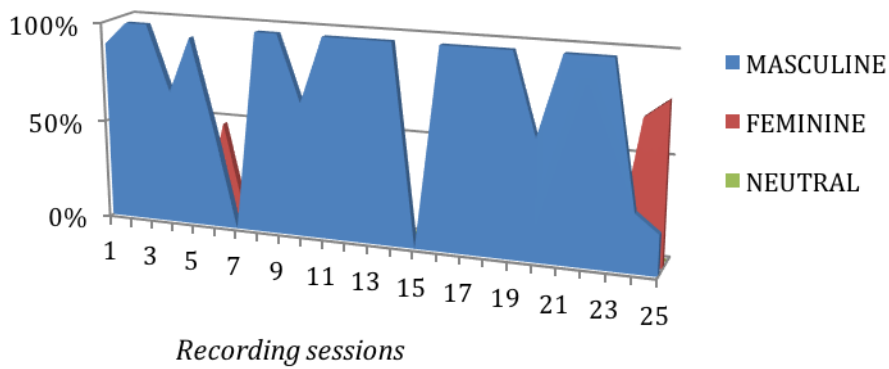


Figure 3.: Dynamic of the semantic-related gender use in S.'s production

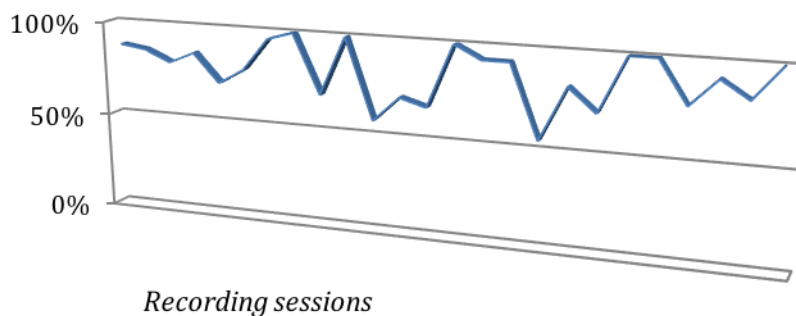


Figure 4: Overuse of the semantic-related gender in the second-person context

