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## Gender in Slavonic from the Standpoint of a General Typology of Gender Systems

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THIS paper outlines a general typology of gender systems and locates the Slavonic systems within it. There are two reasons for adopting this approach: first, it gives a new perspective on the Slavonic data; and second, it highlights those features of gender in Slavonic which are of most interest to researchers working in general linguistics. Slavonic is indeed a rich source: its gender systems are complex and varied and a good deal of work has been done both on descriptions of individual languages and on typologies of Slavonic as a whole, as the publications referred to make clear.<sup>1</sup> Moreover Slavonic scholars, notably Zaliznjak and Gladkij, have worked on the definition of gender, which lays a

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<sup>1</sup> Works on individual languages are noted at appropriate points; typological studies include: I. Fodor, 'La Typologie des langues slaves et le genre grammatical' (*Slavjanska filologija*, III, Sofia, 1963, pp. 51–58); O. Ğ. Karpinskaja, 'Tipologija roda v slavjanskich jazykach' (*Voprosy jazykoznanija*, no. 6, Moscow, 1964, pp. 61–76); id., 'Metody tipologičeskogo opisanija slavjanskich rodovych sistem', in T. M. Nikolajeva, ed., *Lingvističeskije issledovanija po obščej i slavjanskoj tipologii*, Moscow, 1966, pp. 75–116; O. G. Revzina, 'Tipologičeskij analiz grammatičeskoj kategorii roda (na materiale slavjanskich jazykov)' (*Revue Romaine de Linguistique*, 19, Bucharest, 1974, pp. 23–43); E. Štankiewicz, 'The Grammatical Genders of the Slavic Languages' (*International Journal of Slavic Linguistics and Poetics*, 11, Columbus, 1968, pp. 27–41).

foundation for typological work.<sup>2</sup> In the first section we extend Zaliznjak's approach; the problem cases which require extensions of the basic definitions are of course the most significant and interesting. Having established a method for determining the gender pattern in a given language, we examine in section II the assignment systems which allot nouns to the different genders. When assignment rules conflict, there may be nouns which do not fall completely into a single gender and have complex agreement patterns; the constraints on these agreement patterns are examined in section III. And finally, we consider the rules which determine agreement in gender with conjoined noun phrases.

## I

In our analysis of gender systems we shall follow the widely accepted view that the crucial factor is agreement. This approach has been worked out consistently by Zaliznjak.<sup>3</sup> Gladkij reaches similar results, from a more formal, mathematical treatment.<sup>4</sup> The following definition of an agreement class is based on that of Zaliznjak<sup>5</sup> but does not follow his terminology:

An agreement class is a set of nouns such that any two members standing in any grammatical form (but the same for both) require that any given agreement target in any agreement domain must take the same form (or the same set of stylistically variant forms).

The definition depends on the notion of 'grammatical form', which is a combination of case and number specifications. It is not unreasonable to base a definition of gender on the notions of case and number, since they are simpler notions, for which the morphology of the noun may provide sufficient evidence, without requiring reference to agreement.

<sup>2</sup> Constraints of space mean that only a brief outline of the proposed typology can be given here. For fuller accounts see G. G. Corbett, 'An Approach to the Description of Gender Systems', unpublished paper 1986, to appear in D. Arnold, M. Atkinson, J. Durand, C. Grover, and L. Sadler, eds, *Studies in Syntax and Universals of Language in Memory of David Kilby*, to be published by Oxford University Press; id., *Gender*, unpublished monograph 1987, to be published by Cambridge University Press.

<sup>3</sup> A. A. Zaliznjak, 'K voprosu o grammatičeskich kategorijach roda i oduševlenosti v sovremennom russkom jazyke' (*Voprosy jazykoznanija*, no. 4, Moscow, 1964, pp. 25-40) (hereafter Zaliznjak, 'K voprosu . . .'); A. M. Schenker, 'Gender Categories in Polish' (*Language*, 31, Baltimore, 1955 [hereafter Schenker, 'Gender Categories'] pp. 402-08) is a precursor.

<sup>4</sup> A. Gladkij, 'K opredeleniju ponjatij padeža i roda suščestvitel'nogo' (*Voprosy jazykoznanija*, no. 2, Moscow, 1969, pp. 110-23); id., 'Popytka formal'nogo opredelenija ponjatij padeža i roda suščestvitel'nogo', in A. A. Zaliznjak, ed., *Problemy grammatičeskogo modelirovanija*, Moscow, 1973, pp. 24-53; id., 'An Attempt at the Formal Definition of Case and Gender of the Noun', in F. Kiefer, ed., *Mathematical Models of Language*, Stockholm, 1973, pp. 159-204.

<sup>5</sup> Zaliznjak, 'K voprosu . . .', p. 30.

The point about 'stylistically variant forms' covers the situation in which a given feature set has alternative realizations; for example, the Russian adjectival forms *novoj* and *novuju* (both instrumental singular feminine) do not provide grounds for postulating distinct agreement classes.

According to the definition given, the Russian nouns *kniga* 'book' and *gazeta* 'newspaper' are in the same agreement class, since whatever their grammatical form, they require the same form of any agreeing element or 'target', irrespective of the syntactic configuration over which agreement operates (the 'agreement domain'); for example *o našej knige/gazete, kotoruju . . .* 'about our book/newspaper, which . . .'. Nouns like *pisatel'* 'writer', *djadja* 'uncle' are both in a second agreement class since in any of the cases, singular and plural, they take the same agreements, but not those of *kniga* and *gazeta*. Thus far Zaliznjak's approach gives exactly the desired results.

It is worth pointing out, however, that agreement classes lead us (after further analysis) to the number of genders into which nouns are to be divided. There is a second side to gender, the number of gender forms found in verbs, adjectives and other elements which show agreement. We must therefore distinguish *controller genders* (the genders into which nouns are divided) from *target genders* (the genders marked on agreeing elements such as verbs). Failure to make this distinction can lead to confusion, especially in debates on the number of genders in a given language. In Polish, for example, there are two target gender forms in the plural (marked, for example, on past tense verbs) but Polish clearly has more than two controller genders.<sup>6</sup> The relations

<sup>6</sup> The gender system of Polish has been extensively debated; see, for example: É. Decaux, 'Genre et archigenre, cas et archicas, sur l'exemple du polonais' (*Mélanges linguistiques offerts à Emile Benveniste*, Louvain, 1975, pp. 99-106); W. Mańczak, 'Ile rodzajów jest w polskim?' (*Język polski*, 36, Krakow, 1956, pp. 116-21); K. E. Naylor, 'Some Observations on the Grammatical Categories of the Slavic Declensions', in H. Birnbaum, ed., *American Contributions to the 8th International Congress of Slavists, 1 (Linguistics and Poetics)*, Columbus, Ohio, 1978, p. 547; R. A. Rothstein, 'O roli kategorii gramatycznych w ogólnej teorii języka: kategoria rodzaju' in L. Matejka, ed., *American Contributions to the Seventh International Congress of Slavists: Warsaw, August 21-27 1973, 1, Linguistics and Poetics*, The Hague, 1973, pp. 307-14; id., 'Uwagi o rodzaju gramatycznym i cechach semantycznych wyrazów' (*Język polski*, 56, Krakow, 1976, pp. 241-53); id., 'Gender and Reference in Polish and Russian' in C. V. Chvany and R. D. Brecht, eds, *Morphosyntax in Slavic*, Columbus, 1980, pp. 79-97; Z. Saloni, 'Kategoria rodzaju we współczesnym języku polskim', *Kategorie gramatyczne grup imiennych w języku polskim* (Prace instytutu języka polskiego, 14), Wrocław, 1976 (hereafter Saloni, 'Kategoria rodzaju') pp. 43-78, followed by a discussion paper by M. Kucala, pp. 79-87, and general discussion pp. 87-106; Schenker, 'Gender Categories'; C. A. Wertz, 'The number of genders in Polish' (*Canadian Slavonic Papers*, 19, Ontario, 1977 [hereafter Wertz, 'Genders in Polish'] pp. 50-63). A rather different view, comparing Polish with English and Russian, can be found in R. K. Herbert and B. Nykiel-Herbert, 'Explorations in Linguistic Sexism: a Contrastive Sketch' (*Papers and Studies in Contrastive Linguistics*, 21, Poznań, 1986, pp. 47-85). The literature is too extensive to be fully surveyed here; for references to earlier work see M. Kucala, *Rodzaj gramatyczny w historii polszczyzny*, Wrocław, 1978, pp. 21-22, and for more recent publications on the position of the masculine personal in the whole of West Slavonic see J. Zieniukowa, *Rodzaj męski osobowy we współczesnych językach zachodniostowańskich*, Wrocław, 1981 (hereafter Zieniukowa, *Rodzaj męski osobowy*).

between controller and target genders deserve careful study. An interesting feature of Slavonic in this respect is the existence of a *non-lexical gender*, a target gender form with no corresponding controller gender; that is, an agreement form which cannot be controlled by nouns. In Ukrainian, predicative adjectives have such a special form:

(1) v odnij simji nam žyti i lahko i prekrasno  
 in one family for us to live (is) both easy and wonderful

In (1) the subject is an infinitive phrase. The agreement form in *-o* cannot be used with a noun phrase headed by a neuter noun as subject; the neuter form is in *-e*, for example, *prekrasne* 'wonderful'. Target gender forms which do not permit a noun phrase headed by a noun as subject have been termed 'neutral' agreement forms.<sup>7</sup>

Returning now to agreement classes, it should be said that Zaliznjak's paper has led to analyses of the agreement classes in various languages.<sup>8</sup> Typically the number of agreement classes discovered increases steadily, becoming considerably larger than the generally accepted number of genders for a given language. Zaliznjak is fully aware of this problem. He takes the establishing of agreement classes to be only the first step in the analysis, a point missed by some later investigators. We must now consider principled ways in which agreement classes can be excluded from the list of genders.

### *Subgenders*

The notion of subgenders is a useful one, which is widely accepted in Slavonic linguistics. However, it is surprisingly difficult to formalize. A relatively simple case is provided by Serbo-Croat. Various agreement facts, including predicate agreement, require us to set up three agreement classes (corresponding to the traditional three genders). When we turn to attributive agreement we are forced to recognize a fourth agreement class, since nouns like *prijatelj* 'friend' and *zakon* 'law', which take identical predicate agreements, differ in the agreements of attributive modifiers in the accusative singular only. Our analysis

<sup>7</sup> G. G. Corbett, 'Neutral Agreement' (*Quinquereme — New Studies in Modern Languages*, 3, Bath, 1980, pp. 164–70); the data are from G. Y. Shevelov, *The Syntax of Modern Literary Ukrainian: the Simple Sentence*, The Hague, 1963, pp. 128–33. The situation in Polish offers interesting comparisons; information can be found in D. Weiss, 'Kongruenz vs. Kongruenzlosigkeit: Zur typologischen Entwicklung des Polnischen' (*Zeitschrift für Slavische Philologie*, 44, Heidelberg, 1984, pp. 147–63).

<sup>8</sup> H. Dalewska-Greń and K. Feleszko, 'Mesto brojeva u odredivanju gramatičkog roda i broja u srpskohrvatskom i polskom jeziku' in *Naučni Sastanak Slavista u Vukove Dane: Referati i saopštenja*, 13, no. 1, Belgrade, 1984, pp. 29–40; M. I. Ermakova, *Očerk grammatiki verchneluzičkogo literaturnogo jazyka: Morfoložija*, Moscow, 1973, pp. 22–29; id., 'Sopostavitel'noje opisanije sistem soglasovatel'nych klassov v sovremennom serboluzičkom jazyke' in E. I. Demina, ed., *Slavjanskoje i balkanskoje jazykoznanije II: Problemy morfoložii v sovremennyh slavjanskih i balkanskih jazykach*, Moscow, 1976 (hereafter Demina, *Slavjanskoje i balkanskoje jazykoznanije*), pp. 40–63; Saloni, 'Kategorija rodžaju'.

should take account of the fact that the difference between *prijatelj* and *zakon* is less significant than that between both of them and nouns like *luka* 'harbour' or *jezero* 'lake'. The following is an attempt to specify when agreement classes can be analysed as subgenders rather than as full genders:

Subgenders are agreement classes which control minimally different sets of agreements, that is, agreements differing for a small proportion of the inflectional forms of the controller (typically a single one), not including the most basic form (usually the nominative singular).

This definition fits the Serbo-Croat data well. The agreement classes represented by *prijatelj* and *zakon* differ in the accusative singular only, that is, in one inflectional form out of fourteen, if we consider only attributive agreement (though syncretisms reduce the number of independent forms for any given declensional type). By analysing two agreement classes as subgenders (animate and inanimate) of the masculine gender we capture the relative similarities and differences in the system.<sup>9</sup>

In Russian there are three genders, masculine, feminine and neuter, each divided into two subgenders, animate and inanimate. This is essentially the analysis favoured by Zaliznjak and by Gladkij. Our definition appears adequate here, though for masculine, the two agreement classes differ in two forms, rather than one, the accusative singular and the accusative plural.<sup>10</sup> Since the same case is involved in both instances and the syncretism is the same it is reasonable to treat the two agreement classes as minimally different. The type of syncretism found with the animacy features is always the same in Russian, and it has a role elsewhere in the grammar;<sup>11</sup> the subgender analysis is therefore clearly superior to one recognizing six genders. A six-gender scheme would allow agreements for animate masculines to be completely different from other animates, whereas in all examples it

<sup>9</sup> Note that the grammatical divisions of genders and subgenders do not reflect directly the natural semantic classifications like those proposed, for example, in L. Hjelmslev, 'Animé et inanimé, personnel et non-personnel' (*Travaux de l'Institut de linguistique de la Faculté des Lettres de l'Université de Paris*, 1, Paris 1956, pp. 155-99), reprinted in *Travaux du Cercle Linguistique de Copenhague*, 12, Copenhagen 1959, pp. 211-49; and in *Essais linguistiques*, Paris, 1971, pp. 220-58; in semantic terms, animate vs. inanimate is a major distinction, while in the gender systems of Slavonic it is a subgender, ranking below the main genders.

<sup>10</sup> There is evidence that neuter animates are also beginning to take animate agreements in the singular as an alternative to inanimate forms (V. A. Ickovič, 'Suščestvitel'nyje oduševlennyje i neoduševlennyje v sovremennom russkom jazyke (norma i tendencija)' (*Voprosy jazykoznanija*, no. 4, Moscow, 1980 [hereafter Ickovič, 'Suščestvitel'nyje oduševlennyje i neoduševlennyje'] p. 88). They are thus becoming less like feminines and more like masculines. The change represents a further stage in the integration of animacy into the gender system. Compare the situation in Slovene as in J. Toporišič, 'K teoriji spola v slovenskem (knjižnem) jeziku' (*Slavistična revija*, 29, Ljubljana, 1981, p. 82).

<sup>11</sup> G. G. Corbett, 'Syntactic Features' (*Journal of Linguistics*, 17, Cambridge, 1981, pp. 55-76).

is syncretism of accusative and genitive agreeing forms which is involved. Russian also provides the justification for the last part of our definition. If the agreement form for the accusative singular is analysed as equal to nominative or genitive, depending on subgender, then the only remaining difference between masculine and neuter is the agreements with the nominative singular. According to our definition, this fact prevents their being reanalysed as subgenders of a non-feminine gender. We can thus retain the accepted three genders; Zaliznjak and Gladkij also try to retain traditional insights as far as possible.

*Over-differentiated targets*

We continue with methods which allow us to restrict the number of agreement classes which are recognized as genders. In analyses which produce large numbers of agreement classes, marginal targets may be included. Zaliznjak discusses briefly Russian collective numerals such as *dvoe* 'two', which can be used with some but not all nouns.<sup>12</sup> He does not use them to set up further agreement classes; the use of *dvoe* rather than *dva* 'two' can be considered a matter of co-occurrence restrictions rather than a question of agreement. Several examples of such items being used greatly to complicate gender patterns can be found in the literature.

There are, however, more serious problems with apparent agreement targets which permit more distinctions than do typical targets in the language: we term such targets 'over-differentiated'.<sup>13</sup> Consider Polish *dwa* 'two' (a normal numeral, not a collective) which, unlike other attributive modifiers, distinguishes feminine gender from others in the plural. Schenker bases a good deal of his analysis on it,<sup>14</sup> while Zaliznjak, considering the similar case of *oba* in Russian, dismisses it in a footnote, saying that the feminine forms are being lost.<sup>15</sup> The fact that such forms are disappearing (speakers have some problems with Polish *dwa* as well) confirms their marginal status. When a small number of targets serves to establish agreement classes in excess of those found on the basis of typical targets, these additional agreement classes will not be recognized as genders. Rather the over-differentiated targets should be marked lexically.

It is worth considering the difference between subgenders and agreement classes induced by over-differentiated targets. In the former case, agreement classes are separated by a distinction which is widely and consistently indicated on agreement targets, but only for a small

<sup>12</sup> Zaliznjak, 'K voprosu . . .', p. 30.

<sup>13</sup> The term is from L. Bloomfield, *Language*, New York, 1933, pp. 223-24.

<sup>14</sup> Schenker, 'Gender Categories', pp. 402-08.

<sup>15</sup> Zaliznjak, 'K voprosu . . .', p. 31.

proportion of the inflectional forms of the controller. Over-differentiated targets do not comprise a whole target type, but a small number of irregular items, which should be lexically marked as such.

### *Inquorate genders*

Inquorate genders are those postulated on the basis of an insufficient number of nouns, which should be marked as exceptions in the lexicon. Consider the following nouns from Serbo-Croat:<sup>16</sup> *akt* (masc.) 'document' / *akta* (neut. pl.) 'documents', *oko* (neut.) 'eye' / *oči* (fem. pl.) 'eyes', *mače* (neut.) 'kitten' / *mačići* (masc. pl.) 'kittens'. These clearly do not fit into the same agreement patterns as ordinary masculine, feminine and neuter nouns. In principle, the agreement class consisting of nouns taking the agreement forms Ø (singular) and *a* (plural) is just as much an agreement class as that whose nouns take Ø (singular) and *i* (plural). The question is whether three new genders should be recognized for nouns like *akt*, *oko* and *mače*. Such genders can be excluded since the number of nouns is small and since an exceptional marker is readily available. An irregular feature marking can indicate that *akt*, for example, takes masculine agreements when singular, and neuter when plural. The problem can be handled in this straightforward way since the target gender forms required are all regular; it is merely the combination of forms according to the number of the controller which is exceptional. The mere fact that forms from other genders are combined does not automatically exclude the possibility that they may be an independent gender; Rumanian is a language where this is the case. But when the number of nouns involved is small, as in Serbo-Croat, we treat the class as 'inquorate'.<sup>17</sup> It makes sense to handle the gender by means of an exceptional marker since the morphology is also irregular; the different morphology of singular and plural in these examples is the source of the different gender agreements.

### *Consistent agreement patterns*

There are further types of noun which do not belong to an agreement pattern matching any of the established genders. Zaliznjak considers

<sup>16</sup> M. Ivić, 'Obeležavanje imeničkog roda u srpskohrvatskom književnom jeziku' (*Naš jezik*, 10 (n.s.), sv. 7-10 Belgrade, 1960 [hereafter Ivić, 'Obeležavanje . . .'] p. 199); id., 'Relationship of Gender and Number in Serbocroatian Substantives' (*International Journal of Slavic Linguistics and Poetics*, 6, Columbus, 1963 [hereafter Ivić, 'Gender and Number'] p. 56); id., 'Tipovi imeničkog roda u srpskohrvatskom književnom jeziku' (*Zbornik za filologiju i lingvistiku*, 9, Novi Sad, 1966, pp. 43-45). There are also several useful articles on Serbo-Croat in general in *Rod i broj u srpskohrvatskom jeziku* (*Naučni sastanak slavista u vukove dane: referati i saopštenja* 13/1), Belgrade, 1984.

<sup>17</sup> Comparable Czech examples are given in Y. Millet, 'L'Accord animé||inanimé en tchègue contemporain' (*Studia z filologii polskiej i słowiańskiej*, 20, Warsaw, 1981, p. 159).

nouns like Russian *sirota* 'orphan', which can take masculine or feminine agreements.<sup>18</sup> He proposes to treat such nouns as comprising two homonyms, and so not to recognize a new gender.<sup>19</sup> But nouns like *vrač* 'doctor' cause much more serious problems, which he does not consider. Once again we can treat them as having two homonyms. *Vrač*, when denoting a male, takes normal masculine animate agreements. But *vrač* denoting a female is more complex. In attributive position two forms are possible: *novyj* (masc.) / *novaja* (fem.) *vrač* 'the new doctor', the masculine being the more common. In the predicate too, there is a choice: *vrač prišel* (masc.) / *prišla* (fem.) 'the doctor came'; here the feminine is more common.<sup>20</sup> The relative pronoun is usually feminine<sup>21</sup> and the personal pronoun is always feminine. Clearly then *vrač* (denoting a woman) does not fit into any of the main genders. Furthermore, there are many nouns like it, but these do not take exactly the same agreements. For example, *buchgalter* '(female) accountant', is more likely to take feminine agreements than is *vrač*. It is likely that many nouns of this type, strictly speaking, belong to separate agreement classes, creating a large number of agreement classes, a most unwelcome result for Zaliznjak's approach.

The solution lies in the notion of 'consistent agreement patterns'. These are tacitly assumed in the analysis of gender systems, but this

<sup>18</sup> Zaliznjak, 'K voprosu . . .', p. 27.

<sup>19</sup> Note, however, that nouns of this type are not so straightforward; see, for example D. B. Crockett, *Agreement in Contemporary Standard Russian*, Cambridge, Mass., 1976, pp. 69–72; L. L. Iomdin, 'O russkich suščestvitel'nych tak nazyvajemogo obščego roda' (*Izvestija AN SSSR: Serija literatury i jazyka*, 39, no. 5, Moscow, 1980, pp. 456–61); A. B. Kopeliovič, 'K voprosu o kodifikacii imen suščestvitel'nych obščego roda', in V. A. Ickovič, G. I. Miš'kevič and L. I. Skvorcov, eds, *Grammatika i norma*, Moscow, 1977, pp. 178–92; and R. A. Rothstein, 'Sex, Gender and the October Revolution', in S. R. Anderson and P. Kiparsky, eds, *A Festschrift for Morris Halle*, New York, 1973, p. 465. The types of noun which are included in this type in Russian are considered by V. Vasčenko, 'Grammatičeskaja kategorija obščego roda v russkom jazyke' (*Voprosy jazykoznanija*, no. 5, Moscow, 1984, pp. 60–68) and a comparative perspective is provided by P. Herrity, 'Agreement with Epicoena and Masculine Nouns in –a in the Slavonic Languages' (*Slavonic and East European Review*, 61, London, 1983, pp. 41–54).

<sup>20</sup> G. G. Corbett, *Hierarchies, Targets and Controllers: Agreement Patterns in Slavic*, London, 1983 (hereafter Corbett, *Hierarchies*), pp. 30–39; M. V. Kitajgorodskaja, 'Variativnost' v vyraženií roda suščestvitel'nogo pri oboznačenií ženščin po professii', in L. P. Krysin and D. N. Šmelev, eds, *Social'no-lingvističeskije issledovanija*, Moscow, 1976, pp. 144–55; I. P. Mučnik, *Grammatičeskije kategorii glagola i imeni v sovremennom russkom literaturnom jazyke*, Moscow, 1971, pp. 228–33; the comparable situation in Polish is considered by E. Wiese, 'Zu einigen Problemen der Kategorie des Genus von Personenbezeichnungen in der polnischen Sprache der Gegenwart', in R. Eckert, E. Eichler, M. Komárek and R. Zimek, eds, *Zur grammatischen und lexikalischen Struktur der slawischen Gegenwartssprachen*, Halle, 1968, pp. 101–02.

<sup>21</sup> N. A. Janko-Trinickaja, 'Naimenovaniye lic ženskogo pola suščestvitel'nyimi ženskogo i mužskogo roda' in A. E. Zemskaja and D. N. Šmelev, eds, *Razvitije slovoobrazovanija sovremenogo russkogo jazyka*, Moscow, 1966 (hereafter Janko-Trinickaja, 'Naimenovaniye . . .'), pp. 193–94; I. A. Mel'čuk, *Poverchnostnyj sintaksis russkich čislovyh vyraženií*, Vienna, 1985 (hereafter Mel'čuk, *Poverchnostnyj sintaksis*), p. 476, considers the feminine to be obligatory.

part of the analysis is not normally made explicit. In the case of Russian, the agreeing elements take the forms given in Table 1.

TABLE 1. Consistent agreement patterns in Russian

attributive adjective	predicate	relative pronoun	personal pronoun	traditional gender
yj	∅	yj	on	masculine
aja	a	aja	ona	feminine
oje	o	oje	ono	neuter

(This is of course a simplified table; the full version would include all case/number combinations, and therefore the animate and inanimate subgenders.) The question is how we can justify this analysis, given that there are nouns like *vrač* which take other combinations of agreements. In the case of Russian there are phonological clues (*-a* in the feminines, for example) but this is not always a reliable indicator. There are two important factors: first, the vast majority of nouns which take *-yj* also take *-∅* and *on*, and second, these are nouns for which we can give absolute rules — they always take the same agreements.

Each horizontal line of the table above represents a 'consistent agreement pattern', which we define as follows:

A consistent agreement pattern is a set of target gender forms such that:

1. the agreement class it induces is as large as possible;
2. agreement rules relating to this agreement class will be simple and exceptionless.

Bear in mind that the number of target genders in the singular may differ from that in the plural and that different targets may distinguish different numbers or patterns of target genders. However, when targets make the same distinctions, then forms which occur within the same consistent agreement patterns are realizations of the same target gender. The notion of consistent agreement pattern gives us a principled way of capturing the intuition that, for example, a feminine marker on an attributive modifier is 'the same as' a feminine marker on a verb, even if they are phonologically different. The obvious method of matching, say, attributive and predicate agreement forms, that is by requiring that they should occur with one and the same noun, proves inadequate; the problem is that there are nouns like Russian *vrač* 'doctor', which can take different agreements at the same time:

- (2) naš (masc.) *vrač* *prišla* (fem.)  
 our doctor came

It is the notion of consistent agreement pattern which allows us to differentiate the agreements in (2), and so to give an account of nouns like *vrač*.<sup>22</sup> Of course, the majority of nouns belong to agreement classes which have a consistent agreement pattern and which are recognized as genders or subgenders. But our concern here is with those, like *vrač*, which do not. Such nouns take part of their agreements from one consistent agreement pattern and part from another. They are therefore labelled 'hybrids'; they must be marked as exceptional (which is confirmed by the degree of variability within the group) and, since the agreements they take do not comprise a consistent agreement pattern, we do not recognize them as a gender. The interesting agreement patterns of nouns of this type will be discussed in Section III.

In this section we have seen how Zaliznjak's analytical technique can be refined so as to attain the goal he set, namely to give a sounder theoretical basis for the traditional gender classification. We have seen how certain agreement classes are not recognized as independent genders. The purpose is not of course that they should be excluded from consideration, but rather that their specific interest should be highlighted.

## II

The agreement class approach provides the analytical technique for the linguist to determine the gender pattern in a given language and for establishing the gender of any given noun. Clearly, however, we must also account for the fact that the native speaker must 'know' the gender of each noun, in order to produce the required agreements. One hypothesis would be that the gender of each noun is remembered individually. This appears unlikely. An alternative view is that gender can be derived from other information which must in any case be part of the lexical entries of nouns. The rules involved are termed 'gender assignment rules'. They are of practical and theoretical importance, even if they allow a proportion of exceptions, a point made forcefully by Mel'čuk.<sup>23</sup> In some languages, for example in Dravidian languages like Tamil and Telugu, the meaning of a noun is sufficient to determine its gender. Slavonic does not have any strict semantic systems of this type.

<sup>22</sup> For textual examples like (2) see Janko-Trinickaja, 'Naimenovanije . . .', pp. 192-94. Nouns like *vrač* are too numerous to be treated as an inqorate gender. Given their ability to take two types of agreement, and especially the variability involved, we need the notion of consistent agreement pattern to ensure that such nouns do not form the basis of genders, rather than the more straightforward ones.

<sup>23</sup> I. A. Mel'čuk, 'Statistics and the relationship between the gender of French nouns and their endings', in V. Ju. Rozencvejg, ed., *Essays on Lexical Semantics*, 1, Stockholm, 1974, pp. 11-42; first published in *Bjulleten' ob'edinenija po problemam mašinnogo perevoda*, 7, 1958, pp. 13-40.

Of course, semantic criteria are sufficient for many nouns in Slavonic; this is fully expected since all gender systems have a semantic core. Typically in Slavonic, for sex-differentiable nouns (those denoting humans and those denoting animals whose sex matters to humans, notably domestic animals), sex determines gender, males being masculine and females feminine. The situation is not invariably so straightforward; in some Polish dialects, nouns denoting girls and unmarried women are neuter and, in one small dialect area, masculine.<sup>24</sup>

Though many nouns can be assigned to a gender by the semantic criterion, a large proportion remains as a semantic residue. In some languages, for example the Cushitic language Afar,<sup>25</sup> phonological information is sufficient to determine gender in such cases. This is not so in Slavonic, as consideration of sets of examples like Russian *portfel'* (masculine) 'briefcase' and *pyl'* (feminine) 'dust' shows. If, as many believe, the stem rather than the nominative singular is stored, this makes the attempt to base assignment on phonological data more difficult, since we should now add stems like *nedel'* - 'week' and *pol'* - 'field' to the list. On the other hand, since morphological information is required in the lexical entries of nouns in Slavonic, this information can be used for gender assignment. Given an appropriate account of the declensional classes, the declension of a noun provides adequate information to predict its gender. This point has been argued at length elsewhere and so the evidence will not be presented in detail here.<sup>26</sup> The analysis provides the motivation for postulating four declensional classes for Russian. Note too that indeclinability is also a predicting factor, as is information concerning the noun's derivation in the case of diminutives. While Russian is a particularly clear case (some other Slavonic languages appear to allow more exceptions),<sup>27</sup> we may

<sup>24</sup> A. Zaręba, 'Osobliwa zmiana rodzaju naturalnego w dialektach polskich' (*Zbornik Matice srpske za filologiju i lingvistiku*, 17-18, Novi Sad, 1984-85, pp. 243-47). Note too the special use of the neuter, the 'evasive neuter' for reference either to male or female in Polish, described by N. Gotteri, 'The Evasive Neuter in Polish', in F. E. Knowles and J. I. Press, eds, *Papers in Slavonic Linguistics II*, Birmingham, 1984, pp. 1-8.

<sup>25</sup> E. M. Parker and R. J. Hayward, *An Afar-English-French Dictionary (with Grammatical Notes in English)*, London 1985, p. 225.

<sup>26</sup> G. G. Corbett, 'Gender in Russian: an Account of Gender Specification and its Relationship to Declension' (*Russian Linguistics*, 6, Dordrecht, 1982, pp. 197-232). In this paper it is shown that the alternative, predicting declension from gender, cannot account for the difference between the two classes of feminine (*komnata* vs. *noč'*). (It also includes an extensive bibliography on gender in Russian.) See also O. G. Revzina, 'Osnovnyje čerty struktury grammatičeskoj kategorii roda' in Demina, *Slavjanskoje i balkanskoje jazykoznanije*, pp. 10-14. Ivić, 'Obležavanje . . .' and id., 'Gender and Number' shows how gender relates to morphology in Serbo-Croat.

<sup>27</sup> T. Rokicka, 'Próba półautomatycznego rozpoznawania rodzaju gramatycznego rzeczowników polskich na podstawie graficznej postaci mianownika (1. poj.)' (*Polonica*, 6, Wrocław, 1980, pp. 165-80).

nevertheless say that morphological information plays a key role in gender assignment in Slavonic.<sup>28</sup>

While a substantial proportion of nouns in Slavonic is not covered by the semantic criterion for assignment to gender (and so the morphological criterion operates), the subgenres are largely semantic. Thus in Russian, animate nouns are those denoting entities which live and move, with relatively few exceptions.<sup>29</sup> Some other languages allow larger numbers of semantically inanimate nouns into the animate category; a good example is Polish.<sup>30</sup> On the other hand, the subsequent development in West Slavonic, the masculine personal, is more closely tied to semantics.<sup>31</sup>

Slavonic data on the rise of these new subgenres, initially more clearly dependent on semantics than are the older main genders, is of crucial importance for understanding the development of gender systems. We are more likely to learn how genders are formed by examining the hard data from Slavonic than by speculating about the origin of gender in Indo-European.<sup>32</sup>

<sup>28</sup> See, for example, H. I. Aronson, 'The Gender system of the Bulgarian Noun' (*International Journal of Slavic Linguistics and Poetics*, 8, Columbus, 1964, p. 94) and M. Ivič, 'Obeležavanje imeničkog roda u (standardnom) slovenačkom jeziku upoređeno s odgovarajućom srpskohrvatskom situacijom' (*Zbornik za filologiju i lingvistiku*, 11, Novi Sad, 1968, pp. 49-55).

<sup>29</sup> For which see A. Gallis, 'Ein eigentümlicher Gebrauch des Gen.-Akk. bei Trediakovskij und Lomonosov' (*Annuaire de l'Institut de philologie et d'histoire orientales et slaves*, 18, Brussels, 1968, pp. 117-21) and Ickovič, 'Suščestvitel'nyje oduševlennyje i neoduševlennyje', pp. 84-96.

<sup>30</sup> Wertz, 'Genders in Polish'.

<sup>31</sup> A useful survey of the subgenres of Slavonic is provided by D. Huntley, 'The Evolution of Genitive-Accusative Animate and Personal Nouns in Slavic Dialects', in J. Fisiak, ed., *Historical Morphology* (Trends in Linguistics, 17), The Hague, 1980, pp. 189-212; for the development of the masculine personal see Zieniukowa, *Rodzaj męski osobowy*.

<sup>32</sup> There is, for instance, a good deal of published work on the development and function of animacy in Russian, concerning both the agreement data, which justify the claim that it is a subgender, and the morphological data on syncretism within the nominal paradigm: Ju. S. Azarch, 'K istorii kategorii oduševlennosti/neoduševlennosti v russkom jazyke. 1. Izmenenija v slovoobrazovanii suščestvitel'nych mužskogo roda s suffiksami ličnosti/neličnosti', *Obščeslavjanskij lingvističeskij atlas: Materialy i issledovanija 1980*, Moscow, 1982, pp. 151-76. A. V. Bondarko, 'K interpretacii oduševlennosti-neoduševlennosti, razrjadov pola i kategorii roda (na materiale russkogo jazyke)', in Demina, *Slavjanskoje i balkanskoje jazykoznanije*, pp. 25-39; H. S. Coats, 'On Describing Analogy in the Evolution of Russian Noun Inflection' (*Papers in Linguistics*, 5, Edmonton, 1972, pp. 213-26); id., 'Old Russian Declension: a Synchronic Analysis' in L. Matejka, ed., *American Contributions to the Seventh International Congress of Slavists, 1, Linguistics and Poetics*, The Hague, 1973, pp. 67-99; id., 'A Study of Inflectional Change: the Genitive-Accusative in East Slavic', in H. Birnbaum, ed., *American Contributions to the 8th International Congress of Slavists, 1 (Linguistics and Poetics)*, Columbus, Ohio, 1978, pp. 234-55; B. S. Comrie, 'Genitive-Accusatives in Slavic: the Rules and their Motivation' (*International Review of Slavic Linguistics*, 3, Edmonton, 1978, pp. 27-42); id., 'Morphological Classification of Cases in the Slavonic languages' (*Slavonic and East European Review*, 56, London, 1978, pp. 177-91); G. G. Corbett, 'Animacy in Russian and other Slavonic Languages: where Syntax and Semantics Fail to Match', in C. V. Chvany and R. D. Brecht, eds, *Morphosyntax in Slavic*, Columbus, 1980, pp. 43-61; id., 'Naturalness and Markedness of Morphological Rules: the Problem of Animacy in Russian' (*Wiener Slawistischer Almanach*, 6, Vienna, 1980, pp. 251-60); J. Dietze, 'Die Entwicklung der

For confirmation of the assignment rules proposed, we may look to data on child language acquisition,<sup>33</sup> and on the treatment of borrowings.<sup>34</sup> Unfortunately, a few authors fail to distinguish clearly between declensional class and gender, which makes their data difficult to use.

There is, of course, a considerable overlap between gender determined by semantics and gender determined by declensional class.

altrussischen Kategorie der Beseeltheit im 13 und 14 Jahrhundert' (*Zeitschrift für Slawistik*, 18, Berlin, 1973, pp. 261-72); N. Durnovo, 'La Catégorie du genre en russe moderne' (*Revue des études slaves*, 4, Paris, 1924, pp. 208-21); J. Elenskij, 'O kategorii oduševlennosti v russkom jazyke' (*Bolgarskaja rusistika*, no. 6, Sofia, 1977, pp. 41-54); id., 'Oduševlennost' pri čislitel'nych v petrovskuju epochu' (*Bolgarskaja rusistika*, no. 4, Sofia, 1978, pp. 57-67); O. Frink, 'Genitive-Accusative in the Laurentian Primary Chronicle' (*Slavic and East European Journal*, 6, Tempe, Arizona, 1962, pp. 133-37); A. Grannes, 'Impersonal Animacy in 18th-century Russian' (*Russian Linguistics*, 8, Dordrecht, 1984, pp. 295-311); E. I. Kedajtene, 'Iz nabljudenij nad kategorijej lica v pamjatnikach russkogo jazyka staršej pory' (*Voprosy jazykoznanija*, no. 1, Moscow, 1955, pp. 124-28); id., 'K voprosu o razvitii form roditel'nogo-vinitel'nogo padeža (na materiale vostočnoslavjanskich jazykov)' (*Issledovanija po leksikologii i grammatike russkogo jazyka*, Moscow, 1961, pp. 185-93); E. Klenin, *Animacy in Russian: A New Interpretation* (UCLA Slavic Studies, 6), Columbus, Ohio, 1983; J. Kurylowicz, 'Personal and Animate Genders in Slavic' (*Lingua*, 11, Amsterdam, 1962, pp. 249-55); I. A. Mel'čuk, 'Animacy in Russian Cardinal Numerals and Adjectives as an Inflectional Category' (*Language*, 56, Baltimore, 1980, pp. 797-811); id., *Poverchnostnyj sintaksis*, pp. 467-80; K. Müller, 'Die Beseeltheit in der Grammatik der russischen Sprache der Gegenwart und ihre historische Entwicklung' (*Sitzungsberichte der Deutschen Akademie der Wissenschaft zu Berlin, Klasse für Sprachen, Literatur und Kunst*, Jahrgang 1965, Nr. 2, Berlin, 1965, pp. 3-15); F. Scholz, 'Genre, Genus und Person im Russischen' (*Die Welt der Slaven*, 10, Munich, 1965, pp. 281-304); B. Shannon, 'Semantic and Syntactic Features in the Context of Dreams' (*Linguistic Inquiry*, 7, Cambridge, Mass., 1976, 518-19).

<sup>33</sup> W. O. Dingwall and G. Tuniks, 'Government and Concord in Russian: a Study in Developmental Psycholinguistics', in B. B. Kachru, R. B. Lees, Y. Malkiel, A. Pietrangeli, and S. Saporta, eds, *Issues in Linguistics: Papers in Honor of Henry and Renée Kahane*, Urbana, 1973, pp. 150-54; V. M. Henzl, 'Acquisition of Grammatical Gender in Czech' (*Reports on Child Language Development*, 10, 1975, pp. 188-200); M. I. Popova, 'Grammatičeskije elementy jazyka v reči detej predškol'nogo vozrasta' (*Voprosy psihologii*, no. 3, Moscow, 1958, pp. 106-17); M. Smoczyńska, 'The Acquisition of Polish', in D. I. Slobin, ed., *The Crosslinguistic Study of Language Acquisition*, Hillsdale, N.J., 1985, pp. 644, 665-66; A. V. Zacharova, 'Usvojenije doškol'nikami padežnych form' (*Doklady Akademii pedagogičeskich nauk RSFSR*, no. 3, Moscow, 1958, p. 83).

<sup>34</sup> N. Aleksieva, 'Gramatičeski i semantični faktori pri opredeljane roda na anglijskite zaemki v bälgarski ezik' (*Bjuletin za säpostavitelno izsledvane na bälgarskija ezik s drugi ezici*, no. 4-5, Sofia, 1977, pp. 44-54); J. Fisiak, 'Some Remarks Concerning the Noun Gender Assignment of Loanwords' (*Bulletin de la Société Polonaise de Linguistique*, 33, Wrocław, 1975, pp. 59-63); V. S. Gimpelevič, 'Razvitije modelej oformlenija roda inojazyčnych suščestvitel'nych v russkom jazyke (po dannym statističeskogo analiza)', in R. G. Piotrovskij, L. K. Graudina, and V. A. Ickovič, eds, *Jazykovaja norma i statistika*, Moscow, 1977, pp. 189-207; id., 'Svjaz' leksičeskogo i grammatičeskogo osvojenija inojazyčnych slov v russkom jazyke' (*Russian Language Journal*, 36, no. 125, East Lansing, Michigan, 1982, pp. 86-88); M. Martysiuk, 'Rodovaja assmiljacija nemeckich zaimstvovaniij v russkom jazyke' (*Studia Rossica Posnaniensia*, 1, Poznań, 1970, pp. 173-81); T. Matiasen, *Rodovaja "ijerarchija" i oppozicija markirovannosti: nemarkirovannosti v slavjanskich i baltijskich jazykach* (Meddelelser 34), Oslo, 1983, pp. 4-13; A. V. Superanskaja, 'Rod zaimstvovannyh suščestvitel'nych v sovremennom russkom jazyke' (*Voprosy kul'tury reči*, 6, Moscow, 1965, pp. 44-58); G. Thomas, 'A Comparison of the Morphological Adaptation of Loanwords Ending in a Vowel in Contemporary Czech, Russian and Serbo-Croatian' (*Canadian Slavonic Papers*, 25, Toronto, 1983, pp. 194-97); H. Wissemann, 'Zur Frage des Genuswechsels bei Lehnwörtern im Russischen' (*Zeitschrift für slavische Philologie*, 33, Heidelberg, 1966, pp. 305-13).

Thus in Russian, most nouns denoting males are masculine; but they also belong to the typically masculine declensional class. When the two types of assignment rule conflict, normally the semantic rule overrides the morphological rule completely. Thus Russian *djadja* 'uncle', which is semantically male, but follows a declensional pattern which is primarily for females, takes all the agreements of a masculine animate noun. In some instances, however, the semantic rule does not dominate completely; these interesting nouns are considered in the next section.

### III

There are various types of noun for which the conflict between semantic and morphological factors does not lead to the total dominance of semantics. Such nouns do not take a 'consistent agreement pattern'; they are what we earlier termed 'hybrids'. One of the best studied examples is Russian *vrač* 'doctor', when denoting a woman, which can take both masculine and feminine agreements. Given the existence of nouns which can take more than one agreement form, and with different possibilities according to the target involved, the number of agreement patterns which could theoretically occur is extremely large. Only a small subset of the theoretical possibilities is actually found in natural languages, since they are constrained by the Agreement Hierarchy. This hierarchy consists of the following positions:

attributive < predicate < relative pronoun < personal pronoun

The claim made is as follows:

- (I) For any controller that permits alternative agreement forms, as we move rightwards along the Agreement Hierarchy, the likelihood of agreement forms with greater semantic justification will increase monotonically.

In the case of *vrač* 'female doctor', we indeed find, as mentioned above, that masculine (syntactic) agreement is much the more likely in attributive position, both forms are found in the predicate, with the feminine (semantic) form being the more common; the semantic form is much the more common in the relative pronoun, and is the exclusive form in the personal pronoun. The Agreement Hierarchy was proposed on the basis of agreement options in a range of languages.<sup>35</sup> However, the Slavonic languages provide particularly strong confirming data; besides nouns like *vrač*, there are other hybrids, such as Serbo-Croat *gazda* 'boss' and similar nouns which, when in the plural, can take both masculine

<sup>35</sup> G. G. Corbett, 'The agreement hierarchy' (*Journal of Linguistics*, 15, London, 1979, pp. 203-24).

and feminine agreements.<sup>36</sup> The idiosyncratic use of gender agreement by Gogol' in *Šinel'* also follows a pattern sanctioned by the Agreement Hierarchy.<sup>37</sup> The Slavonic data have been analysed in detail elsewhere, and that evidence will not be repeated here.<sup>38</sup>

Let us concentrate on two lines of recent research on the Agreement Hierarchy. The first is the attempt to break down the four main positions into sub-hierarchies. Given that the predicate can be further analysed in this way,<sup>39</sup> an attempt has been made to establish other sub-hierarchies, including one for the attributive position.<sup>40</sup> Slavonic data, specifically Bulgarian, prove helpful here. The noun *bašta* 'father' is at first sight like Russian *djadja*; it denotes a male but has the morphological shape of a feminine. It controls masculine agreement of pronouns (relative and personal), of the verbal predicate, and of most attributive modifiers: *moj bašta* 'my father', *dobrijat bašta* 'the good father'. This last example includes the definite article, attached to an attributive adjective, and this article is also in the masculine form. However, when in the absence of modifiers the article is attached to the noun, it takes the feminine form: *baštata* 'the father'. This is the only circumstance in which *bašta* takes feminine agreement; otherwise it is consistently masculine. These data indicate that the attributive position must indeed be subdivided and that, surprisingly, there can be a distinction between the article attached to the noun on the one hand and all other attributive modifiers on the other.

A second line of enquiry has been directed to the question as to whether the Agreement Hierarchy constrains only controllers which permit alternative agreement forms, or whether it can be motivated by other constructions. Once again Slavonic data prove crucial. The construction of interest here involves the possessive adjective. In Upper Sorbian, the possessive adjective can control an attributive modifier. This is shown by the fact that the modifier takes its gender from the noun underlying the possessive adjective and not from the head noun.<sup>41</sup>

<sup>36</sup> S. V. Marković, 'O kolebljivosti slaganja u rodu kod imenica čiji se prirodni i gramatički rod ne slažu (i o rodu ovih imenica)' (*Pitanja književnosti i jezika*, 1, Sarajevo, 1954, pp. 87-110); this situation existed even in Old Church Slavonic: K. I. Chodova, 'K voprosu o različenoj gramatičeskogo roda v staroslavjanskom jazyke' (*Slovo*, 25-26, Zagreb, 1976, pp. 139-45).

<sup>37</sup> G. G. Corbett, 'A Note on Grammatical Agreement in *Šinel'*' (*Slavonic and East European Review*, 59, London, 1981, pp. 59-61).

<sup>38</sup> Corbett, *Hierarchies* pp. 8-41, 81-86.

<sup>39</sup> Corbett, *Hierarchies* pp. 42-59, 76-93, starting from data in B. Comrie, 'Polite Plurals and Predicate Agreement' (*Language*, 51, Baltimore, 1975, pp. 406-18).

<sup>40</sup> F. Cornish, *Anaphoric Relations in English and French: A Discourse Perspective*, London, 1986, pp. 203-11.

<sup>41</sup> See H. Fasske, *Grammatik der obersorbischen Schriftsprache der Gegenwart: Morphologie*, Bautzen, 1981, pp. 382-85, from whom examples (3) and (5) are taken; example (4) is from R. Löttsch, 'Das sog. Possessivadjektiv im Slawischen, speziell im Sorbischen, und seine Stellung im System der Redeteile' (*Forschungen und Fortschritte*, 39, pt 12, Berlin, 1965, p. 378).

- (3) *mojeho* (gen. sg. masc.) *mužowa* (nom. sg. fem) *sotra* (nom. sg. fem.)  
 my husband's sister

In (3) *mojeho* is masculine since *muž* 'husband', which underlies *mužowa*, is masculine. The possessive adjective is also able to control a relative pronoun:

- (4) *slyšetaj* . . . *Wićazowy hlós*, *kotryž je zastupił*  
 (they) hear *Wićaz*'s voice, who is gone in

The relative pronoun *kotryž* is masculine singular; the sense shows that its antecedent is *Wićaz*, the noun underlying the possessive adjective, and not *hlós*.

The possessive adjective can similarly control personal pronouns:

- (5) *To je našeho* (gen. sg. masc.) *wučerjowa* (nom. sg. fem.)  
 That is our teacher's  
*zahrodka* (nom. sg. fem.) *Wón* (nom. sg. masc.) *wjele w njej džěła*.  
 garden. He [our teacher] a lot in it works.

The personal pronoun *wón* takes as its antecedent the noun phrase *naš wučer* 'our teacher', which underlies the phrase headed by the possessive adjective.

Upper Sorbian is unusual in that the possessive adjective can control three different types of target. Across the Slavonic family, and in the course of development of individual languages, the control possibilities of the possessive adjective vary dramatically. However, the following generalization holds:<sup>42</sup>

- (II) The possessive adjective can control attributive modifiers only if it can also control relative pronouns, and it can control relative pronouns only if it can also control personal pronouns.

This generalization recalls the Agreement Hierarchy; there is a difference in that the predicate is not involved as a target for possessive adjectives. (This would require a construction with a subject of the type *mužowa sotra*, 'husband's sister' and a predicate in the masculine, agreeing with *muž* rather than with *sotra*.) There are independent reasons why the predicate is excluded in this way.<sup>43</sup> First, in the Slavonic languages predicate verbs agree with subjects which stand in the nominative. (The case of the possessive adjective for agreement purposes is genitive, as attributive modifiers show.) A second point is that the phenomena covered are of rather different types. The

<sup>42</sup> G. G. Corbett, 'The Morphology-Syntax Interface: Evidence from Possessive Adjectives in Slavonic' (*Language*, 63, Baltimore, 1987, [hereafter Corbett, 'Possessive adjectives'] p. 318).

<sup>43</sup> G. G. Corbett, 'Possessive adjectives' pp. 320-21.

agreement cases typically cover situations where agreement is required but where the controller is such as to permit a choice as to the form of agreement; the Agreement Hierarchy constrains the distribution of the options. The targets of the possessive adjective differ in that their actual presence is optional. There is no requirement that an attributive modifier, relative clause or anaphorically related personal pronoun be present, while the existence of a predicate is typically essential. Thus the control possibilities of the possessive adjective are constrained by those parts of the Agreement Hierarchy which relate to optional elements (all but the predicate). The third and major argument, related to the second, concerns coherence. If there were sentences of the type: *husband's sister came* in which *came* was controlled by *husband*, then *sister*, the head of the subject noun phrase, would have no role, syntactic or semantic, and the sentence would simply be incoherent.

While the possessive adjective cannot control predicate agreement for quite independent reasons, its control possibilities are constrained by the remainder of the Agreement Hierarchy. As we move rightwards along the Agreement Hierarchy, the likelihood of control by a possessive adjective will increase monotonically. Thus the Agreement Hierarchy, which constrains the agreement patterns of controllers which permit alternative agreements (notably those of hybrid nouns), also constrains the control possibilities of the possessive adjective.

#### IV

When the agreement controller consists of conjoined noun phrases, special rules are required to determine the form of agreement used. These rules are termed 'resolution rules', and of them, gender resolution rules are the most complex and interesting. The Slavonic situation has been analysed in detail by the present author.<sup>44</sup> We shall therefore take the basic facts to be established and, following the pattern of this paper, concentrate on the typological implications.

There are two basic types of gender resolution system: semantic and syntactic.<sup>45</sup> In the semantic type agreement is determined according to the meaning of the nouns which are heads of the noun phrases, irrespective of their grammatical gender (as determined by the types of factor discussed in Section II). For example, in several Bantu languages the gender agreement form to be used with conjoined noun phrases depends on whether the noun phrases denote humans or not,

<sup>44</sup> Corbett, 'Resolution Rules for Predicate Agreement in the Slavonic Languages' (*Slavonic and East European Review*, 60, London, 1982, pp. 347-78); Corbett, *Hierarchies*, pp. 177-214. References to sources of data are included in both.

<sup>45</sup> G. G. Corbett, 'Resolution Rules: Agreement in Person, Number and Gender', in G. Gazdar, E. Klein and G. K. Pullum, eds, *Order, Concord and Constituency* (Linguistic Models, 4), Dordrecht, 1983, pp. 175-206.

irrespective of the gender of the nouns involved.<sup>46</sup> This type of gender resolution is not found in Slavonic.

The other basic type, which operates according to the syntactic gender of the nouns involved, irrespective of their meaning, is found in Slavonic. In Slovenian, for example, if all conjuncts are feminine, the feminine form is used, and in all other cases the masculine.<sup>47</sup> As illustrations of these rules, consider the following sentences:

(6) Marina (fem.) in Marta (fem.) sta prizadevni (fem. dual)  
Marina and Marta are assiduous

(7) ta streha (fem.) in gnezdo (neut.) na njej mi  
that roof and nest on it to me  
bosta ostala (masc. dual) v spominu  
will remain in memory  
'that roof and the nest on it will remain in my memory'

Furthermore, Slavonic has mixed systems. This Polish example is of particular interest:<sup>48</sup>

(8) Hania (fem.) i Reks (masc.) bawili (masc. pers.) się piłką  
Hania and Rex played with a ball

The masculine personal form, which is that preferred by the majority of Zieniukowa's informants,<sup>49</sup> results from the combination of a semantically personal conjunct and a syntactically masculine one.

Perhaps the most interesting gender resolution system in Slavonic is that of Serbo-Croat. At first sight, the system appears to be as in Slovenian, that is, feminine agreement is found if all conjuncts are feminine, and masculine elsewhere. But there are exceptions.<sup>50</sup>

(9) Vredali (masc. pl.) su ga nebriga (fem.) i  
Offended him carelessness and  
lakomislenost (fem.) Tahir-begova. (Andrić, *Travnička Hronika*)  
capriciousness of Tahir-beg

'The carelessness and capriciousness of Tahir-beg offended him.'

<sup>46</sup> T. Givón, *Studies in ChiBemba and Bantu grammar*. (Studies in African Linguistics, 3, supplement 3), Los Angeles, 1972, pp. 80-93.

<sup>47</sup> The data are from R. Lenček, 'O zaznamovanosti in nevtralizaciji slovnične kategorije spola v slovenskem knjižnem jeziku' (*Slavistična revija*, 20, Ljubljana, 1972, p. 61), discussed in Corbett, *Hierarchies*, pp. 183-86.

<sup>48</sup> W. Doroszewski, *O kulturę słowa: Poradnik językowy*, Warsaw, 1962, p. 237.  
<sup>49</sup> J. Zieniukowa, 'Składnia zgody w zdaniach z podmiotem szeregowym we współczesnej polszczyźnie' (*Slavia occidentalis*, 36, Warsaw, 1979, pp. 117-29).

<sup>50</sup> As pointed out by V. Gudkov, 'Dodatak pravilima slaganja predikata sa više subjekata' (*Književnost i jezik*, 12, 4, Belgrade, 1965, pp. 60-61); for further data see J. Megaard, 'Predikatets kongruens i serbokroatisk i setninger med koordinerte subjektsnominalfraser' (unpublished thesis, University of Oslo, 1976), pp. 69-107, and G. G. Corbett, 'Slaganje predikata sa više subjekata u srpskohrvatskom jeziku' (*Naučni Sastanak Slavista u Vukove Dane: Referati i saopštenja*, 12, 1, Belgrade, 1983, pp. 93-102).

It seems that when one of the nouns involved is a feminine which ends in a consonant then, optionally, masculine agreement may be used. However, examples have also been found where all conjuncts have as their heads feminine nouns in *-a*, but still the agreement is masculine:<sup>51</sup>

- (10) Krošnja (fem.) i grane (fem. pl.) zahvatili (masc. pl.) su  
 Crown (of tree) and branches occupied  
 čitavo nebo . . . (B. Ćosić)  
 whole sky

Clearly Serbo-Croat does not fit in a straightforward way within the suggested typology. An exciting possibility is that we may have here a case of a language moving from a syntactic resolution system to a semantic one. The significant point is that all the examples like (9) and (10) involve inanimates. (There are of course few animates in the feminine consonant declension.) Serbo-Croat may therefore be moving towards a semantic system in which the feminine would be used provided all conjuncts referred to females, and the masculine elsewhere. It deserves particular attention.<sup>52</sup>

## V

Gender continues to be one of the most puzzling and fascinating problems in linguistics. In this paper an attempt has been made to

<sup>51</sup> V. P. Gudkov, 'Prilog o pravilima kongruencije' (*Književnost i jezik*, 21, 1, Belgrade, 1974, p. 61).

<sup>52</sup> In work on Slavonic it was pointed out that gender resolution and number resolution interact in unexpected ways. The sentences in question involved plural nouns of the same gender (Corbett, *Hierarchies* pp. 208-09):

- (i) . . . ta sećanja (neut. pl.) i razmatranja (neut. pl.)  
 those memories and reflections  
 sve su više ustupala ((neut. pl.) mesto novim  
 ever have more yielded place to new  
 utiscima . . . (Andrić, *Travnička Hronika*)  
 impressions . . .

'those memories and reflections increasingly gave way to new impressions'

The point is that the form which would result from gender resolution (the masculine) is unacceptable; similar data were quoted from Czech. The solution proposed was that gender resolution could be triggered in two ways: either by the operation of number resolution or by the presence of nouns of different gender in the conjunct. Neither of these conditions applies in the example just given and so agreement is with the nearer conjuncts. This solution fits the data; it follows that in all cases of plural conjuncts of the same gender, agreement is with the nearest conjunct (even though, in some cases, the resolution rule would give the right result). The condition on the operation of gender resolution is surprising, and it might be suspected that it would prove to be an idiosyncratic feature of Slavonic. However, it has recently been shown that an identical condition operates in the Bantu language Chichewa (G. G. Corbett and A. D. Mtenje, 'Gender Agreement in Chichewa' (*Studies in African Linguistics*, 18, 1, Los Angeles, 1987)). Chichewa has a larger number of genders, and so the data are more convincing. Thus the claim about the interaction of gender and number in resolution rules, made originally on the basis of Slavonic data, gains support from an unexpected source.

show the areas in which Slavonic data are of special value for improving our understanding of gender, and also to give bibliographical indications as to some of the previous research. Slavonic languages provide important evidence for each of the major areas of investigation into gender systems; there are therefore excellent possibilities for profitable interaction between those working in typology and those analysing individual Slavonic languages.