Notes on Russian numerals and denumerals

1. Cardinals

Numeral *odin* '1' agrees in gender and case with the N that heads the noun phrase it occurs in.

In direct cases, cardinal numerals do not change. Their head N selects smaller paucal forms (Paperno 2012), formally non-distinct from the genitive singular, after 2, 3 and 4; besides, *dva* '2' (and *oba* 'both') agrees in gender with its head N e.g. *dva mal'čik-a* two(U) boy(M)-GEN.SG, *dve knig-i* two(F) book(F)-GEN.SG.('U' = unmarked form) From 5 onwards, the head N takes the greater paucal forms, which is formally non-distinct from the genitive plural. With complex cardinals, the head N agrees with the last element e.g. *dvadcat' mal'čik-ov* twenty boy(M)-GEN.PL, d*vadcat' tri mal'čik-a* twenty-three boy(M)-GEN.SG. When an adjective follows 2, 3, 4, it takes the nominative plural if the head N is feminine and the genitive plural if the head N is masculine or neuter. In oblique cases, the cardinal agrees in case with its head noun and both are plural e.g. *o trëx učenik-ax* about three:LOC.PL pupil(M)-LOC.PL 'about 3 pupils'.

The agreement marking is amazingly complicated because it keeps trace of distinctions that once were taken into account by a dual which completely disappeared. We refer to Corbett (1993) for a more detailed discussion.

*Odin* is declined on the model of the definite determiner *ètot* 'this'; *dva*, *tri* and *četyre* have a declension of their own (and *oba* 'both' too); numerals ending with a palatalized /t/ and those denoting tens from 50 to 80 follow the declension of feminine nouns like *tetrad'* 'notebook'. Compound cardinals of the second tens series inflect each of their parts e.g. *dvadcat-i pjat-i* twenty-SFX five-SFX. The same holds for numeral of the series of tens from 50 to 80 and for multiples of 100. Numerals 40, 90 and 100 have a unique form for all oblique cases e.g. *sorok-a* 40-OBL. Numeral *tysjača* '1000' and *million* $10^6$ are nouns (feminine and masculine, respectively) and are inflected as such.

When cardinal numbers precede their head N, they have a normal counting function e.g. *desjat' domov* 'ten houses'. When they follow it, the phrase gets an approximate interpretation e.g. *domov desjat'* 'about ten houses'.

2. Collectives

Collective denumerals are used instead of cardinals (2 to 4) when the head N lacks smaller paucal forms. This happens with *pluralia tantum* e.g. *dvoe sutok* 'two sledges' (*sutk-i* sledge(M)-PL); with nominalized participles e.g. *troe služaščix* 3:COLL serve(PRSPT).GEN.PL '3 employees'; with pronominal constructions e.g. *nas bylo sedmero* PRO:1PL.GEN be:PST.3SG.NEU seven:COLL 'there were 7 of us'. Collective denumerals compete with cardinal numerals when they combine with masculine nouns denoting people or young animals, in particular those exhibiting a special plural marking e.g. *dvoe brat'ev* '2 brothers', *troe kotjat* '3 kittens'. They also can occur on their own without a noun e.g. *dvoe vošli vo vnutr'* 'two (of them) walked in'.

Collectives have a declension of their own. In direct cases, the head noun takes the genitive plural.

3. Fractionals

From 1/5 onwards, the denominator has the form of a feminine ordinal adjective because the word *čast'* 'part', which is feminine, is implied. In the nominative, accusative, this ordinal adjective follows the agreement patterns triggered by cardinal controllers for adjective targets (cf. Cardinals above) e.g. *odna sotaja* one:F.SG hundred(CARD):NOM.F.SG '1/100', *tri desjatyx* three ten(CARD):GEN.F.PL '3/10'. In oblique cases, both elements are declined e.g. *trëm desjatym* three:INS ten(CARD):INS.SG.

The N that the fractional denumeral modifies appears in the genitive singular e.g. *tri desjatyx urožaj-a* three ten crop-GEN.SG '3/10 of crop', *četvert' čas-a* quarter hour-GEN.SG '1/4 of an hour'.

Corbett, G. G. (1993). The head of Russian numeral expressions. Heads in grammatical theory. G. G. Corbett, N. M. Fraser and S. MacGlashan. Cambridge, Cambridge University Press: 11-35.
Paperno, Denis. 2012. Quantification in standard Russian. Handbook of Quantifiers in Natural Language, ed. by E. Keenan & D. Paperno, 000-00. Dordrecht: Springer.