The Pluralization of Plurals in Urdu: An OT Analysis

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The study brings forth the morpho-phonological processes responsible of forming plurals of the plurals in Urdu. Optimality Theory introduced by (McCarthy & Prince 1993a, 1993b; Prince & Smolensky 1993) is utilized to analyze the data. The paper starts by offering a brief introduction of the pluralization system of Urdu. First, a short description of the formation of sound plurals, which are based on suffixation, is given, for example *kɪ̯tab* 'book' → *kɪ̯tab-**æ̃*** 'books. It then rejects Hardie's (2004, p. 35) claim that "Urdu inflection is based on suffixation ...." by explaining (shortly) Urdu broken plurals, a grammatical rule borrowed from Arabic, which can be formed through infixation, transfixation and circumfixation. For example, *məsdʒɪ̯d* 'mosque' → *məs-**a**-dʒɪ̯d* 'mosques' is the result of inserting an infix ***-a-*** in the middle of the stem. Hardie (2004) and Mangrio (2016) have discussed the pluralization through suffixation, and Mangrio (2016) has briefly introduced Urdu broken plurals. However, the pluralization of plurals is missed by all the previous researchers. Therefore, this study documents the plurals of plurals, and analyzes the process of their formation.

In Urdu, a single word (not all the words) can have three plural forms and all of them are used by the speakers of Urdu. For example:

rə.səm 'custom'	→	*rəs.m-**æ̃*** 'customs'	(Sound Plural)
rə.səm 'custom'	→	*rəs-**u**ː-m* 'customs'	(Broken Plural)
rə.səm 'custom'	→	*rəsuːm-**a**ːɪ̯* 'customs'	(Plural of plural)

Urdu learners are introduced these patterns in their grammar text books at school. Any of three forms given above is acceptable and correct, and they have same semantics as well. However, there is no criteria when and where to use which form. It totally depends upon the speakers which form they want to use. Whatever form is used by them is grammatical.

In pluralization of plurals, first, broken plural is formed; then, native rule is applied to form the plural of plural, for example, *rəsəm* 'custom' → *rəs-**u**ː-m* 'customs' → *rəsuːm-**a**ːɪ̯* 'customs'. The stem is *rəsəm*, from which a broken plural is formed i.e. *rəs**u**ːm*, and then the plural-plural marker ***-a**ːɪ̯*** is attached to the broken plural, which forms *rəsuːm-**a**ːɪ̯*,* the plural of the plural. Morpho-phonological processes take place in this formation. When the broken plural *rəsuːm* is formed, the plural markers are inserted in the stem and the word is totally re-syllabified, and when the plural-plural marker ***-a**ːɪ̯*** is attached to *rəsuːm* to get *rəsuːm-**a**ːɪ̯*,* the coda in the last syllable of the stem i.e. /*m*/ becomes the onset of the plural-plural marker. Thus, the syllabification pattern is *rə.səm* 'custom' → *rə.s**u**ː.m* → *rə.suː.m**a**ːɪ̯*. Though, broken plurals are borrowed from Arabic, they have become a regular plural formation pattern in Urdu. OT analysis of this pattern is given below:

Tableau 1: Pluralization of plurals

S #	**Input:** *rəsəm*	**Align Infix (-*u*ː-)**	**Align Suffix (-*aɪ̯*)**	**IDENT-IO**
1	→ *rəs**u**ːm-**a**ːɪ̯*			*
2	*rəsəm*	*!	*!	
3	*rəs**u**ːm*		*!	*

Align Infix (-*u*ː-) and Align Suffix (-*aɪ̯*) are crucial constraints and cannot be violated by the optimal candidate. Candidate 1 is the optimal candidate because it follows both high-ranked constraints, candidate 2 and 3 are losing candidates because they disobey both or at least one crucial constraint.

Four plural-plural markers: ***-ɪːn, -aːn, -mi*** and ***-aːṯ*** are found in Urdu. The data for the first three are too little to regard them regular patterns, they can be said exceptions. However, the last marker i.e. ***-aːṯ*** is a regular pattern.

Keywords: Urdu Pluralization, Broken Plurals, Pluralization of Plurals, OT

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