Reverse Sonority Clusters: Developing a Model for Descriptive Analysis

Muhammad Kamal Khan

Assistant Professor

Shaheed BB University

Sheringal Dir Upper KP-Pakistan

Presentation Plan

SSG an overwhelming preference by languages

Clusters and Reverse Sonority Clusters

The problem of description

Preliminary suggestions

Implications

SSP [SSG]

Sonority Sequencing Principle (SSP)

Sonority decreasing when moving away from syllable nucleus [a cross-linguistic phenomenon]

(Sievers, 1881)

Between any member X of a syllable and the syllable peak p, only sounds of higher sonority rank than X are permitted   (Clements, 1990, p. 285)

Glides › rhotics › laterals › nasals › voiced fricatives ›

voiced stops › voiceless fricatives › voiceless stops

(w › r › l › n › z › d › s › t)

(Based on Jesperson, 1904; Clements 1990; Dost, 2004)

Sonority Scale

Vowels › glides › liquids › nasals › obstruents

  (Bell & Hooper, 1978; Clements, 1990; Smolensky, 1995)

Fundamental to phonotactics in languages

Permitted hierarchy of consonant clusters (syllable
  structure) [simple, moderately complex and complex]

Sonority Sequencing Generalization (SSG)

                                (Selkirk, 1984)

Reverse Sonority Clusters

Polish:

/vdr/ *w+drażać* 'implement'

/vzbr/ *wz+bronić* 'forbid'

/fsx/ *ws+chodzić* 'rise'

/zdm/ *z+dmuchnąć* 'blow out'

/strf/ *s+trwonić* 'waste'.   (Orzechowska, 2013)

Pashto:

Levi (2004) shows 23 bipartite consonant clusters being reversed in sonority in Pashto (p. 204):   [wr, wɽ, wl, rɣ, lm, lɣ, nʂ, nʐ, nɣ, sp, st, sʈ, sk, ʃp, ʃt, ʃk, ʂk, xp, zb, zd, zɖ, ʐb, ʐd]

/wrara/ nephew

/wɽal/   to carry

Reverse Sonority Clusters

Ladakhi:

Initial (liquid+obstruent) clusters

/lg, lz, rb, rg/

(Koshal, 1979)

Pashto:

Khan (2012) shows a number of consonant clusters

Theoretical Justification

Optimality Theoretic (Prince & Smolensky, 1993) Justification

Problems in Description

1. Experimental: (Distributional occurrence- Phonetics)

Word-Initially /wɻal/ /wɻal.ke.d̪əl/ (to carry)

Word-Medially /wər.wɻal.ke.d̪əl/ (to be carried)

Word-Finally /wər.wɻal/ (to carry to someone)

Problems: Most of them are monosyllabic (root words)

Word initially (e.g., Pashto)

(lmaɻ, nmase, ngor)

Problems in Description

Issues: The most extreme class of RSC (Beginning with a semivowel /wr, wl)

(Hammarberg, 1971; Houlihan, 1973)

Mutation?

Fricatives?

Devoiced?

Misc.   Longer delays?

Preliminary Suggestions

2. Data collection

a. Carefully selected respondents
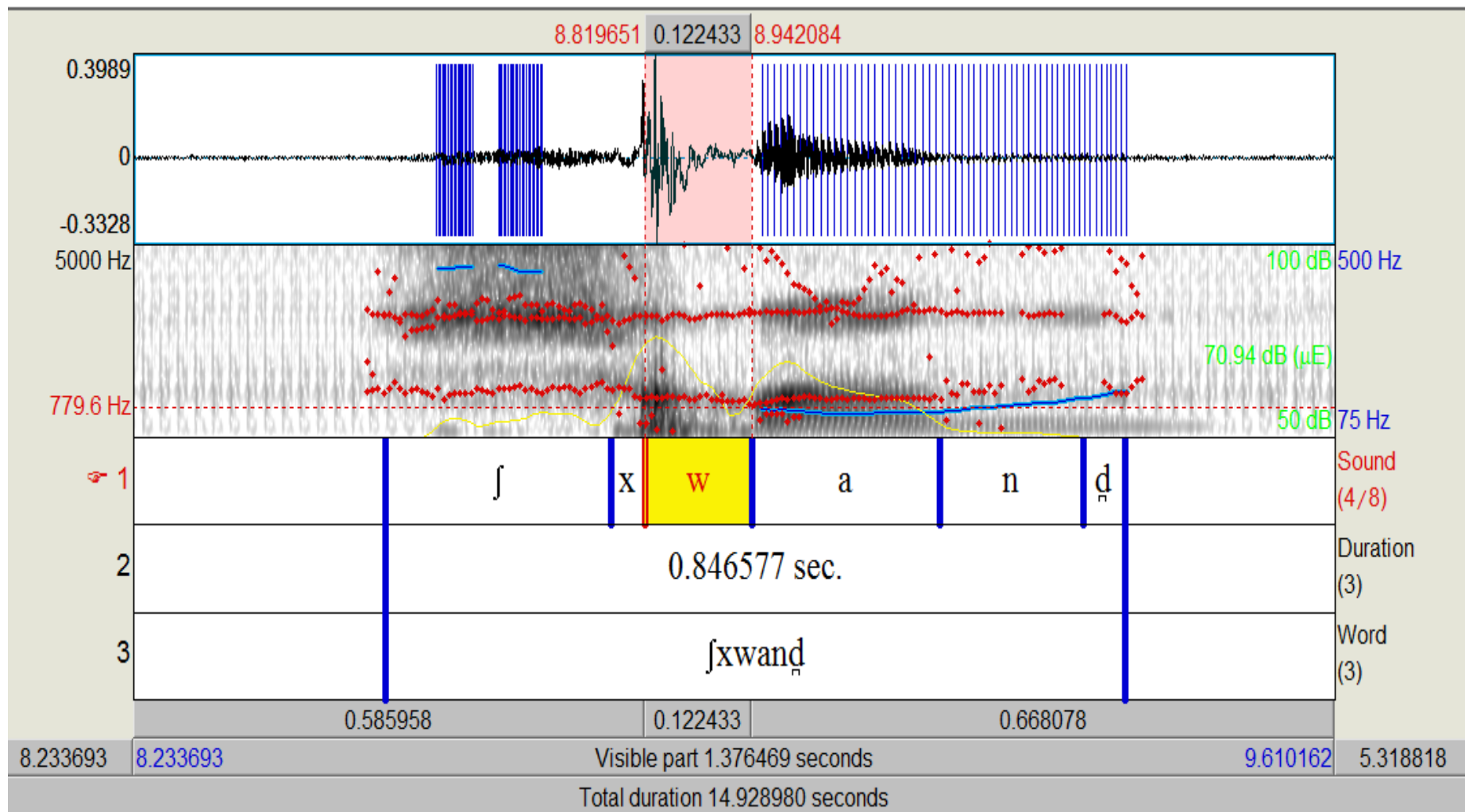
NORMs (Trudgill, 1987)

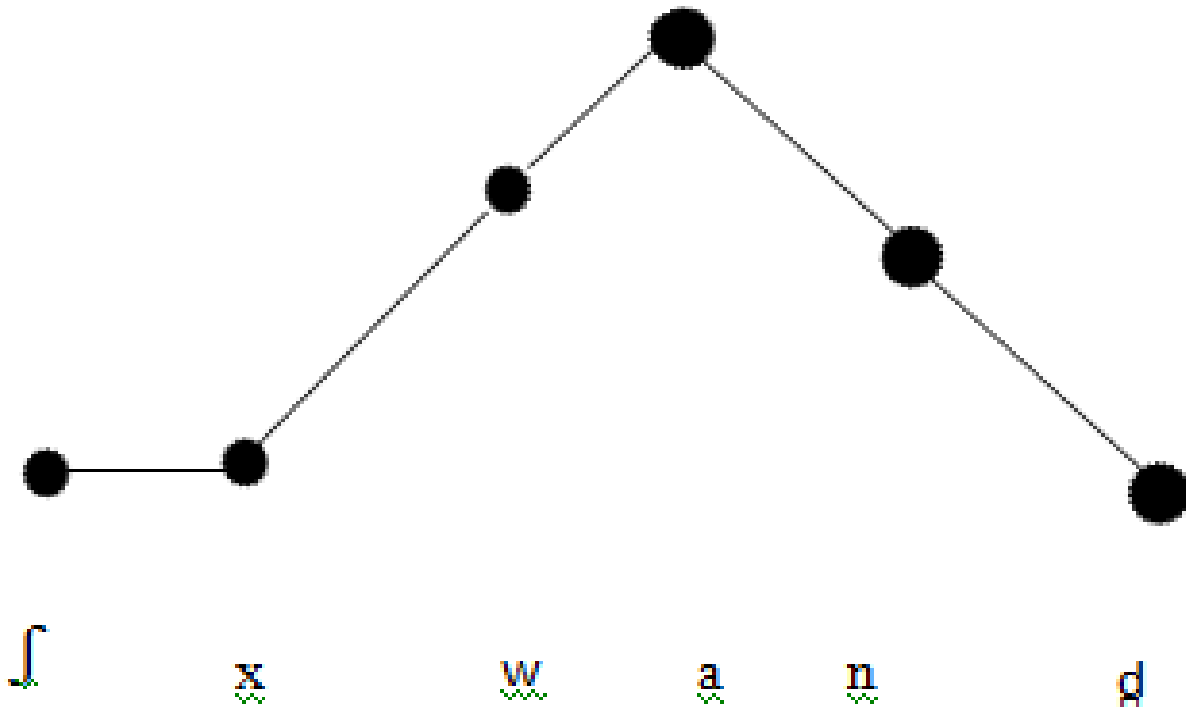b. Place of recording (setting)

c. PRAAT

d. FormantPro Tool (Xu, 2015)
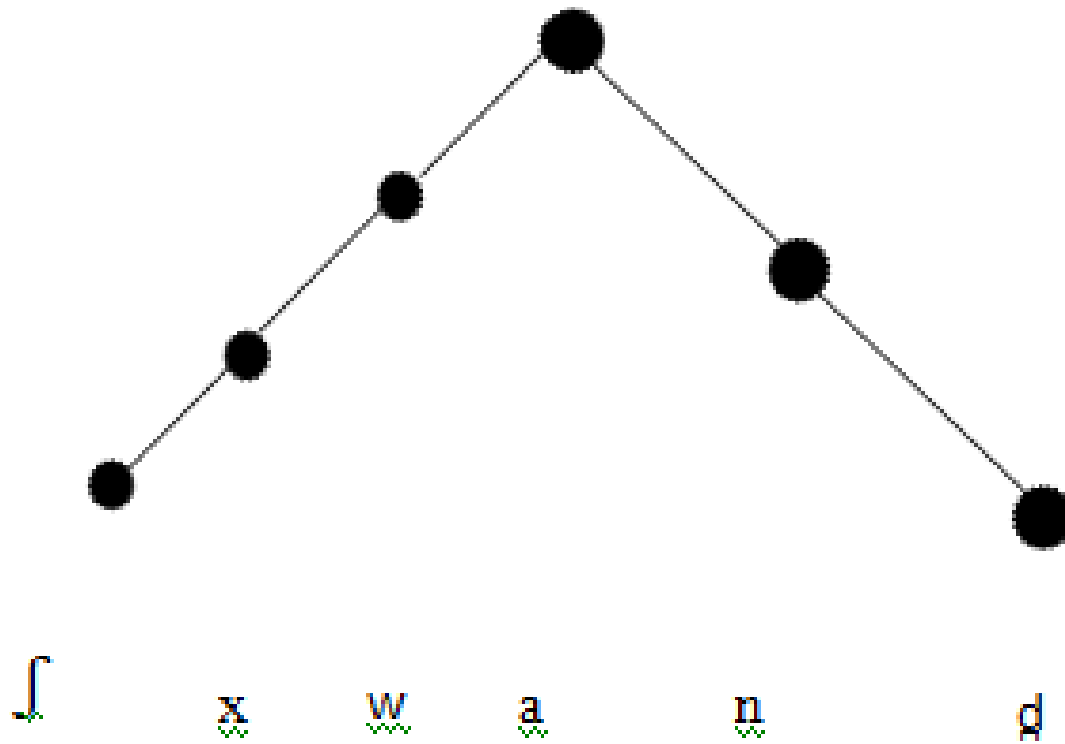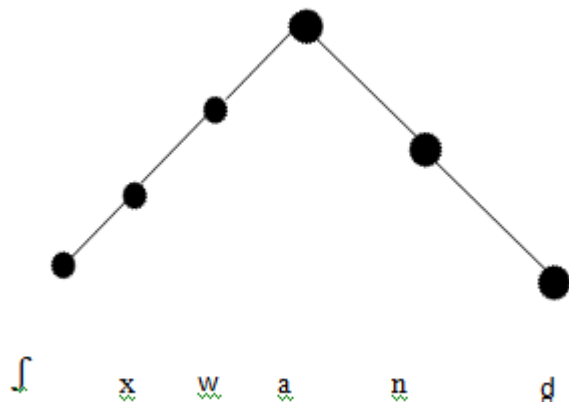
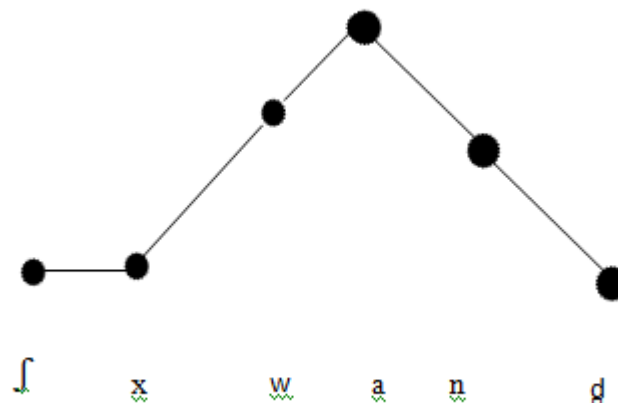e. Diagram

f. Statistics

/ʃxwand̪/

/ʃxwand̪/

ʃ   x   w   a   n   d̪

/ʃxwand̪/

ʃ   x   w   a   n   d̪

/ʃxwand̪/

If SSP followed   **If it's not followed**

Implications

Towards a typology of RSC

      Most preferred and least preferred clusters

      Sonority repair strategies

      Synchronic as well as diachronic

Implicational Universals

      Structural dependecies

The End