Examples

The source file for this pdf file is *pst-asr-examples.tex*. It is written in very simple LaTex, using no packages other than those that are absolutely necessary for illustrating *pst-asr*: *pstricks*, *pst-xkey*, and *pst-asr* itself. The hope is that potential *pst-asr* users can easily experiment with the various examples and use various bits and pieces as models for there own work.

Most of the examples in *pst-asr-doc.pdf* are given here, in the order in which they appear in that document. The numbering is sequential and differs from the numbering in that document.

(1)

(2)

(3)

(4)

(5)

(6) × ⊗ × × ×
     | | | | |
     k a m b a

(7) × ⊗ × × ×   (alternate code for example above)
     | | | | |
     k a m b a

(8) × × × × ×   (alternate code for earlier example)
     | | | | |
     kʰ a m b a

(9) × × × × ⊗ × ×
     | | | ∨ | |
     k u p a n u

(10) ×   ×   ×   ×   ×
      | | | | |
      d   u   m   a   n

σ

(11) σ^{μ} $\sigma^{\mu\mu}$
      ×   ×   ×   ×   ×
      | | | | |
      d   u   m   a   n

(12) σ^{μ} $\sigma^{\mu\mu}$ (alternate code for example above)
      ×   ×   ×   ×   ×
      | | | | |
      d   u   m   a   n

2

(13)

```
      σ           σ
     /\         /|\
    × ×        × × ×
    |  |       |  |  |
    d  u       m  a  n
```

(14)

```
      σ            σ            σ
     /|\         /|\          /\
    × × ×       × × ×        × ×
    |  |  |      |  |  |       |  |
    k  a  t     m  a  n       d  u
```

(15)

```
        ν             ν             ν
    σ  /          σ  /          σ  /
   /\ /          /\ /          /| /
  × × ×         × × ×         × × 
  |  |  |        |  |  |        |  |
  k  a  t       m  a  n       d  u
```

(16)

```
   k       t       b
   |       |       |
   ×   ×   ×   ×   ×
        \__ __/
           a
```

(17)

$$\begin{bmatrix} +\text{cons} \\ -\text{sonor} \end{bmatrix} \qquad \begin{bmatrix} +\text{cons} \\ -\text{sonor} \end{bmatrix} \qquad \begin{bmatrix} -\text{cons} \\ +\text{sonor} \end{bmatrix} \qquad \begin{bmatrix} +\text{cons} \\ +\text{sonor} \end{bmatrix} \qquad \begin{bmatrix} +\text{cons} \\ -\text{sonor} \end{bmatrix}$$

```
 Oral   Phar      Phar   Oral     Oral      Phar      Oral   Oral      Phar

Coronal Glottal  Glottal Coronal  Dorsal     SP             Labial    Glottal

          [−voiced]                          [+nasal]                 [−voiced]

                              [+low]  [−back]
```

(18)

$$
\begin{array}{c}
\text{L} \quad \text{H} \qquad \text{L} \qquad\qquad \text{L} \quad \text{H} \qquad \text{L} \\
| \qquad | \qquad\quad | \qquad\qquad\quad | \quad\; | \qquad\quad | \\
\times \quad \times + \times \quad \times \quad \times \;\rightarrow\; \times \quad \times \quad \times \quad \times \quad \times \\
\text{h} \quad \text{u} \quad \text{a} \quad \text{r} \quad \text{i} \qquad \text{h} \quad \text{w} \quad \text{a} \quad \text{r} \quad \text{i}
\end{array}
$$

(19)

$$
\begin{array}{c}
\text{L} \\
\times \quad \times \quad \times \quad \times \quad \times
\end{array}
$$

(20)

$$
\begin{array}{ccc}
[\text{+cons}] & [\text{+cons}] & [\text{+cons}] \\
| & | & \\
\text{Place} & \text{Place} & \text{Place} \quad \text{Soft Palate} \\
| & | & | \qquad\qquad | \\
\text{Coronal} & \text{Coronal} & \text{Coronal} \quad [\text{+nas}] \\
[-\text{ant}] & [\alpha\text{ant}] & [-\text{ant}] \\
[-\text{dist}] & [\beta\text{dist}] & [\text{+dist}]
\end{array}
$$

4

(21)

$$[-\text{cons}] \qquad [+\text{cons}] \qquad [-\text{cons}]$$

Place　　　　　Place　　　　　Place

Dorsal　　　　　　　　Dorsal

[−high]

[+back]　　　[+back]

[−low]　　　[+low]

Labial　　　　　　　　　　　　　Labial

[+round]　　　　　　　　　　　[−round]

(22)

ν　　ν　　ν

σ　　σ　　σ

× × ×　× × ×　× ×
| | |　| | |　| |
k a t　m a n　d u

(alternate code for earlier example)

(23)

```
        *
 ( *
 ( *     *       *      ( *
 ( *     *    *  ( *     *       *    ( *     *    *    *    *
 × ×.× ×.× ×.× × ×.× ×.× ×.× × ×.× ×.× ×.× ×.× ×
 | | | | | | | | | | | | | | | | | | | | | | |
 C V C V C V C V X C V C V C V X C V C V C V C V
```

5

(24)

		Phonological phrase
PhP		Phonological phrase
Wd Wd		Prosodic word
Ft Ft Ft Ft		foot
σ σ σ σ σ σ σ σ		syllable
× × × × × × × × × × ×		syllable terminal

(25)

σ   σ   σ   σ   σ   σ
k a t m a n d u u   versus   × × × × × × × × ×
                               k a t m a n d   u

(26)

H L H L   L H L
| | | | | | |
c e d e + a r i   h u + a r i   underlying

H L H L   L H L
| | | | | |
c e d + a r i   h w + a r i   syncope/glide formation

H L H L   L H L
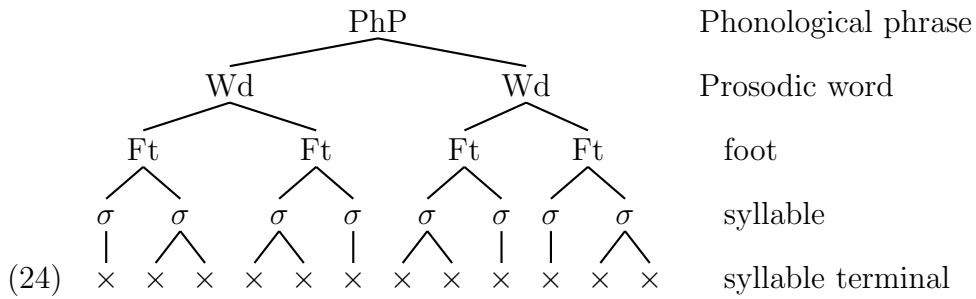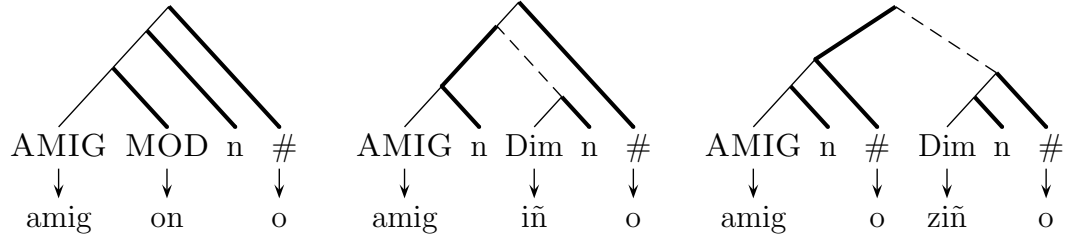| ⋱| | ⋱⋰| |
c e d + a r i   h w + a r i   reassociation

(27) a. Derivational suffix   b. /iñ/-Adjunction   c. /ziñ/-Adjunction

        #   #   #₁
        n   n₁   #₁   #₂
      Suffix   n₁   n₂   n   n
  Stem Suffix n #   Stem n₁ Dim n₂ #   Stem n #₁   Dim n #₂
    ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓
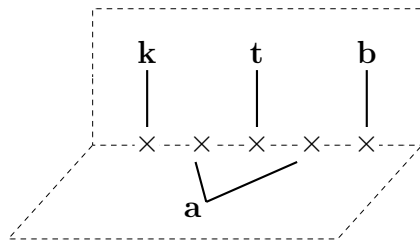 amig on   o   amig   iñ   o   amig o   ziñ   o

6

(28) a. Derivational suffix   b. /iñ/-Adjunction   c. /ziñ/-Adjunction

AMIG MOD n #   AMIG n Dim n #   AMIG n #   Dim n #
  ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓ ↓   ↓   ↓ ↓   ↓   ↓ ↓
 amig   on   o   amig   iñ   o   amig   o   ziñ   o

(29)

$$
\begin{array}{ccc}
\mathbf{k} & \mathbf{t} & \mathbf{b}
\end{array}
$$

× -- × -- × -- × -- ×

a

(30)

   H   L   H
   ●   ●   ●
+upper   −upper   +upper

      −hi   +hi   −hi

(31)

σ
  R
  N
× × × × ×
d r i   m

(32)

$$\sigma$$

```
                σ
          ／         ＼
     onset          rhyme
      ／ ＼         ／     ＼
     ×   ×    nuclear    coda
     |   |    ×    ×       ×
     d   r       i         m
```

(33)   a. ω ω ω ω b. ω ω ω-ω c. ω ω ω ω-ω

         ($\acute{\omega}$ ω ω ω ($\acute{\omega}$ ω ω-ω ($\acute{\omega}$ ω ω ω-ω

         ($\acute{\omega}$ ω)ω ω ($\acute{\omega}$ ω)ω-ω ($\acute{\omega}$ ω)ω ω-ω

         ($\acute{\omega}$ ω)$\acute{\omega}$)ω ($\acute{\omega}$ ω)$\acute{\omega}$)ω-ω