

Aggregate Data

Tyler Lau

July 18, 2016

```
[1] "Common Sound Change, Token Freq T"
```

```
[1] "Only considering max suffixes: TRUE, Only considering max suffixes for same trend: TRUE"
```

```
[1] "Dropping suffixes that appear 10 or less times"
```

```
[1] "Sg_systems"
```

```
    e    o    -    es    s    i    is  
0.56 0.16 0.14 0.06 0.04 0.02 0.02
```

```
[1] "Proportion of Sg systems without s ending: 0.88"
```

```
[1] "Nom_Acc_Sg_systems"
```

```
    -,o    -,e    o    -    e    s,o  
0.50 0.36 0.08 0.02 0.02 0.02
```

```
[1] "Proportion of Nom_AccSg systems without s ending: 0.98"
```

```
[1] "Acc_Abl_Sg_systems"
```

```
    o    e    o,e    -,e  
0.40 0.38 0.20 0.02
```

```
[1] "Proportion of Acc_AblSg systems without s ending: 1"
```

```
[1] "Nom_Acc_Abl_Sg_systems"
```

```
    -,e    -,o    -,o,e    o    e    s,o,e  
0.38 0.32 0.18 0.08 0.02 0.02
```

```
[1] "Proportion of Nom_Acc_AblSg systems without s ending: 0.98"
```

```
[1] "Gen_Dat_Sg_systems"
```

```
    e    es,e    es    -    s    -,e    e,-    s,-    i    i,e    is    is,-    is,i    o    s,e  
0.36 0.12 0.10 0.08 0.06 0.04 0.04 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02  
s,es  
0.02
```

```
[1] "Proportion of Gen_DatSg systems without s ending: 0.58"
```

```
[1] "Sg_1_systems"
```

```
a
```

```
1
```

```
[1] "Proportion of Sg1 systems with a ending: 1"
```

```
[1] "Nom_Acc_Sg_1_systems"
```

```
a
```

```
1
```

```
[1] "Proportion of Nom_AccSg1 systems with a ending: 1"
```

```
[1] "Acc_Abl_Sg_1_systems"
```

```
a
```

```
1
```

```
[1] "Proportion of Acc_AblSg1 systems with a ending: 1"
```

```
[1] "Nom_Acc_Abl_Sg_1_systems"
```

```
a
```

```

1
[1] "Proportion of Nom_Acc_AblSg1 systems with a ending: 1"
[1] "Gen_Dat_Sg_1_systems"

a as,a as s,as - es,a
0.70 0.14 0.08 0.04 0.02 0.02
[1] "Proportion of Gen_DatSg1 systems with a ending: 0.86"
[1] "Sg_2_systems"
o
1
[1] "Proportion of Sg2 systems with o ending: 1"
[1] "Nom_Acc_Sg_2_systems"
o
1
[1] "Proportion of Nom_AccSg2 systems with o ending: 1"
[1] "Acc_Abl_Sg_2_systems"

o o,os
0.98 0.02
[1] "Proportion of Acc_AblSg2 systems with o ending: 1"
[1] "Nom_Acc_Abl_Sg_2_systems"

o o,os
0.98 0.02
[1] "Proportion of Nom_Acc_AblSg2 systems with o ending: 1"
[1] "Gen_Dat_Sg_2_systems"

e - s e,o es,e i -,o es -,e i,e i,o is is,- o s,-
0.36 0.16 0.08 0.06 0.06 0.06 0.04 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Gen_DatSg2 systems with o ending: 0.14"
[1] "Sg_3_systems"

e - es s i is
0.80 0.08 0.04 0.04 0.02 0.02
[1] "Proportion of Sg3 systems with e ending: 0.88"
[1] "Nom_Acc_Sg_3_systems"

-,e e - es,e s,e
0.86 0.08 0.02 0.02 0.02
[1] "Proportion of Nom_AccSg3 systems with e ending: 1"
[1] "Acc_Abl_Sg_3_systems"

e -,e
0.98 0.02
[1] "Proportion of Acc_AblSg3 systems with e ending: 1"
[1] "Nom_Acc_Abl_Sg_3_systems"

-,e e es,e s,e
0.88 0.08 0.02 0.02
[1] "Proportion of Nom_Acc_AblSg3 systems with e ending: 1"
[1] "Gen_Dat_Sg_3_systems"

e es,e es -,e s,e is s e,- i is,- s,es
0.40 0.18 0.10 0.08 0.08 0.04 0.04 0.02 0.02 0.02 0.02

```

```

[1] "Proportion of Gen_DatSg3 systems with e ending: 0.78"
[1] "Sg_4_systems"

    o  os   -   es   u
0.90 0.04 0.02 0.02 0.02
[1] "Proportion of Sg4 systems with o ending: 0.9"
[1] "Nom_Acc_Sg_4_systems"

    o os,o   u
0.92 0.06 0.02
[1] "Proportion of Nom_AccSg4 systems with o ending: 0.98"
[1] "Acc_Abl_Sg_4_systems"

    o o,os o,-   u
0.88 0.08 0.02 0.02
[1] "Proportion of Acc_AblSg4 systems with o ending: 0.98"
[1] "Nom_Acc_Abl_Sg_4_systems"

    o os,o o,- o,os   u
0.88 0.06 0.02 0.02 0.02
[1] "Proportion of Nom_Acc_AblSg4 systems with o ending: 0.98"
[1] "Gen_Dat_Sg_4_systems"

    e   o   -   es   s e,o es,e   i s,o -,o -,s e,- is,- is,i os
0.24 0.20 0.10 0.06 0.06 0.04 0.04 0.04 0.04 0.02 0.02 0.02 0.02 0.02 0.02
os,- s,-   u
0.02 0.02 0.02
[1] "Proportion of Gen_DatSg4 systems with o ending: 0.3"
[1] "Sg_5_systems"

    e   -   es
0.92 0.04 0.04
[1] "Proportion of Sg5 systems with e ending: 0.92"
[1] "Nom_Acc_Sg_5_systems"

    -,e   e es,e s,e   -
0.68 0.22 0.04 0.04 0.02
[1] "Proportion of Nom_AccSg5 systems with e ending: 0.98"
[1] "Acc_Abl_Sg_5_systems"

    e e,es -,e
0.94 0.04 0.02
[1] "Proportion of Acc_AblSg5 systems with e ending: 1"
[1] "Nom_Acc_Abl_Sg_5_systems"

    -,e   e   es,e   s,e s,e,es
0.70 0.22 0.04 0.02 0.02
[1] "Proportion of Nom_Acc_AblSg5 systems with e ending: 1"
[1] "Gen_Dat_Sg_5_systems"

    e   es es,e -,e s,e e,-   s s,es   -   i   is is,- is,i
0.38 0.12 0.12 0.10 0.06 0.04 0.04 0.04 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Gen_DatSg5 systems with e ending: 0.7"
[1] "Sg_m_systems"

```

```

e o - es i s
0.50 0.34 0.06 0.06 0.02 0.02
[1] "Proportion of Sgm systems with oe ending: 0.9"
[1] "Nom_Acc_Sg_m_systems"

o -,o - s,o
0.92 0.04 0.02 0.02
[1] "Proportion of Nom_AccSgm systems with oe ending: 1"
[1] "Acc_Abl_Sg_m_systems"

o o,e -,e o,os
0.88 0.08 0.02 0.02
[1] "Proportion of Acc_AblSgm systems with oe ending: 1"
[1] "Nom_Acc_Abl_Sg_m_systems"

o -,o,e -,e o,e o,os s,o,e
0.88 0.04 0.02 0.02 0.02 0.02
[1] "Proportion of Nom_Acc_AblSgm systems with oe ending: 1"
[1] "Gen_Dat_Sg_m_systems"

e - es,e -,e es s e,o es,o i is is,- is,i o s,e s,es
0.38 0.10 0.10 0.06 0.06 0.06 0.04 0.04 0.04 0.02 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Gen_DatSgm systems with oe ending: 0.78"
[1] "Sg_f_systems"

a e
0.92 0.08
[1] "Proportion of Sgf systems with ae ending: 1"
[1] "Nom_Acc_Sg_f_systems"

-,e a,e e - es,e s,e
0.68 0.18 0.08 0.02 0.02 0.02
[1] "Proportion of Nom_AccSgf systems with ae ending: 1"
[1] "Acc_Abl_Sg_f_systems"

e e,a -,e
0.94 0.04 0.02
[1] "Proportion of Acc_AblSgf systems with ae ending: 1"
[1] "Nom_Acc_Abl_Sg_f_systems"

-,e a,e e es,e s,e
0.70 0.18 0.08 0.02 0.02
[1] "Proportion of Nom_Acc_AblSgf systems with ae ending: 1"
[1] "Gen_Dat_Sg_f_systems"

e a,e es es,e -,e s,e e,- s - a,es e,a es,a
0.28 0.14 0.08 0.08 0.06 0.06 0.04 0.04 0.02 0.02 0.02 0.02
es,as i is is,- is,i s,a s,es
0.02 0.02 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Gen_DatSgf systems with ae ending: 0.78"
[1] "Sg_n_systems"

e o - es s i is

```

0.36 0.34 0.18 0.04 0.04 0.02 0.02
 [1] "Proportion of Sgn systems with oe ending: 0.88"
 [1] "Nom_Acc_Sg_n_systems"
 o
 1
 [1] "Proportion of Nom_AccSgn systems with oe ending: 1"
 [1] "Acc_Abl_Sg_n_systems"

 o o,os
 0.98 0.02
 [1] "Proportion of Acc_AblSgn systems with oe ending: 1"
 [1] "Nom_Acc_Abl_Sg_n_systems"

 o o,os
 0.98 0.02
 [1] "Proportion of Nom_Acc_AblSgn systems with oe ending: 1"
 [1] "Gen_Dat_Sg_n_systems"

 e - s e,o es,e i -,o es -,e i,e i,o is is,- o s,-
 0.36 0.16 0.08 0.06 0.06 0.06 0.04 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02
 [1] "Proportion of Gen_DatSgn systems with oe ending: 0.8"
 [1] "Sg_mf_systems"

 e,a o,a e -,a es,a i,a s,a
 0.42 0.34 0.08 0.06 0.06 0.02 0.02
 [1] "Proportion of Sgmf systems with aoe ending: 1"
 [1] "Nom_Acc_Sg_mf_systems"

 o,-,e o,a,e o,e -,a,o,e - o,es,e s,o,e
 0.68 0.14 0.08 0.04 0.02 0.02 0.02
 [1] "Proportion of Nom_AccSgmf systems with aoe ending: 1"
 [1] "Acc_Abl_Sg_mf_systems"

 o,e -,e o,e,a o,e,os,a
 0.94 0.02 0.02 0.02
 [1] "Proportion of Acc_AblSgmf systems with aoe ending: 1"
 [1] "Nom_Acc_Abl_Sg_mf_systems"

 o,-,e o,a,e o,e -,a,o,e -,e o,a,e,os o,es,e s,o,e
 0.68 0.12 0.08 0.04 0.02 0.02 0.02 0.02
 [1] "Proportion of Nom_Acc_AblSgmf systems with aoe ending: 1"
 [1] "Gen_Dat_Sg_mf_systems"

 e -,e e,a es,e -,s,e e,- es -,a,e -,s
 0.26 0.08 0.08 0.08 0.04 0.04 0.04 0.02 0.02
 e,a,o e,o,- es,a es,e,as es,o es,o,e i i,a,e is
 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
 is,- is,i o,a,e s s,e s,e,a s,es s,es,a
 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
 [1] "Proportion of Gen_DatSgmf systems with aoe ending: 0.86"
 [1] "Pl_systems"

 e - s es a eo i
 0.28 0.24 0.20 0.16 0.04 0.04 0.04

[1] "Proportion of Pl systems with s ending: 0.36"

[1] "Nom_Acc_Pl_systems"

s	-	es	-,a	a	-,e	s,-	s,es	-,es	es,a	a,e	e
0.18	0.16	0.14	0.08	0.08	0.06	0.06	0.06	0.04	0.04	0.02	0.02
es,as	es,e	is,as									
0.02	0.02	0.02									

[1] "Proportion of Nom_AccPl systems with s ending: 0.58"

[1] "Acc_Abl_Pl_systems"

s	es,e	-	es	a,-	a,es	e	-,e	a,e
0.14	0.10	0.08	0.08	0.06	0.06	0.06	0.04	0.04
e,-	-,ebos	-,eo	-,es	-,i	-,s	a,eo	a,i	as,e
0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
as,eo	e,es	es,-	es,ebos	es,s	s,e	s,eo		
0.02	0.02	0.02	0.02	0.02	0.02	0.02		

[1] "Proportion of Acc_AblPl systems with s ending: 0.6"

[1] "Nom_Acc_Abl_Pl_systems"

s	-	-,e	es	es,e	-,a	a,e
0.14	0.08	0.08	0.08	0.08	0.06	0.06
-,es	es,a	-,a,i	-,eo	-,es,e	-,s	a,eo
0.04	0.04	0.02	0.02	0.02	0.02	0.02
a,es	e	es,as,e	is,as,eo	s,-,e	s,-,ebos	s,-,i
0.02	0.02	0.02	0.02	0.02	0.02	0.02
s,e	s,eo	s,es	s,es,e	s,es,ebos		
0.02	0.02	0.02	0.02	0.02		

[1] "Proportion of Nom_Acc_AblPl systems with s ending: 0.64"

[1] "Gen_Dat_Pl_systems"

e	-	es	s	eo	i	-,e	e,a	ebos,es
0.28	0.20	0.16	0.14	0.04	0.04	0.02	0.02	0.02
es,-	o	o,eo	s,-					
0.02	0.02	0.02	0.02					

[1] "Proportion of Gen_DatPl systems with s ending: 0.36"

[1] "Pl_1_systems"

a	as	-	e	o	s
0.64	0.28	0.02	0.02	0.02	0.02

[1] "Proportion of Pl1 systems with s ending: 0.3"

[1] "Nom_Acc_Pl_1_systems"

a	as	a,es	es	as,a	s,as
0.62	0.26	0.04	0.04	0.02	0.02

[1] "Proportion of Nom_AccPl1 systems with s ending: 0.38"

[1] "Acc_Abl_Pl_1_systems"

a	as	es,a	as,s	a,-	a,as	a,bos	a,e	a,eo	a,o
0.52	0.18	0.06	0.04	0.02	0.02	0.02	0.02	0.02	0.02
as,-	as,bos	as,i	es,as						
0.02	0.02	0.02	0.02						

[1] "Proportion of Acc_AblPl1 systems with s ending: 0.4"

[1] "Nom_Acc_Abl_Pl_1_systems"

a	as	a,es	a,-	a,as	a,e	a,eo	a,o
0.52	0.18	0.04	0.02	0.02	0.02	0.02	0.02
as,-	as,a,bos	as,bos	as,i	as,s	es,a	es,as	s,as
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

[1] "Proportion of Nom_Acc_AblPl1 systems with s ending: 0.4"

[1] "Gen_Dat_Pl_1_systems"

a	as	s,as	-	a,as	ao	aso	bos,as	e	o
0.64	0.16	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02
s									
0.02									

[1] "Proportion of Gen_DatPl1 systems with s ending: 0.26"

[1] "Pl_2_systems"

-	e	s	es	a	i	o
0.34	0.22	0.22	0.10	0.04	0.04	0.04

[1] "Proportion of Pl2 systems with s ending: 0.32"

[1] "Nom_Acc_Pl_2_systems"

-	a	s	-,a	s,-	s,as	e,-	es	es,e	os,s
0.32	0.20	0.20	0.10	0.06	0.04	0.02	0.02	0.02	0.02

[1] "Proportion of Nom_AccPl2 systems with s ending: 0.36"

[1] "Acc_Abl_Pl_2_systems"

s	-,e	-	a,-	a,e	-,s	-,eo	-,es	-,i	a	a,es	a,i
0.18	0.14	0.12	0.12	0.10	0.08	0.02	0.02	0.02	0.02	0.02	0.02
a,o	as,e	as,es	e,es	es	s,e	s,es					
0.02	0.02	0.02	0.02	0.02	0.02	0.02					

[1] "Proportion of Acc_AblPl2 systems with s ending: 0.42"

[1] "Nom_Acc_Abl_Pl_2_systems"

s	-	-,e	a,e	-,a	-,s	a,-	-,a,e	-,a,es
0.18	0.12	0.10	0.08	0.06	0.06	0.06	0.02	0.02
-,eo	-,es	a	a,i	a,o	e,-	es	es,e	os,s,es
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
s,-	s,-,e	s,-,i	s,as,e	s,as,es	s,e			
0.02	0.02	0.02	0.02	0.02	0.02			

[1] "Proportion of Nom_Acc_AblPl2 systems with s ending: 0.46"

[1] "Gen_Dat_Pl_2_systems"

-	e	s	es	o	-,a	i	-,e	a
0.28	0.24	0.20	0.10	0.06	0.04	0.04	0.02	0.02

[1] "Proportion of Gen_DatPl2 systems with s ending: 0.3"

[1] "Pl_3_systems"

e	es	s	-	eo	i	ebos
0.32	0.26	0.16	0.14	0.06	0.04	0.02

[1] "Proportion of Pl3 systems with s ending: 0.44"

[1] "Nom_Acc_Pl_3_systems"

es	s,es	-,e	s,e	e	es,e	-	-,es	a,e	is,es	s	s,-
0.28	0.20	0.18	0.08	0.06	0.06	0.04	0.02	0.02	0.02	0.02	0.02

[1] "Proportion of Nom_AccPl3 systems with s ending: 0.7"

[1] "Acc_Abl_Pl_3_systems"

es	e	es,e	e,es	e,eo	es,eo	-	-,e	-,es
0.28	0.20	0.16	0.08	0.04	0.04	0.02	0.02	0.02
e,-	e,ebos	e,i	e,s	es,ebos	es,i	s		
0.02	0.02	0.02	0.02	0.02	0.02	0.02		

[1] "Proportion of Acc_AblPl3 systems with s ending: 0.68"

[1] "Nom_Acc_Abl_Pl_3_systems"

es,e	es	-,e	s,es	e	s,e	-
0.18	0.16	0.14	0.12	0.06	0.04	0.02
-,e,eo	-,e,es	-,e,i	-,es,e	a,e	is,es,eo	s
0.02	0.02	0.02	0.02	0.02	0.02	0.02
s,-,es	s,e,ebos	s,e,eo	s,es,e	s,es,ebos	s,es,eo	s,es,i
0.02	0.02	0.02	0.02	0.02	0.02	0.02

[1] "Proportion of Nom_Acc_AblPl3 systems with s ending: 0.72"

[1] "Gen_Dat_Pl_3_systems"

e	es	-	-,e	s	eo	i	s,es	e,-
0.30	0.18	0.10	0.08	0.08	0.06	0.04	0.04	0.02
ebos,es	es,e	o	s,-	s,e				
0.02	0.02	0.02	0.02	0.02				

[1] "Proportion of Gen_DatPl3 systems with s ending: 0.38"

[1] "Pl_4_systems"

-	s	e	es	o	eo	i	os	u
0.28	0.20	0.18	0.12	0.10	0.04	0.04	0.02	0.02

[1] "Proportion of Pl4 systems with s ending: 0.34"

[1] "Nom_Acc_Pl_4_systems"

-	s	o	es	e	e,o	os	s,-	es,e	u
0.36	0.22	0.12	0.08	0.06	0.04	0.04	0.04	0.02	0.02

[1] "Proportion of Nom_AccPl4 systems with s ending: 0.4"

[1] "Acc_Abl_Pl_4_systems"

-	s	-,e	es	e	o	-,eo	-,i	o,e	-,s	e,es	o,-	o,os	o,s	os
0.22	0.18	0.08	0.08	0.06	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02
os,s	s,e	s,eo	u											
0.02	0.02	0.02	0.02											

[1] "Proportion of Acc_AblPl4 systems with s ending: 0.42"

[1] "Nom_Acc_Abl_Pl_4_systems"

-	s	es	-,e	e	o	-,eo	e,o	-,i	-,s	es,e	o,-
0.22	0.18	0.08	0.06	0.06	0.06	0.04	0.04	0.02	0.02	0.02	0.02
o,os	o,s	os	os,s	s,-,e	s,-,i	s,e	s,eo	u			
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02			

[1] "Proportion of Nom_Acc_AblPl4 systems with s ending: 0.46"

[1] "Gen_Dat_Pl_4_systems"

e	-	es	s	eo	es,-	i	-,e	eso,eo	o
0.32	0.16	0.16	0.16	0.04	0.04	0.04	0.02	0.02	0.02
u									
0.02									

[1] "Proportion of Gen_DatPl4 systems with s ending: 0.36"

[1] "Pl_5_systems"


```

e es - s eo i a ebos
0.34 0.26 0.18 0.08 0.06 0.04 0.02 0.02
[1] "Proportion of Pl5 systems with s ending: 0.36"
[1] "Nom_Acc_Pl_5_systems"

es s,es -,e - es,e a s,e -,es a,e e is,es s
0.30 0.20 0.18 0.08 0.06 0.04 0.04 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Nom_AccPl5 systems with s ending: 0.66"
[1] "Acc_Abl_Pl_5_systems"

es es,e e e,es - e,eo -,e -,es a
0.26 0.20 0.14 0.08 0.04 0.04 0.02 0.02 0.02
a,- e,- e,ebos e,i es,ebos es,eo es,i es,io s
0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Acc_AblPl5 systems with s ending: 0.68"
[1] "Nom_Acc_Abl_Pl_5_systems"

es,e es -,e s,es - -,e,eo -,e,es
0.22 0.14 0.12 0.12 0.04 0.04 0.02
-,e,i -,es -,es,e a a,- a,e e
0.02 0.02 0.02 0.02 0.02 0.02 0.02
is,es,io s s,e s,e,ebos s,es,e s,es,ebos s,es,eo
0.02 0.02 0.02 0.02 0.02 0.02 0.02
s,es,i
0.02
[1] "Proportion of Nom_Acc_AblPl5 systems with s ending: 0.7"
[1] "Gen_Dat_Pl_5_systems"

e es - -,e s eo i s,es a
0.28 0.16 0.12 0.10 0.08 0.06 0.04 0.04 0.02
ebos,es es,e es,s o s,e
0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Gen_DatPl5 systems with s ending: 0.36"
[1] "Pl_m_systems"

e - s es eo i o
0.32 0.22 0.22 0.14 0.04 0.04 0.02
[1] "Proportion of Plm systems with s ending: 0.36"
[1] "Nom_Acc_Pl_m_systems"

- s es -,e e s,- s,e a,e e,- e,es es,- is,es
0.32 0.20 0.16 0.06 0.04 0.04 0.04 0.02 0.02 0.02 0.02 0.02
os,es s,es
0.02 0.02
[1] "Proportion of Nom_AccPlm systems with s ending: 0.54"
[1] "Acc_Abl_Pl_m_systems"

- s -,e es es,e e -,es -,i e,es -,eo -,s e,eo
0.18 0.16 0.10 0.10 0.10 0.08 0.04 0.04 0.04 0.02 0.02 0.02
e,s es,eo es,s s,e s,eo
0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Acc_AblPlm systems with s ending: 0.56"
[1] "Nom_Acc_Abl_Pl_m_systems"

```

-	s	-e	es	es,e	-e,es	e	s,e
0.18	0.16	0.08	0.08	0.08	0.04	0.04	0.04
-eo	-es	-i	-s	a,e	e,-	e,es	es,-
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
is,es,eo	os,es	s,-e	s,-i	s,e,eo	s,eo	s,es	
0.02	0.02	0.02	0.02	0.02	0.02	0.02	

[1] "Proportion of Nom_Acc_AblPlm systems with s ending: 0.62"

[1] "Gen_Dat_Pl_m_systems"

e	-	s	es	eo	i	-e	e,-	es,-	o	s,-
0.30	0.20	0.16	0.14	0.06	0.04	0.02	0.02	0.02	0.02	0.02

[1] "Proportion of Gen_DatPlm systems with s ending: 0.34"

[1] "Pl_f_systems"

a	es	as	s	e	-	eo	i
0.48	0.18	0.10	0.08	0.06	0.04	0.04	0.02

[1] "Proportion of Plf systems with s ending: 0.36"

[1] "Nom_Acc_Pl_f_systems"

es	s,es	-e	a	a,e	-	es,e	s,e	-e,es	e	is,es	s
0.30	0.20	0.14	0.10	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.02

[1] "Proportion of Nom_AccPlf systems with s ending: 0.64"

[1] "Acc_Abl_Pl_f_systems"

es	es,e	e	a	e,es	a,es	e,eo	es,eo	-
0.26	0.18	0.12	0.06	0.06	0.04	0.04	0.04	0.02
-e	e,-	e,a	e,ebos	e,i	es,a	es,ebos	es,i	s
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

[1] "Proportion of Acc_AblPlf systems with s ending: 0.68"

[1] "Nom_Acc_Abl_Pl_f_systems"

es,e	es	s,es	-e	a	a,e	a,es
0.18	0.14	0.12	0.10	0.06	0.04	0.04
-	-e,eo	-e,es	-e,i	-es,e	a,e,eo	e
0.02	0.02	0.02	0.02	0.02	0.02	0.02
es,a	is,es,eo	s	s,e	s,e,ebos	s,es,e	s,es,ebos
0.02	0.02	0.02	0.02	0.02	0.02	0.02
s,es,eo	s,es,i					
0.02	0.02					

[1] "Proportion of Nom_Acc_AblPlf systems with s ending: 0.7"

[1] "Gen_Dat_Pl_f_systems"

e	es	-e	s	-	a	eo	i	s,es
0.24	0.16	0.08	0.08	0.06	0.06	0.06	0.04	0.04
-a	a,-	a,e	a,es	ebos,es	es,as	es,e	o	s,e
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

[1] "Proportion of Gen_DatPlf systems with s ending: 0.38"

[1] "Pl_n_systems"

-	e	s	es	a	i	o
0.32	0.22	0.22	0.10	0.06	0.04	0.04

[1] "Proportion of Pln systems with a ending: 0.06"

[1] "Nom_Acc_Pl_n_systems"

```

- a s -,a s,- s,as e,- es es,e os,s
0.32 0.20 0.20 0.10 0.06 0.04 0.02 0.02 0.02 0.02
[1] "Proportion of Nom_AccPln systems with a ending: 0.3"
[1] "Acc_Abl_Pl_n_systems"

s -,e - a,- a,e -,s -,eo -,es -,i a a,es a,i
0.18 0.14 0.12 0.12 0.10 0.08 0.02 0.02 0.02 0.02 0.02 0.02
a,o as,es as,o e,es es s,e s,es
0.02 0.02 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Acc_AblPln systems with a ending: 0.3"
[1] "Nom_Acc_Abl_Pl_n_systems"

s - -,e a,e -,a -,s a,- -,a,e -,a,es
0.18 0.12 0.10 0.08 0.06 0.06 0.06 0.02 0.02
-,eo -,es a a,i a,o e,- es es,e os,s,es
0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
s,- s-,e s-,i s,as,es s,as,o s,e
0.02 0.02 0.02 0.02 0.02 0.02
[1] "Proportion of Nom_Acc_AblPln systems with a ending: 0.3"
[1] "Gen_Dat_Pl_n_systems"

- e s es o -,a i a
0.30 0.24 0.20 0.10 0.06 0.04 0.04 0.02
[1] "Proportion of Gen_DatPln systems with a ending: 0.06"
[1] "Pl_mf_systems"

e,a -,a es s s,as s,a - e e,es eo es,a -,es e,as i i,e
0.22 0.16 0.10 0.08 0.08 0.06 0.04 0.04 0.04 0.04 0.04 0.02 0.02 0.02 0.02
o,es
0.02
[1] "Proportion of Plmf systems with s ending: 0.46"
[1] "Nom_Acc_Pl_mf_systems"

s,es -,e es -,es - -,a -,a,e e,es s-,es s,a,e
0.18 0.14 0.14 0.08 0.04 0.04 0.04 0.04 0.04 0.04
-,s,e -,s,es a,e e e,a,- es,-e es,e is,es os,es s
0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
s,e
0.02
[1] "Proportion of Nom_AccPlmf systems with s ending: 0.68"
[1] "Acc_Abl_Pl_mf_systems"

es,e -,e s,es -,es,e es -,a,es
0.12 0.10 0.10 0.08 0.08 0.04
e e,es - -,a,e -,e,eo -,e,es
0.04 0.04 0.02 0.02 0.02 0.02
-,e,i -,e,s,ebos -,es -,es,a -,es,i e,a
0.02 0.02 0.02 0.02 0.02 0.02
e,a,s e,eo e,es,a es,eo es,s s
0.02 0.02 0.02 0.02 0.02 0.02
s,e s,es,e s,es,ebos s,es,eo
0.02 0.02 0.02 0.02
[1] "Proportion of Acc_AblPlmf systems with s ending: 0.74"

```

[1] "Nom_Acc_Abl_Pl_mf_systems"

s,es	-,e	es,e	es	-,a,es	-,es,e
0.12	0.10	0.10	0.06	0.04	0.04
e,es	-	-,a,e	-,a,e,es	-,e,eo	-,e,es
0.04	0.02	0.02	0.02	0.02	0.02
-,e,i	-,es	-,es,a	-,s,e,ebos	-,s,es,e	a,e
0.02	0.02	0.02	0.02	0.02	0.02
e	e,a,-	es,-,e	is,es,eo	os,es	s
0.02	0.02	0.02	0.02	0.02	0.02
s,-,es,e	s,-,es,i	s,a,e	s,a,e,eo	s,e	s,es,e
0.02	0.02	0.02	0.02	0.02	0.02
s,es,ebos	s,es,eo				
0.02	0.02				

[1] "Proportion of Nom_Acc_AblPlmf systems with s ending: 0.76"

[1] "Gen_Dat_Pl_mf_systems"

e	es	-,e	s	-	eo	-,a
0.22	0.12	0.10	0.08	0.06	0.06	0.04
e,a	i	s,es	-,es	e,a,-	e,a,es	e,es
0.04	0.04	0.04	0.02	0.02	0.02	0.02
es,-,e	es,as	o	s,a,-	s,e	s,ebos,es	
0.02	0.02	0.02	0.02	0.02	0.02	

[1] "Proportion of Gen_DatPlmf systems with s ending: 0.4"

\$Nom_Acc_Sg_same

[1] "12%"

\$Acc_Abl_Sg_same

[1] "78%"

\$Nom_Acc_Abl_Sg_same

[1] "10%"

\$Gen_Dat_Sg_same

[1] "66%"

\$m_Sg_n_Sg_same

[1] "72%"

\$Pl_same

[1] "22%"

\$Nom_Acc_Pl_same

[1] "58%"

\$Acc_Abl_Pl_same

[1] "36%"

\$Nom_Acc_Abl_Pl_same

[1] "32%"

\$Gen_Dat_Pl_same

[1] "88%"

```
$m_Pl_f_Pl_same  
[1] "32%"
```

```
$m_Pl_n_Pl_same  
[1] "74%"
```

```
$n_Pl_f_Sg_same  
[1] "12%"
```

```
$n_Pl_f_Pl_same  
[1] "32%"
```

```
$m_n_same  
[1] "52%"
```

```
$Dec_24_same  
[1] "100%"
```