Selective Handout for
Harmonic Alignment in Morphosyntax: Subject Selection
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Harmonic Alignment

(13)   Harmonic Alignment ($\mathcal{HA}$) applies to a pair of scales. [1]

A structural, binary scale	An n-ary scale, usually substantive, e.g.
Syllable Structure Positions: Peak > Margin	Sonority Scale: $a > \dots > t$

Grammatical Functions:
      Subject > NonSubject
            Subject > Object
            Subject > Oblique
	Role Scale: Agent > Patient
	Topicality Scale: T > t
	Person Scale: Local > 3rd
	                         $1^{st} > 3^{rd}$
	                         2nd > 3rd

(14) … and derives harmonic alignments and constraint subhierarchies

$\mathcal{HA}$ (X, Y)	Harmonic Alignments	Constraint Subhierarchies

$\mathcal{HA}$ (GF, Role)	Su/Agent ≻ Su/Patient
	   Oj/Patient ≻ Oj/Agent
	   Obl/Patient ≻ Obl/Agent
		*Su/Patient » *Su/Agent
		   *Oj/Agent » *Oj/Patient
		   *Obl/Agent » *Obl/Patient

$\mathcal{HA}$ (GF, Topicality)	Su/T ≻ Su/t
	   Oj/t ≻ Oj/T
	   Obl/t ≻ Obl/T
		*Su/t » *Su/T
		   *Oj/T » *Oj/t
		   *Obl/T » *Obl/t

$\mathcal{HA}$ (GF, Person)	Su/Local ≻ Su/3
	   Oj/3 ≻ Oj/Local
	   Obl/3 ≻ Obl/Local
		*Su/3 » *Su/Local
		   *Oj/Local » *Oj/3
		   *Obl/Local » *Obl/3

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[1] Alignment. Suppose given a binary dimension D_1 with a scale X > Y on its elements {X, Y}, and another dimension D_2 with a scale a > b ... > z on its elements. The harmonic alignment of D_1 and D_2 is the pair of Harmony scales:

H_X : X/a > X/b > ... > X/z
H_Y: Y/z > ... > Y/b > Y/a

The constraint alignment is the pair of constraint hierarchies:

C_X: *X/z >> ... >> *X/b >> *X/a
C_Y : *Y/a >> *Y/b >> ... >> *Y/z

(Prince and Smolensky 1993, 136)

Some Case Studies from Aissen 1999

(20)   Simplifying assumptions:
Since neither active nor passive violates *Oj/Agt, this constraint is ignored.
Syntactic obliques are restricted here to AGENT obliques.

Subject selection determined solely by semantic role

(21)   Fox (Algonquian): All clauses with syntactically realized AGENT and PATIENT
are active (Dahlstrom 1995)

*<u>Su/Pat</u> » $\mathcal{GF}$ /$\mathcal{X}$

x: Agent /3rd /t y: Patient/Local/T	*<u>Su/Pat</u>	*$\mathcal{GF}$ /$\mathcal{X}$
☞ ACT: Su/Agt/3/t Oj/Pat/Local/T		******
PSV: Su/Pat/Local/T Obl/Agt/3/t	*!	*****

Discourse status plays a role in subject selection

(22)   "English": Passive occurs when patient is topical (Tomlin 1985; Thompson 1987)

*Su/t » *<u>Su/Pat</u> » $\mathcal{GF}$ /$\mathcal{X}$

a.

x: Agent /3rd/t y: Patient/3rd/T	*Su/t	*<u>Su/Pat</u>	*$\mathcal{GF}$ /$\mathcal{X}$
ACT: Su/Agt/3/t Oj/Pat/3/T	*!		*****
☞ PSV: Su/Pat/3/T Obl/Agt/3/t		*	*****

b.

x: Agent /3rd/t y: Patient/3rd/t	*Su/t	*<u>Su/Pat</u>	*$\mathcal{GF}$ /$\mathcal{X}$
☞ ACT: Su/Agt/3/t Oj/Pat/3/t	*		*****
PSV: Su/Pat/3/t Obl/Agt/3/t	*	*!	****

Person plays a role in subject choice -- Salish (Jelinek and Demers 1983)

(23) Lushootseed

a) Like English except that passives with local person agents are excluded (a common constraint).

	Active	Passive
$1^{st}/2^{nd}$ A, 3rd P	yes	no
3rd A, 3rd P	yes	yes
$1^{st}/2^{nd}$ A, $1^{st}/2^{nd}$ P	yes	no
3rd A , $1^{st}/2^{nd}$ P	yes	yes

b) Ranking: *Obl/Local » *Su/t » *<u>Su/Pat</u> » *$\mathcal{GF}$ /$\mathcal{X}$

c)

x: Agent/1st/t y: Patient/3rd/T	*Obl/Local	*Su/t	*<u>Su/Pat</u>	*$\mathcal{GF}$ /$\mathcal{X}$
☞ ACT: Su/Agt/1/t Oj/Pat/3/T		*		*****
PSV: Su/Pat/3/T Obl/Agt/1/t	*!		*	****

(31) Lummi

a)   Like Lushootseed except that active clauses with local person patients are ungrammatical.

	Active	Passive
$1^{st}/2^{nd}$ A, 3rd P	yes	no
3rd A, 3rd P	yes	yes
$1^{st}/2^{nd}$ A, $1^{st}/2^{nd}$ P	yes	no
3rd A , $1^{st}/2^{nd}$ P	no	yes

b)   *Obl/Local » *Oj/Local » *Su/t » *<u>Su/Pat</u> » *$\mathcal{GF}$ /$\mathcal{X}$

c)

x: Agent/3/T y: Patient/1st/t	*Obl/Local	*Oj/Local *or *Su/3*	*Su/t	*<u>Su/Pat</u>	*$\mathcal{GF}$ /$\mathcal{X}$
ACT: Su/Agt/3/T Oj/Pat/1/t		*!			*****
☞ PSV: Su/Pat/1/t Obl/Agt/3/T			*	*	****

d)

x: Agent/2nd y: Patient/1st	*Obl/Local	*Oj/Local *or *Su/3*	*Su/t	*<u>Su/Pat</u>	*$\mathcal{GF}$ /$\mathcal{X}$
☞ ACT: Su/Agt/2 Oj/Pat/1		*			*****
PSV: Su/Pat/1 Obl/Agt/2	*!			*	****

(25)   Squamish (Salish)   (Jelinek and Demers 1983)

a)   Like Lummi except that 1st and 2nd person patients behave differently…

	Active	Passive
1st/2nd A, 3rd P	yes	no
3rd A, 3rd P	yes	yes
1st/2nd A, 1st/2nd P	yes	no
3rd A , 1st P	yes	yes
3rd A, 2nd P	no	yes

b)   *Obl/Local » *Oj/2 » *Su/t » *Su/Pat » *$\mathcal{GF}$ /$\mathcal{X}$

c)

x: Agent/3rd/T y: Patient/2st/t	*Obl/Local	*Oj/2	*Su/t	*Su/Pat	*$\mathcal{GF}$ /$\mathcal{X}$
ACT: Su/Agt/3/T Oj/Pat/2/t		*!			*****
☞ PSV: Su/Pat/2/t Obl/Agt/3/T			*	*	****

x: Agent/3/t y: Patient/1st/t	*Obl/Local	*Oj/2	*Su/t	*Su/Pat	*$\mathcal{GF}$ /$\mathcal{X}$
☞ ACT: Su/Agt/3/t Oj/Pat/1/t			*		*****
PSV: Su/Pat/1/t Obl/Agt/3/t			*	*!	****

References for *selective handout***:**

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