

# ТИПОЛОГИЯ ПОРЯДКА СЛОВ

—

ЧТО ТАКОЕ БАЗОВЫЙ  
ПОРЯДОК СЛОВ?

# ЭЛЕМЕНТЫ








S(ubject)

O(bject)

V(erb)

## Values of Map 81A. Order of Subject, Object and Verb

[Go to map](#)

	Value	Representation
	Subject-object-verb (SOV)	565
	Subject-verb-object (SVO)	488
	Verb-subject-object (VSO)	95
	Verb-object-subject (VOS)	25
	Object-verb-subject (OVS)	11
	Object-subject-verb (OSV)	4
	Lacking a dominant word order	189
Total:		1377

# Dryer (2013)

# KPOME TOGO:

Adp(osition)

N(oun)

Adj(ective)

N(oun)

G(enitive)

N(oun)

Rel(ative)

N(oun)

КАК ВЫДЕЛИТЬ  
БАЗОВЫЙ ПОРЯДОК  
СЛОВ?

# БАЗОВЫЙ ПОРЯДОК СЛОВ

- прагматическая нейтральность
- частотность
- маркированность

# БАЗОВЫЙ ПОРЯДОК СЛОВ

«in stylistically neutral, independent, indicative clauses with full noun phrase (NP) participants, where the subject is definite, agentive and human, the object is a definite semantic patient, and the verb represents an action, not a state or an event»

«нейтральное, независимое предложение в индикативе с участниками, выраженными полными именными группами, где субъект определённый, агентивный и является человеком, объект – явный пациент, глагол выражает действие, а не состояние или событие»

(Siewierska 1988a: 8)



# ИКОНИЧНОСТЬ

Уподобление порядка слов порядку действий.

Уподобление порядка слов порядку участников.

# ЧТО ТАКОЕ ДОМИНАНТНОСТЬ?

# КАКОЙ ТИП ДОМИНАНТНЫЙ?

	NG	GN
NRel	+	+
RelN	−	+

tetrachoric representation of Hawkins' (1983) universal VI

# ЧТО ТАКОЕ ГАРМОНИЧНОСТЬ?

# КАКОЙ ТИП ГАРМОНИЧНЫЙ?

	NG	GN
NRel	+	+
RelN	−	+

tetrachoric representation of Hawkins' (1983) universal VI

# БИГАРМОНИЧНЫЙ ТИП

	NG	GN
AdpN	+	–
NAdp	–	+

Greenberg's Universal 2 (1966: 78): In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes.

# ЗАВИСИМЫ? Greenberg (1966)

## Universal 3

Languages with dominant VSO order are always prepositional.

## Universal 4

With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional.

## Universal 2

In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes.

# Heaviness Serialization Principle (HSP)

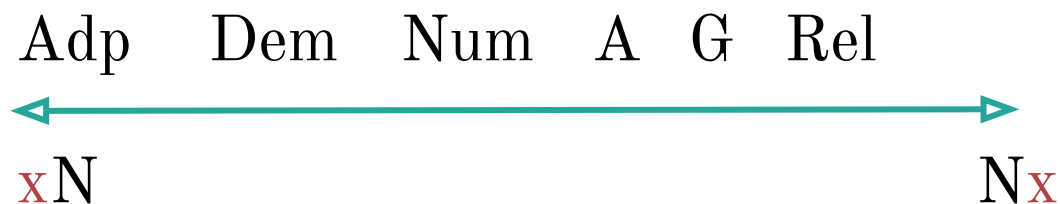
- a. AdpN & NDem & NNum & NA & NG & NRel
- b. AdpN & DemN & NNum & NA & NG & NRel
- c. AdpN & NDem & NumN & NA & NG & NRel
- d. AdpN & DemN & NumN & NA & NG & NRel
- e. AdpN & DemN & NumN & AN & NG & NRel
- f. AdpN & DemN & NumN & AN & GN & NRel
- g. AdpN & DemN & NumN & AN & GN & RelN



# Heaviness Serialization Principle (HSP)

что это значит?

Это история про то, в каком месте шкалы проходит «водораздел»



# Heaviness Serialization Principle (HSP)

$\text{Rel} \geq_R \text{G} \geq_R \text{A} \geq_R \{\text{Dem}, \text{Num}\}$

where ' $\geq_R$ ' means 'exhibits more or equal rightward positioning relative to the head noun across languages'.

# С ПОСТПОЗИТИВНЫМИ СЛОЖНЕЕ

- a. NAdp & NA & GN
- b. NAdp & NDem & GN
- c. NAdp & NNum & GN
- d. NAdp & NA & RelN

# Mobility Principle (MP)

the Dem, the Num, and the A are more mobile than the G and the Rel

In consistent postpositional languages, all nominal modifiers are already placed to the left of the head. When modifiers deviate from their ‘ideally serialized’ positions, they can only move to the right.

# Mobility Principle (MP)

- a. \*NAdp & AN & NG
- b. \*NAdp & DemN & NG
- c. \*NAdp & NumN & NG

# Head-Dependent Theory

Verb patterners are heads and object patterners are dependents. That is, a pair of elements  $X$  and  $Y$  will employ the order  $XY$  significantly more often among VO languages than among OV languages if and only if  $X$  is a head and  $Y$  is a dependent.

	AFRICA	EURASIA	SEASIA&Oc	AUS-NEWGUI	NAMER	SAMER	TOTAL
OV&VAux	<div>5</div>	<div>12</div>	<div>2</div>	<div>8</div>	<div>1</div>	<div>8</div>	36
OV&AuxV	3	0	0	0	0	0	3
VO&VAux	1	1	0	<div>1</div>	0	1	4
VO&AuxV	<div>15</div>	<div>5</div>	<div>3</div>	0	<div>4</div>	1	28

TABLE 28. Order of content verb and auxiliary verb.

V = head

# Branching Direction Theory

Verb patterners are non-phrasal (non-branching, lexical) categories and object patterners are phrasal (branching) categories. That is, a pair of elements X and Y will employ the order XY significantly more often among VO languages than among OV languages if and only if X is a non-phrasal category and Y is a phrasal category.

Ветвимость: на одну сторону собираются модификаторы, способные к ветвлению; ничего не говорится про порядок модификаторов



	AFRICA	EURASIA	SEASIA&Oc	AUS-NEWGUI	NAMER	SAMER	TOTAL
OV&VAux	<div>5</div>	<div>12</div>	<div>2</div>	<div>8</div>	<div>1</div>	<div>8</div>	36
OV&AuxV	3	0	0	0	0	0	3
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TABLE 28. Order of content verb and auxiliary verb.

# Parsing Theory of Word Order

Basic word order = order that maximizes efficiency and speed in processing

кратко: сколько (линейно) слов нам нужно, чтобы пропарсить количество ветвей в дереве (чем меньше, тем лучше)

# Constituent Recognition Domain

The CRD for a phrasal mother node  $M$  consists of the set of terminal and non-terminal nodes that must be parsed in order to recognize  $M$  and all ICs of  $M$ , proceeding from the terminal node in the parse string that constructs the first IC on the left, to the terminal node that constructs the last IC on the right, and including all intervening terminal nodes and the non-terminal nodes that they construct.


# Heavy NP Shift

- a. I vp[gave NP[the valuable book that was extremely difficult to find] pp[to Mary]]
- 1 2 3 4 5 6 7 8 9 10 11
- b. I vp[gave pp[to Mary] NP[the valuable book that was extremely difficult to find]]
- 1 2 3 4


# ЛЕВОЕ ВЕТВЛЕНИЕ

Japanese (Hawkins 1994: 66)

a. S<sub>1</sub>[NP[Mary ga] VP[S'<sub>1</sub>[S<sub>2</sub>[kinoo Johnga kekkon shi-ta] to] it-ta]]  
Mary NOM yesterday JohnNOM marry-PST QUOTsay-PST



b. S<sub>1</sub>[S'<sub>1</sub>[S<sub>2</sub>[Kinoo John ga kekkon shi-ta] to] NP[Mary ga] VP[it-ta]]  
yesterday John NOMmarry-PST QUOT Mary NOM say-PST



'Mary said that John married yesterday.'

# IC-to-Word Ratio

$$\frac{\text{number of ICs}}{\text{number of words}} \times 100\%$$

- a. I VP[gave NP[the valuable book that was extremely difficult to find] PP[to Mary]]
- 1 2 3 4 5 6 7 8 9 10 11
- b. I VP[gave PP[to Mary] NP[the valuable book that was extremely difficult to find]]
- 1 2 3 4

# Early Immediate Constituents

The human parser prefers to maximize the left-to-right IC-to-word ratios of the phrasal nodes that it constructs.



# Early Immediate Constituents

- a. Joe  $v_P$ [looked up  $N_P$ [the number]].
- b. Joe  $v_P$ [looked  $N_P$ [the number] up].
- c. Joe  $v_P$ [looked  $N_P$ [the number of the ticket] up].
- d. Joe  $v_P$ [looked  $N_P$ [the number that Mary had forgotten] up].

Structure	IC-to-word ratio within CRD of PP	Number of languages with this word order (total: 61 languages)	Percentage of languages with this word order (100% = 61 languages)
1. PP[P <sub>NP</sub> [ <b>Dem</b> N]]   2/2	100%	29	48%
2. PP[P <sub>NP</sub> [ <b>Adj</b> N]]   2/3	67%	17	28%
3. PP[P <sub>NP</sub> [ <b>PossP</b> N]]   2/4	50%	8	13%
4. PP[P <sub>NP</sub> [ <b>S'</b> N]]   2/6	33%	1	2%
1'. PP[P <sub>NP</sub> [N <b>Dem</b> ]]   2/2	100%	32	52%
2'. PP[P <sub>NP</sub> [N <b>Adj</b> ]]   2/2	100%	44	72%
3'. PP[P <sub>NP</sub> [N <b>PossP</b> ]]   2/2	100%	53	87%
4'. PP[P <sub>NP</sub> [N <b>S'</b> ]]   2/2	100%	60	98%

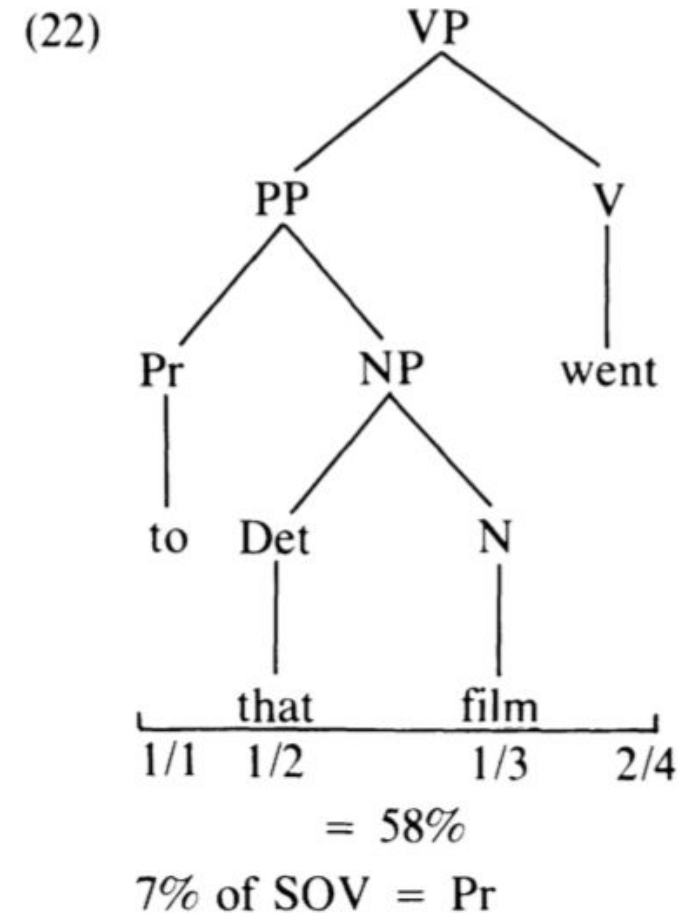
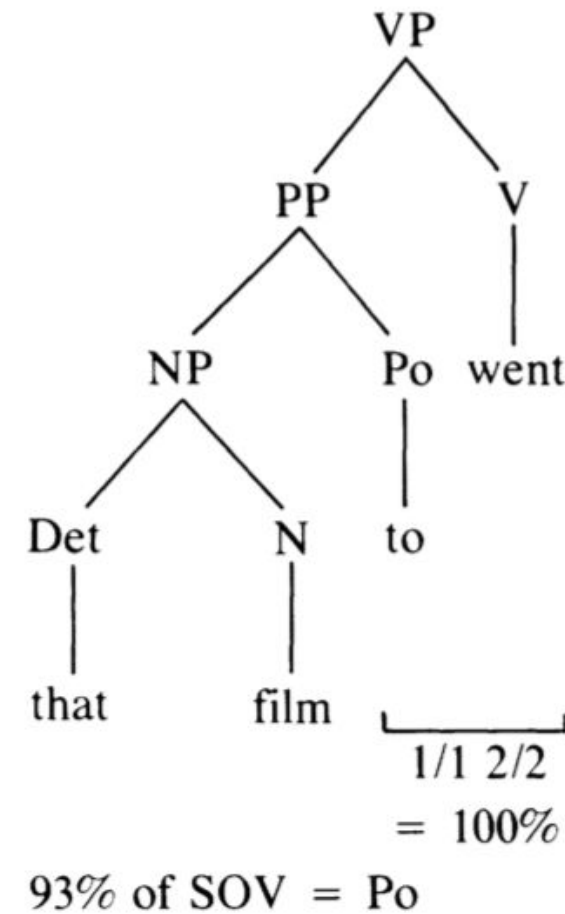
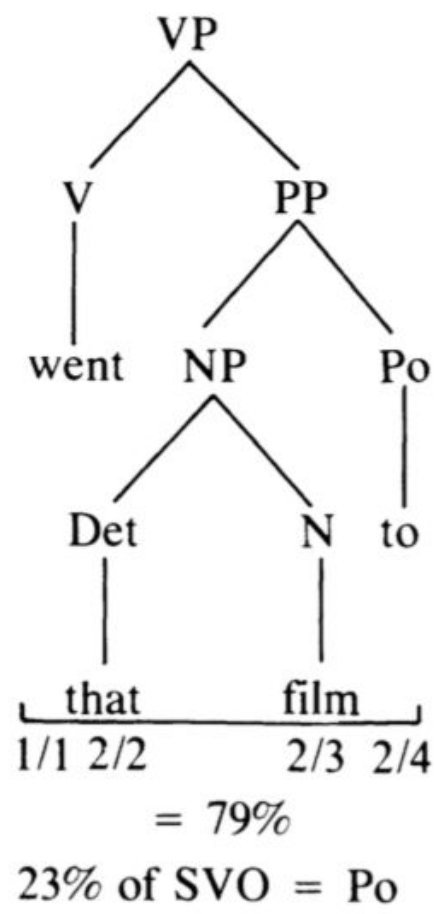
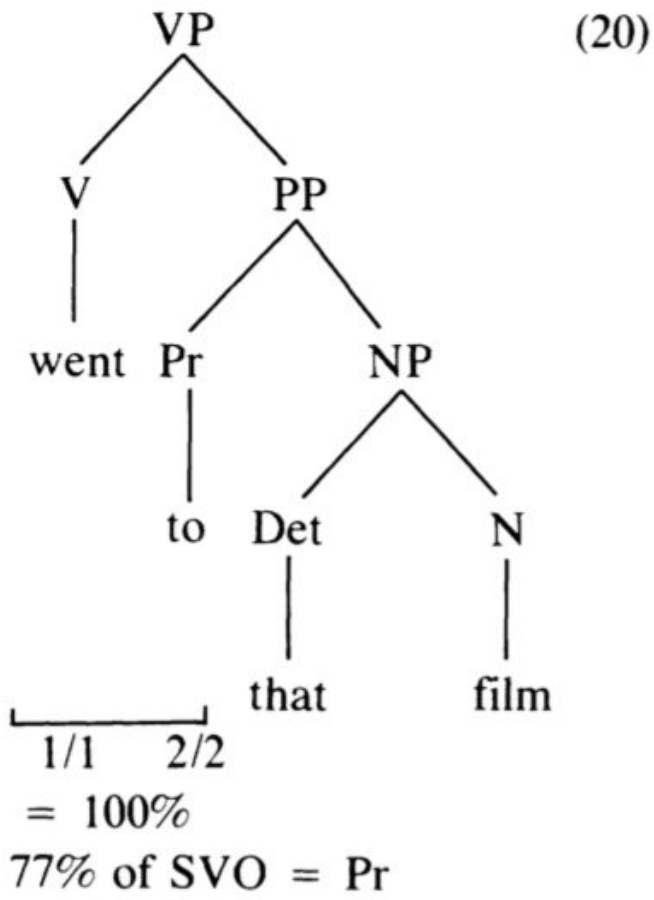
# Prepositional Noun Modifier Hierarchy

# Parsing basic word order

Word-order type	average IC-t-word ratio	number of languages in Tomlin (1986)	percentage within VO languages
$s[mS \text{ VP}[V \text{ mO}]]^4$			
CRD of S: $2/3 = 67\%$	84%	168	77%
CRD of VP: $2/2 = 100\%$			
$s[VP[V] \text{ mS VP}[mO]]$			
CRD of S: $2/2 = 100\%$	75%	37	17%
CRD of VP: $2/4 = 50\%$			
$s[VP[V \text{ mO}] \text{ mS}]$			
CRD of S: $2/5 = 40\%$	70%	12	6%
CRD of VP: $2/2 = 100\%$			

# Parsing basic word order

IC-to-word ratio:	84%	75%	70%	60%
	SVO	> VSO	> VOS	> OSV
	SOV		OVS	
Percentage of the world's lxs in Tomlin (1986):	87%	9%	4%	0%



## Values

	OV and Postpositions	472
	OV and Prepositions	14
	VO and Postpositions	42
	VO and Prepositions	456
	Other	158

# ЧТО ЕЩЁ БЫВАЕТ?

Pragmatically-based word order (Mithun 1992)



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