1 NOTATIONS & ABBREVIATIONS

RH	Right hand
LH	Left hand
DS	Depicting sign
DSL	Depicting Sign Location
DSM	Depicting Sign Movement
DSS	Depicting Sign Size and Shape
DSH	Depicting Sign Handling
VP	Plain verb
DI	Directional indicating verb
LI	Locatable indicating verb
VD	Depicting verb
SoA	State of affairs
	Handshape codes, sometimes followed by orientation codes:
BENT2-HORI	Bent two handshape with the fingertips pointing downwards
2-DOWN	Two handshape with the fingertips pointing downwards
B	Extended flat hand
BB	A variant of B flat
B-HORI	Flat hand placed horizontally, often depicting a vehicle
FLATBC	The cupped flat handshape
F	The tip of the thumb touches the tip of the index finger
1-VERT	Upright index handshape
OPEN-DOOR	A gloss that represents one sign but consists of more than one word
PT	Pointing sign

PT: LOC	Locative
PT: DET	Determiner
PT: DET/LOC	Determiner which has some underlying locative meaning
FBUOY (fragment buoy)	A preservation of the sign, usually on the non-dominant hand, which is kept during the articulation of the sign(s) on the dominant hand
{}	A simultaneous construction, the signs within brackets are produced simultaneously
_____	A straight horizontal line that marks the scope a certain non-manual feature has over a sign or signs
|	A pause after a constituent
//	A clausal boundary
+	Progressive aspect
mg	Stands for mouth gesture
mg: mm	The 'mm' mouth gesture adds adverbial information 'as usual/in a normal manner'
mg: th	The 'th' mouth gesture or slight tongue protrusion adds the meaning 'sleek'
mg: brr	The 'brr' mouth gesture (i.e. lips vibrate with a puff of air coming out of the mouth) is onomatopoeic inasmuch as it imitates the sound of an engine in a moving vehicle.
m	Stands for mouthing
	Subscript letters that represent modifications for spatial loci:
c	The signer's locus
f	Forward
fd	Forward down
lf	Left
rt	Right

self	On the signer's body
	The names of sign languages:
ASL	American Sign Language
Auslan	Australian Sign Language
BSL	British Sign Language
DGS	Deutsche Gebärdensprache (German Sign Language)
DTS	Dansk tegnsprog (Danish Sign Language)
FinSL	Finnish Sign Language
HKSL	Hong Kong Sign Language
HZJ	Hrvatski znakovni jezik (Hrvatski znakovni jezik)
LIS	Lingua dei Segni Italiana (Italian Sign Language)
LSA	Lengua de señas Argentina (Argentine Sign Language)
LSFB	Langue des signes de Belgique francophone (French Belgian Sign Language
SASL	South African Sign Language
STS	Svenskt teckenspråk (Swedish Sign Language)
TİD	Türk İşaret Dili (Turkish Sign Language)
VGT	Vlaamse Gebarentaal (Flemish Sign Language)

2 PARTICIPANTS

There were 21 male and 19 female, 17 native signers (i.e. those who were born and raised in a deaf family), and 23 non-native signers (i.e. those who acquired SZJ from deaf peers, usually before 7 years old) ranging in age between 18 and 70. Depending on the year our participants started school and whether their primary and secondary education was interrupted by a change in educational policy, we distinguished between three groups of participants based on the year of their birth, i.e. the participants born between 1949 and 1966 (I), 1973-1995 (II), 1996-2001 (III). Different periods in deaf education in Serbia are described in the Žižić et al. (2015) report available at http://gogb.org.rs/wp-content/uploads/2015/07/The-report-on-the-position-of-the-Deaf-community-in-Serbia-in-the-field-of-media-availability-of-interpreting-services-and-education-2015.pdf. The schooling of the first group of participants, i.e. those born between 1949 and 1966, corresponds to the period from 1949 until the end of the 1970s, when deaf people received their education in seven deaf schools in addition to specially established units within two regular schools in Serbia. The participants of the second group were educated from 1980 to 2009 when a special needs curriculum for deaf people was introduced in deaf schools. In 2009 the special needs curriculum was replaced with a regular curriculum and this marked the beginning of the third period in deaf education in Serbia. The third group of participants who were born between 1996 and 2001 received at least their secondary education during the third period.

	Name ID	Gender	Year of birth	Age group	Nativeness
1	CS	F	1949	I	Non-native
2	OR	M	2001	III	Native
3	MP	M	1983	II	Native
4	JS	F	1988	II	Native
5	MA	F	1994	II	Native
6	AD	F	1992	II	Non-native
7	MB	M	1996	III	Non-native
8	PI	M	1959	I	Native
9	MI	M	1996	III	Native
10	TD	F	1996	III	Non-native

11	SG	F	1978	II	Non-native
12	KD	M	2001	III	Native
13	AD	M	1999	III	Non-native
14	TI	M	2000	III	Native
15	IH	M	1973	II	Non-native
16	SH	F	2001	III	Native
17	EH	F	1998	III	Native
18	AD	M	2001	III	Native
19	MC	F	1978	II	Non-native
20	AV	F	1987	II	Non-native
21	DX	F	1991	II	Non-native
22	ND	M	1964	I	Non-native
23	UK	M	1990	II	Non-native
24	SR	F	1956	I	Non-native
25	VD	M	1998	III	Native
26	DP	M	1997	III	Native
27	BB	M	1989	II	Non-native
28	IK	F	1978	II	Non-native
29	TR	F	1994	II	Native
30	VL	M	1986	II	Non-native
31	VB	F	1996	III	Non-native
32	VG	M	1954	I	Non-native
33	ZY	F	1966	I	Non-native
34	SS	M	1982	II	Non-native

35	NS	M	1995	III	Non-native
36	SM	F	1960	I	Non-native
37	NJ	M	1999	III	Non-native
38	MS	F	2001	III	Native
39	SW	F	2001	III	Native
40	MG	M	1981	II	Native

3 TABLES

Table 1. The effect of verb type on constituent order in some sign languages

Verb type	**Factor**	**Constituent order**	**Sign language**
Plain verb		SVO	LSB (de Quadros 1999) VGT (Vermeerbergen 1996) Auslan (Johnston & Schembri 2007) RSL (Kimmelman 2011)
	Modification for aspect or number one noun is the natural subject, the other natural object especially in non-reversible clauses	Clause final	ASL (Liddell 2003) Auslan (Johnston & Schembri 2007: 205)
Indicating verb		SVO or SOV SVO	Auslan (Johnston & Schembri 2007) RSL (Kimmelman 2012)
	Modification for subject and/or object, (and) CA	SOV/clause final	HZJ (Milković et al. 2006) VGT (Vermeerbergen et al. 2007a) BSL (Fenlon et al. 2018)
Depicting verb (+ CA)		Clause final	VGT (Vermeerbergen 1996) LSB (de Quadros 1999) DTS (Engberg-Pedersen 2002), HKSL (Sze 2003) Auslan (Johnston et al. 2007) FinSL (Jantunen 2008) RSL (Kimmelman 2012)
		After the first argument of the predicate in locative clauses	FinSL (Jantunen 2008) TİD (Özyürek et al. 2010)

Table 2. CO pattern per verb type in clauses for non-reversible SoA (for an explanation of the columns see below the table)*

Verb type	CO pattern	Number of tokens & percentage		Modified	CA	Simultaneous construction
LI	i_SV	66	19%		2	
	V	38	11%		10	
	SVO	34	10%		3	
	SOV	11	3%		3	
	t_SV	6	2%		1	
	SVOV	6	2%		2	
	OV	4	1%		1	
	VO	3	1%		1	
	OSV	1	0%			
	Total LI	**169**	**48%**			
VD	SOV	38	11%		3	22
	V	30	8%		13	12
	t_SV	13	4%		3	9
	SVO	9	3%		1	3
	OV	7	2%		2	2
	i_SV	4	1%			2
	OSV	2	1%		1	1
	VO	1	0%			
	Total VD	**104**	**29%**			
DI	SVO	29	8%	19	12_(MOD.) 1_(UNMOD.)	
	VO	7	2%	3	2_(MOD.)	
	SVOV	6	2%	4	4_(MOD.)	
	OV	4	1%	3	1_(UNMOD.)	
	V	3	1%	2	2_(MOD.)	
	i_SV	2	1%			
	OVS	1	0%	1	1_(MOD.)	
	Total DI	**52**	**15%**			
VP	V	17	5%		2	
	i_SV	5	1%			
	SVO	4	1%			
	OV	2	1%			
	VO	1	0%			
	Total VP	**29**	**8%**			
Total		**354**	**100%**			

*The first column of Table 2 lists four verb types from the most to the least frequent ones. Different constituent order patterns in which the verb type from the first column appears are shown in the second column. The third column gives the number of verb tokens in the constituent order pattern. The fourth column is meant for DI

verbs only i.e. it shows if a DI verb is modified. The fifth column shows how many tokens of a particular verb type co-occur with CA. In the case of DI verbs, it shows how many of DI verbs co-occurring with CA are modified (MOD) or unmodified (UNMOD). In the last column, it can be seen whether a particular verb is in fact a simultaneous construction.

Table 3. CA across verb types in non-reversible SoA

	With CA		Without CA		
	Token frequency & percentage				*Totals*
DI	23	44%	29	56%	52 (100%)
VP	2	7%	27	93%	29 (100%)
VD	23	22%	81	78%	104 (100%)
LI	23	14%	146	86%	169 (100%)

Table 4. CO pattern per verb type in clauses for reversible SoA

Verb type	**CO pattern**	**Number of tokens & percentage**		**Modified**	**CA**	**Simultaneous construction**
LI	SVO	84	30%		18	
	V	19	7%		6	
	SOV	18	6%		10	
	t_SV	18	6%		7	
	SVOV	16	6%		6	
	VO	3	1%		1	
	OSV	2	1%		1	
	OV	1	0%			
	Total LI	**161**	**57%**			
DI	SVO	50	18%	4	12_(UNMOD.) 3_(MOD.)	
	V	14	5%		7_(UNMOD.)	
	SOV	11	4%		7_(UNMOD.)	
	OSV	6	2%		2_(UNMOD.)	
	t_SV	7	2%		4_(UNMOD.)	
	VO	3	1%			
	SVOV	4	1%		2_(UNMOD.)	
	OV	2	1%	1	1_(UNMOD.)	
	Total DI	**97**	**34%**			
VD	V	10	4%		5	7
	OSV	4	1%		1	3
	SOV	3	1%		2	2
	SVOV	2	1%		2	
	t_SV	1	0%		1	
	OV	1	0%		1	1
	SVO	1	0%			1
	Total VD	**22**	**8%**			
VP	SVO	3	1%			
	Total VP	**3**	**1%**			
Total		**283**	**100%**			

Table 5. CA across verb types in reversible SoA

	With CA		Without CA		
	Token frequency & percentage				*Totals*
LI	49	30%	112	70%	161 (100%)
DI	38	39%	59	61%	97 (100%)
VD	12	55%	10	45%	22 (100%)
VP	-	-	3	100%	3 (100%)

Table 6. Patterns included in the first statistical analysis (610 tokens)

Dependent variable	**(S)V(O)**		**other**		
	Token number & percentage				
Patterns included	SVO t_SV VO	211 (35%) 45 (7%) 17 (3%)	SOV i _SV OSV OVS OV SVOV Verb-only	81 (13%) 76 (12%) 15 (2%) 1 (0%) 22 (4%) 17 (3%) 125 (20%)	
Totals		273 (45%)		337 (55%)	=610 (100%)

Table 7. Patterns included in the second statistical analysis (392 tokens)

Dependent variable	**(S)V(O)**		**other**		
	Token number & percentage				
Patterns included	SVO t_SV VO	211 (54%) 45 (11%) 17 (4%)	SOV OSV OVS OV	81 (21%) 15 (4%) 1 (0%) 22 (6%)	
Totals		273 (69%)		119 (31%)	=392 (100%)

Table 8. Patterns included in the third statistical analysis (308 tokens)

Dependent variable	**(S)V(O)**		**other**		
	Token number & percentage				
Patterns included	SVO	211 (69%)	SOV OSV OVS	81 (26%) 15 (5%) 1 (0%)	
Totals		211 (69%)		97 (31%)	=308 (100%)

Table 9. Linguistic factors influencing constituent order (610 tokens)

	Tokens	Log-odds	Factor weights
Verb type (p<0.0001)			
DI	144	1.093	0.749
LI	312	0.220	0.555
VP	31	-0.605	0.353
VD	123	-0.707	0.33
Reversibility (p<0.0001)			
Reversible	272	0.586	0.642
Non-reversible	338	-0.586	0.358
Topicality (p<0.05)			
Yes	213	0.234	0.558
No	397	-0.234	0.442
CA (p>0.1)			

Table 10. Social factors influencing constituent order (610 tokens)

	Tokens	Log-odds	Factor weights
Gender (p<0.02)			
F	282	0.328	0.581
M	328	-0.328	0.419
Age of acquisition (p<0.4)			
Age group (p<0.3)			

Table 11. Linguistic factors influencing constituent order (392 tokens)

	Tokens	Log-odds	Factor weights
Verb type (p<0.0001)			
DI	120	0.728	0.674
LI	183	0.626	0.652
VP	9	0.229	0.557
VD	80	-1.583	0.17
Topicality (p<0.01)			
NO	210	0.374	0.593
YES	182	-0.374	0.407
Reversibility (p>0.3)			
CA (p>0.05)			

Table 12. Social factors influencing constituent order (392 tokens)

	Tokens	Log-odds	Factor weights
Gender (p<0.005)			
F	186	0.454	0.611
M	206	-0.454	0.389
Age group (p<0.05)			
III	161	0.596	0.645
II	160	-0.146	0.464
I	71	-0.450	0.389
Age of acquisition (p>0.7)			

Table 13. Linguistic factors influencing constituent order (308 tokens)

	Tokens	Log-odds	Factor weights
Verb type (p<0.0001)			
VP	6	12.907	> 0.999
DI	97	-2.879	0.053
LI	148	-3.174	0.04
VD	57	-6.855	0.001
Topicality (p<0.005)			
NO	143	0.594	0.644
YES	165	-0.594	0.356
CA (p<0.05)			
NO	227	0.594	0.644
YES	81	-0.594	0.356
Reversibility (p>0.5)			

Table 14. Social factors influencing constituent order (308 tokens)

	Tokens	Log-odds	Factor weights
Gender (p<0.001)			
F	156	0.535	0.631
M	152	-0.535	0.369
Age group (p<0.05)			
III	133	0.793	0.688
II	126	-0.075	0.481
I	49	-0.718	0.328
Age of acquisition (p>0.8)			

Table 15. Devices SZJ signers used to encode locative relations between entities

	Devices used in locative SoA		Total number of tokens	% of responses
	First-Ground-then-Figure-order	*First-Figure-then-Ground-order*		
	{VD} – 50	{VD} – 24	74	37%
	PREP – 40	PREP – 19	59	30%
	DS – 46	DS – 5	51	26%
	JUXTAPOSITION – 2	JUXTAPOSITION – 5	7	4%
	DS+{VD} – 4		4	2%
	PREP+{VD} – 4		4	2%
	PT – 1		1	1%