PRESENTATION NOTES FOR NO. 39 OF THE SIGNWRITING SYMPOSIUM 2014 – MARIA GALEA

1) The ten active public literature Puddles analysed in Galea (2014)

Table 1: The Active Literature Puddles with their corresponding number of text entries and number of individual signs (in brackets)

Literature Puddles	No of Entries (No. of Signs) 2012	No of Entries (No. of Signs) 2014	Change in number of signs
ASL Bible[1]	13,110 (120,587)	15,944 (155,361)	34,774
Brazil	132 (3,401)	143 (3,495)	91
Czech Republic	15 (933)	28 (1,969)	1,036
Germany	396 (4,935)	412 (5,193)	258
Malta	557 (5,468)	582 (5,677)	209
Nicaragua	454 (10,841)	454 (10,841)	0
Norway	343 (2,283)	342 (2,262)	-21
Spain	454 (13,754)	455 (13,755)	1
Tunisia	34 (1,295)	115 (3,392)	2,097
United States	624 (10,775)	682 (11,662)	887

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[1] The ASL Puddle became so large that it was divided into two ASL Puddles (SW List email dated 19/06/2013). For the results in the no. of signs for 2014 the two ASL Bible Puddle were added. (8,032 + 7,912 = and 8,599 +146,762 = 155,361)

2) A table that shows the activity of SignPuddle during 2012-2014 – both dictionary and literature puddles

Table 2: The Public SignPuddles. 'Code' = country code. 454 (13,754) = number of text entries (number of individual signs). n/a = not available. Square brackets = entries in 2014.

Blue highlight – those that have changed from 2012 to 2014.

Yellow = those that have not changed from 2012 to 2014

Country/Sign Language	Code	Puddle 1 Dictionary Entires	Puddle 2 Literature Entries	Puddle 3 Encyclopaedia Entries
Afghanistan	AF	13	n/a	n/a
Argentina	AR	1,726	n/a	n/a
Australia	AU	24	n/a	n/a
Austria	AT	4	n/a	n/a
Bangladesh	BD	0	n/a	n/a
Bolivia	BO	5	n/a	n/a
Brazil	BR	2,948 [3,386]	132 (3,401) [143]	n/a
Bulgaria	BG	0	n/a	n/a
Canada English	CA-en	Directed to U.S Puddle	Directed to U.S Puddle	Directed to U.S Puddle
Canada Quebec*2	CA-fr	3,202 [4,378]	170 (1,364) [204]	n/a
Chile	CL	0	n/a	n/a
China	CN	0 [17]	n/a	n/a
Colombia	CO	347 [445]	n/a	n/a
Czech Republic	CZ	2,163 [5,281]	15 (933) [28]	n/a
Denmark	DK	7	0	n/a
Dictionary International	IN	61 [81]	n/a	n/a
Ecuador	EC	0	n/a	n/a
Egypt	EG	109	n/a	n/a
El-Salvador	SV	0	n/a	n/a
Esperanto (SignUno)3	EO	2,310 [2,316]	n/a	n/a
Estonia	EE	0	n/a	n/a
Ethiopia	ET	143	0	n/a
Finland	FI	164 [165]	n/a	n/a
Flanders-Belgium	Be-nl	5,091 [5,401]	32 (375) [38]	n/a

[2]Quebec dictionary and literature SignPuddles are available for the Blind and the Sighted.

[3] SignUno is not a natural sign language, rather it is Signed Exact Esperanto. Signuno is not used, and is based on the Esperanto community rather than based on the international Deaf community. Gestuno (or International Sign Language) is unrelated to SignUno (http://en.wikipedia.org/wiki/International_auxiliary_language retrieved 29/08/2012)

France	FR	1,360 [1,377]	10 (10) [11]	n/a
French Switzerland	CH-fr	5,617 [5,741]	43 (113) [45]	n/a
French-Belgium	BE-fr	1,660 [2,050]	0 [2]	n/a
German Switzerland	CH-de	4,668	26 (176)	n/a
Germany	DE	18,501 [22,121]	396 (4,935) [412]	11 (56)
Great Britain	GB	657 [726]	33 (313) [37]	n/a
Greece	GR	25	n/a	n/a
Guatemala	GT	0	n/a	n/a
Haiti	HT	1	n/a	n/a
Honduras	HN	7 [197]	n/a	n/a
Hungary	HU	67	1 (1)	n/a
Iceland	IS	39	n/a	n/a
India	IN	0	n/a	n/a
Ireland	IE	25	n/a	n/a
Israel	IL	3	n/a	n/a
Italian Switzerland	CH-it	3	n/a	n/a
Italy	IT	17 [167]	n/a	n/a
Japan	JP	186 [187]	2 (1)	n/a
Jordan	JO	24	1 (1)	n/a
Kenya	KE	17	n/a	n/a
Latvia	LV	0	n/a	n/a
Lithuania	LT	0	n/a	n/a
Malawi	MW	14	n/a	n/a
Malaysia	MY	4	n/a	n/a
Malta	MT	748 [769]	557 (5,468) [668]	n/a
Mexico	MX	178	0	n/a
Nepal	NP	4 [5]	n/a	n/a
Netherlands	NL	64 [67]	n/a	n/a
New Zealand	NZ	37	n/a	n/a
Nicaragua	NI	897 [1,532]	454 (10,841)	n/a
Nigeria	NG	0	n/a	n/a
Northern Ireland	GB-ie	55 [56]	n/a	n/a
Norway	NO	8,285 [7723]	343 (2,283) [342]	n/a
Pakistan	PK	0	n/a	n/a
Paraguay	PY	1,066 [2,466]	n/a	n/a
Peru	PE	28	n/a	n/a
Philippines	PH	904	n/a	n/a
Poland	PL	2,126	4 (20)	n/a
Portugal	PT	210 [232]	4 (35)	n/a
Romania	RO	37	0	n/a
Russia	RU	91 [98]	0	n/a
Saudi-Arabia	SA	278 [356]	0 [3]	n/a
Slovakia	SK	37 [42]	n/a	n/a
Slovenia	SI	16 [2,346]	n/a [10]	n/a
South Africa	ZA	52 [53]	n/a	n/a
South Korea	KR	21 [22]	n/a	n/a
Spain	ES	7,813 [7,848]	454 (13,754) [455]	n/a

Spain-Catalonia	ES-ct	3,290 [3,292]	17 (23)[4]	
Sweden	SE	19 [16]	n/a	n/a
Taiwan	TW	205	n/a	n/a
Thailand	TH	57	n/a	n/a
Tunisia	TN	1,447 [2,923]	34 (1,295) [115]	n/a
Turkey	TR	3 [4]	n/a	n/a
Ukraine	UA	0	n/a	n/a
United States	US	9,326 [9,891]	624 (10,775) [682]	18 (268)[5] [818]
Uruguay	UV	61 [63]	0	n/a
Venezuela	VZ	8 [131]	n/a	n/a

Table 3: The Private SignPuddles in 2012

Private Puddle No. 1	DOOR	US	16 (386)	n/a
Private Puddle No. 2	LLCN and SignTyp	US	5,517	Dictionary
Private Puddle No. 3	ASL Bible	US	13,126 (120,743)	Literature [Dictionary]
Private Puddle No. 4	Time and Date Database	n/a	0	n/a
Private Puddle No. 5	Malta LSM Private Puddle	Malta	234 (1,974)	Literature
Private Puddle No. 6	DAC Private Puddle	US	108 (304)	n/a
Private Puddle No. 7	n/a	n/a	n/a	n/a
Private Puddle No. 8	n/a	n/a	n/a	n/a
Private Puddle No. 9	n/a	n/a	n/a	n/a

The Private Puddles were reshuffled in 2014 (Table D4) due to the enlargement of the Bible Puddle.

Table 4: The Private SignPuddles in 2014

Private Puddle No. 1	DOOR (Deaf Harbor]	US	16 (386)	n/a
Private Puddle No. 2	LLCN and SignTyp	US	5,523	Dictionary
Private Puddle No. 3	ASL Bible Dictionary	US	7,970	[Dictionary]
Private Puddle No. 4	ASL Bible Books NLT	US	7,738 (143,602	Literature
Private Puddle No. 5	ASL Bible Books Shores	US	2212 (35,639)	Literature
Private Puddle No. 6	Translate Wiki ASL	US	207 (349)	
Private Puddle No. 7	DAC Private Puddle	US	108 (304)	n/a
Private Puddle No. 8	Malta LSM Private Puddle	Malta	234 (1,974)	Literature
Private Puddle No. 9	Anthropology Book Project	Various	1 (14)	Literature

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[4]This is not a Literature Puddle since all entries consist of just two or three signs and not longer stretches of text.
[5]US Puddles: there are 3 more large Puddles for ASL. One of these is the ASL Bible. This Puddle is huge and consists of

3) Confirmation that all glyph-sets of other sign languages are smaller than the ISWA 2010 glyph-set.

Table 5 High-entry literature Puddles with the corresponding number of BaseSymbols glyphs

	BaseSymbol glyphs[6] (excluding Detailed Loc and Punctuation)
ISWA 2010	639
ASL Bible	445
Brazil	246
Czech	199
Germany	312
Malta	*266*
Nicaragua	291
Norway	246
Spain	305
Tunisia / TN	244
US	418

4) Different choices are being made by different sign languages when employing SW. E.g. US have the largest glyph-sets, Malta, Czech and Norway have no glyph used from Group 7.

Table 6: Three categories of literature Puddles on the basis of the number of BaseSymbol glyphs used

Category 1:   418-445 Glyphs – ASL Bible and US Literature

Category2:   291-312 Glyphs – Spain, Nicaragua and Germany

Category 3:   199-266 Glyphs - Malta, Norway, Brazil, Tunisia and Czech Republic

5) Possible future research: comparing glyph-sets.

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[6] The SW categories of Location and Punctuation (Section 2.7.1) are not worked out by the Symbol Frequency and were left out, the ISWA total shown here is the total of glyphs excluding these categories.

Table 7: Cross-Comparison of SignPuddles use of glyphs (Glyph-Groups 1-10) (analysis 09/2012)

Group	1	2	3	4	5	6	7	8	9	10
ISWA 2010	**14**	**16**	**38**	**8**	**58**	**30**	**22**	**19**	**40**	**16**
ASL Bible	5	9	10	5	40	11	6	7	24	8
Spain /ES	4	7	10	4	23	10	3	5	21	5
Nicaragua/ NI	4	7	7	4	22	11	1	4	22	9
US	8	9	12	6	40	11	2	8	24	9
Malta /MT	*4*	*6*	*6*	*3*	*23*	*6*	*0*	*2*	*18*	*2*
Germany/ DE	6	8	9	4	28	8	1	2	23	5
Brazil / BR	3	8	8	3	21	9	3	3	17	6
Norway/ NO	4	6	3	3	22	10	1	4	20	4
Tunisia / TN	6	7	6	6	22	3	0	2	18	3
Czech / CZ	4	4	3	1	23	2	0	2	13	3

Table 8 Cross-Comparison of SignPuddles use of glyphs (Glyph-Groups 11-20)

Group	11	12	13	14	15	16	17	18	19	20
ISWA 2010	**17**	**20**	**43**	**16**	**35**	**30**	**17**	**30**	**14**	**20**
ASL Bible	15	13	36	8	30	24	3	25	14	15
Spain /ES	10	10	28	4	23	18	2	13	13	14
Nicaragua /NI	15	9	25	7	18	15	1	12	8	9
US	15	13	32	9	26	26	6	20	14	14
Malta /MT	*15*	*12*	*20*	*10*	*21*	*18*	*0*	*7*	*11*	*10*
Germany/ DE	11	10	37	4	16	18	2	14	10	11
Brazil / BR	13	9	22	6	12	13	5	7	9	8
Norway / NO	10	7	16	2	18	13	0	8	9	8
Tunisia / TN	14	11	17	5	15	5	12	10	11	11
Czech / CZ	10	9	11	1	14	7	0	8	7	5

Table 9: Cross-Comparison of SignPuddles use of glyphs (Glyph-Groups 21-30)

Group	21	22	23	24	25	26	27	28	29 Detail Loc	30 Punct.
ISWA 2010	**8**	**11**	**32**	**17**	**30**	**20**	**9**	**9**	**8**	**5**
ASL Bible	7	6	20	12	28	16	8	8	n/a	n/a
Spain	7	6	16	8	18	10	4	9	n/a	n/a
Nicaragua/NI	8	5	14	11	19	10	6	8	n/a	n/a
US	7	10	21	12	32	11	8	9	n/a	n/a
Malta /MT	*6*	*5*	*18*	*5*	*17*	*7*	*6*	*5*	*n/a*	*2*
Germany / DE	6	4	19	9	23	8	8	8	n/a	n/a
Brazil / BR	7	5	14	6	13	6	4	6	n/a	n/a
Norway/ NO	6	7	11	12	21	9	7	7	n/a	n/a
Tunisia/ TN	7	6	15	4	12	5	4	7	n/a	n/a
Czech/ CZ	6	7	18	6	14	6	3	3	n/a	n/a

Redundancy of SW glyphs in spellings

A) Thiessen (2011): "The question is whether (…) redundancy is helpful for visual clarity or whether it creates an unnecessary proliferation of symbols that can confuse writers and readers". Thiessen argues for the inclusion of a minimal amount of glyphs that are enough for the reader to access the intended sign (Thiessen, 2011, p. 186).

B) Van der Hulst and Channon (2010) "a written representation of a word does not need to be a recipe to produce it, but only to be sufficiently unique to act as a trigger to activate the relevant words in the reader's mind." (Van der Hulst & Channon, 2010, p. 154)

C) Bergeron (2004): Bergeron (2004) proposes that SW should become more economical. The first proposal is to create a bi-unique system where one grapheme[7] represents one phoneme in the language and thus avoid redundancy (Bergeron, 2004, p. 132).

Bergeron also talks of the representation of the grammatical level of sign languages.

D) Di Renzo et al. (2006): Di Renzo, Lamano, Lucioli, Pennacchi and Ponzo (2006) described the process of adapting SW for the needs of writing LIS. They

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[7] In this work 'glyph' is used (see discussion in Section 2.3.2), Bergeron (2004) uses the term grapheme.
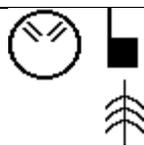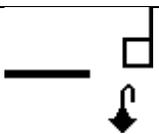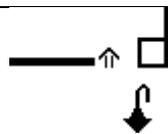
discovered that phonetic writing resulted in ambiguities and that when LIS was written with such detail it often made the reading of the texts unclear.

……so all this leads to the WHOLE point!

Signs that cannot be read mean that it is not adequately represented and that the salient features of the sign have been missed.

To illustrate:

Table 10: The evolving orthography reveals the salient features of the signs (at lexical, morphological, syntactic levels)

	Problem Reading the Signs	Clear Reading of the signs	
1			WHAT?
2			LAST-SUNDAY
3			1-2-3

Conclusion:

The analysis of the written form of a sign language, helps us to understand our

sign language better since the readability of the signs rests on the condition that

the salient features are included in the spellings.