

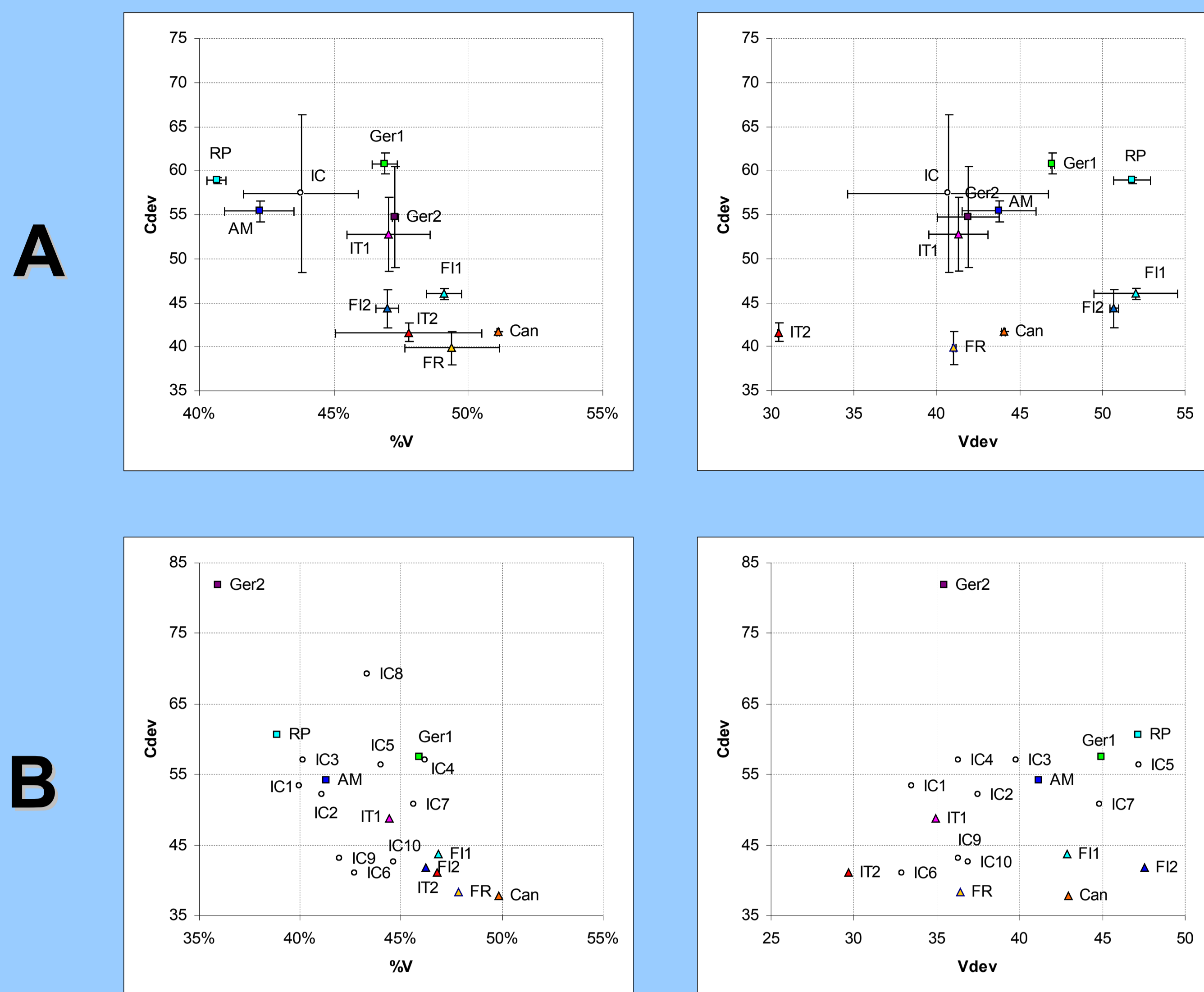
A comparison of four rhythm metrics for six languages

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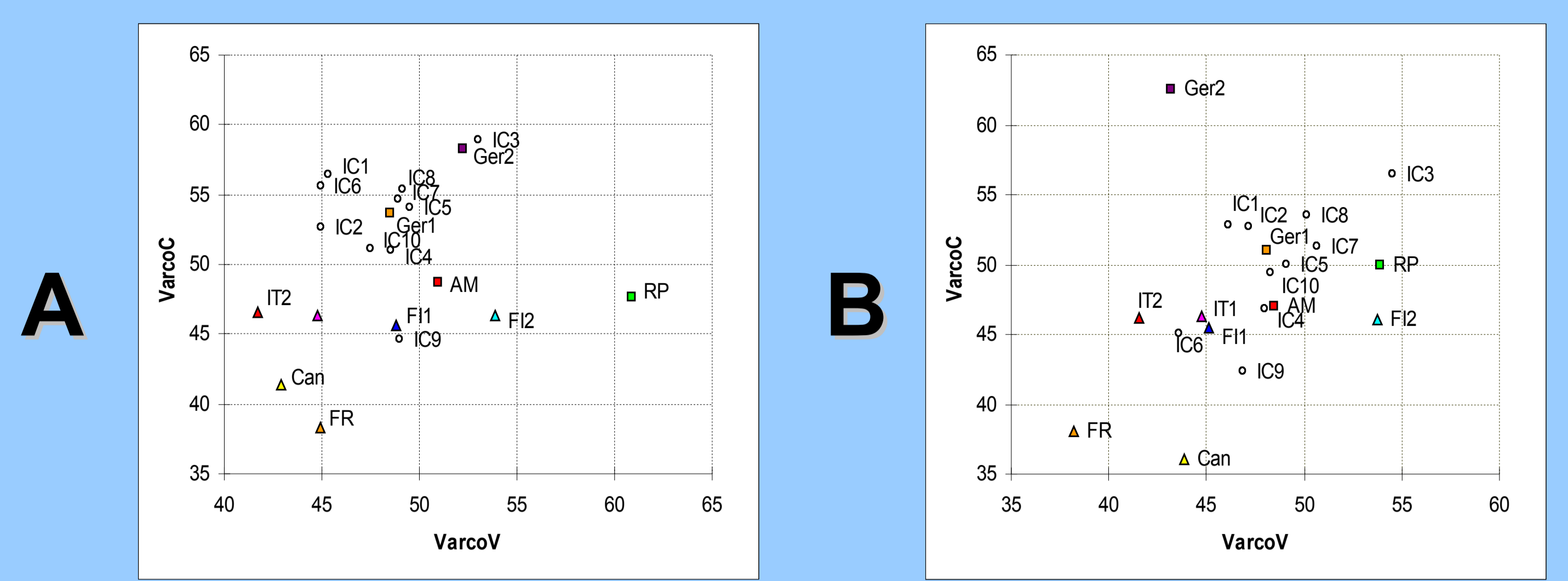
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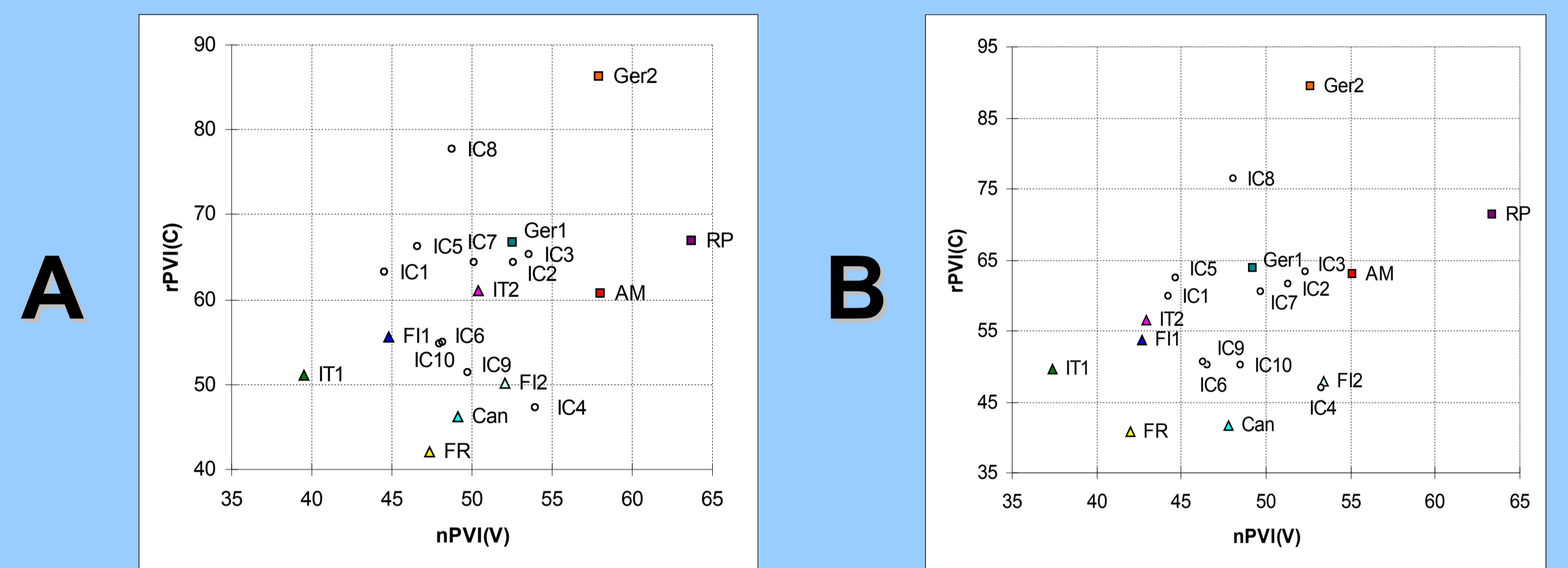
The classics (Ramus et al., 1999)



Varcos (Dellwo & Wagner, 2003)

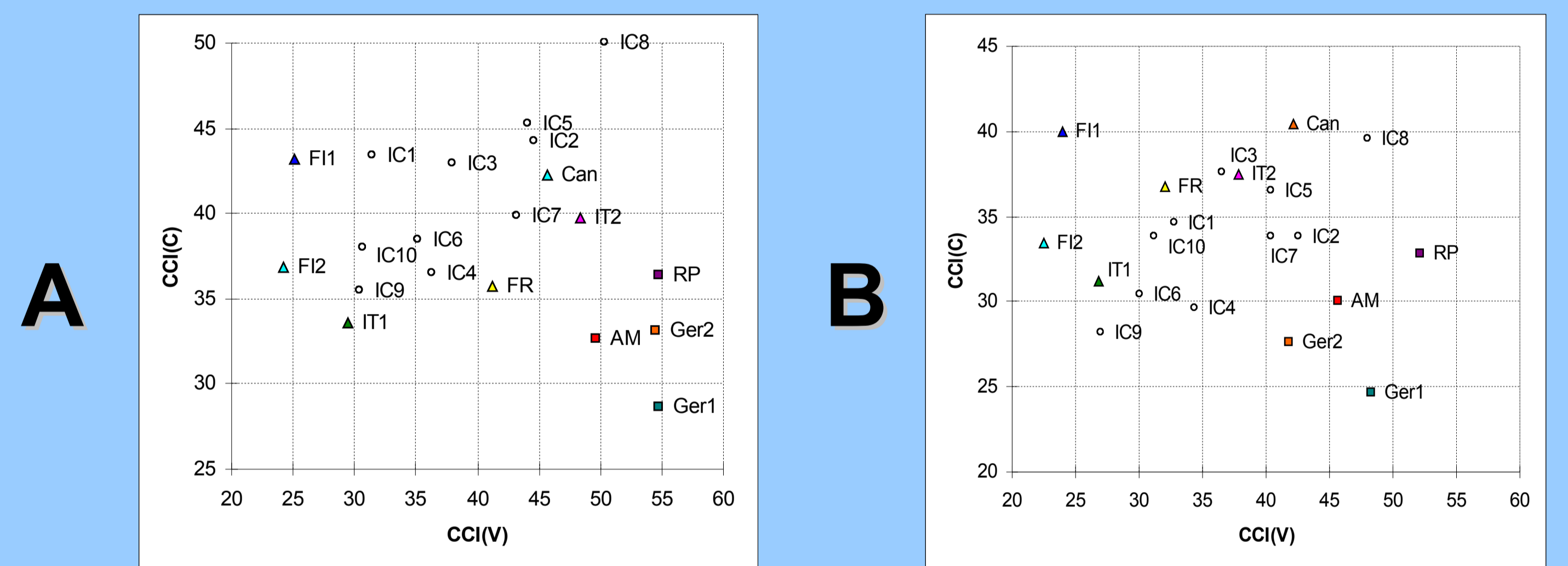


PVIs (Grabe & Low, 2002)

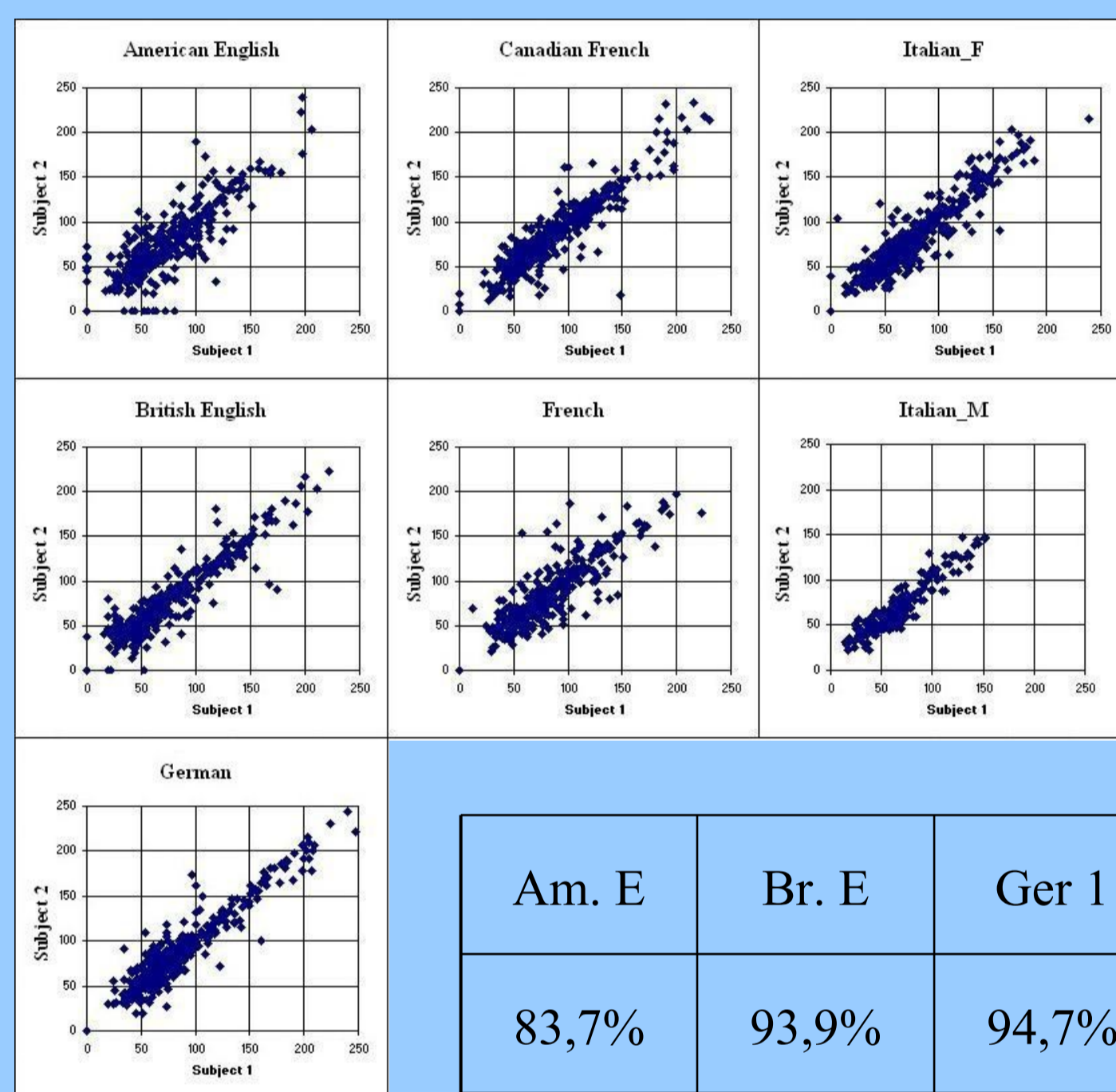


Since, as suggested by Bertinetto & Bertini (forthcoming), realisations of TU codas may often have a heavy negative impact on rhythm measures, we computed data for all speakers and for all rhythm metrics in two different ways: (A) in the traditional way and (B) excluding 1) the last stressed vowel of each TU and all that comes thereafter and 2) TUs of less than 6 syllables.

CCIs (Bertinetto & Bertini, forthcoming)



Intersubject correlation (Mairano & Romano, 2007)



(See also error bars in the charts above)

	Am. E	Br. E	Ger 1	Can. Fr	Fr	It. F	It. M
	83,7%	93,9%	94,7%	91,6%	85,3%	93%	93,6%

Characteristics of the samples

	American English	British English	German1	German2	Can. French	French	Italian F	Italian M	Finnish 1	Finnish 2	Icelandic 1	Icelandic 2	Icelandic 3	Icelandic 4	Icelandic 5	Icelandic 6	Icelandic 7	Icelandic 8	Icelandic 9	Icelandic 10
IU	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
TU	11	12	14	15	17	14	22	10	11	11	10	11	12	11	11	12	15	18	11	13
Number of syllables	135	137	177	176	178	158	188	220	166	167	159	161	163	164	164	163	164	168	164	163
Number of segments	370	358	440	433	366	341	431 (467)*	515 (557)*	392 (414)*	392 (466)**	386	405	386	390	395	391	390	406	385	385
Duration excl. pauses [s]	26,62	27,53	35,80	33,89	31,65	28,38	35,35	33,85	34,02	31,02	27,03	31,07	27,96	25,69	34,58	27,85	30,67	38,04	27,77	25,76
Total duration [s]	27,70	27,70	37,67	41,78	32,98	32,98	45,00	39,15	41,05	35,93	34,74	38,97	40,65	37,52	47,16	38,69	39,22	47,50	36,08	34,08
Mean syllable rate	5,07	4,96	4,94	5,19	5,63	5,55	5,33	6,50	4,87	5,39	5,88	5,18	5,82	6,38	4,74	5,85	5,34	4,41	5,90	6,32
Number of segments per syllable	2,74	2,62	2,49	2,46	2,06	2,16	2,29 (2,48)*	2,34 (2,53)*	2,37 (2,50)*	2,34 (2,47)*	2,43	2,52	2,37	2,38	2,41	2,40	2,38	2,42	2,35	2,36

*including geminates **including double vowels

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