Supplementary Materials

Table S1. Demographic characteristics and stroke variables of PwA.

Participants	Gender	Age	Years of Education	Localization of Stroke	Type of Stroke	Stage of Recovery	Time Post-Stroke in Months	Dysarthria /Apraxia	Aphasia Severity
1	M	50	14	supply area on the left ACM	ischemic	acute	3	-	mild
2	M	63	11	cortical hypodensity TP	ischemic	acute	1	-	mild
3	M	56	11	frontally in the area of the frontal operculum and precentral gyrus	hemorrhagic	acute	1	-	mild
4	M	39	12	anterior part of insula, frontal operculum	ischemic	acute	0	-	mild
5	F	64	8	frontal cortico subcortical	ischemic	acute	3	dysarthria	mild
6	M	52	16	frontal and frontoparietal	ischemic	acute	1	-	mild
7	M	56	12	subtotal occlusion of the left ACI	ischemic	acute	2	-	mild
8	F	23	14	AVM frontal	hemorrhagic	acute	2	-	mild
9	M	59	11	temporal	ischemic	acute	1	-	mild
10	M	57	16	parietal	ischemic	acute	0	dysarthria	mild
11	M	55	12	temporoparietal cortico/subcortical	ischemic	acute	0	dysarthria	mild
12	M	68	11	ischemic changes and occlusion of the left ACM	ischemic	acute	0	-	mild
13	F	23	16	AVM frontal	hemorrhagic	acute	0	-	mild
14	F	88	12	frontal opercular	ischemic	acute	1	apraxia	moderate

15	F	61	12	insular, occlusion of the left ACI and subtotal stenosis of the ACI with embolism of the left ACM	ischemic	acute	2	-	mild
16	M	42	12	frontal on higher cortico/subcortical sections	ischemic	acute	2	-	mild
17	F	77	12	temporoparietal cortico/subcortical	ischemic	acute	1	apraxia	moderate
18	M	65	12	ACM supply area (insula, superior temporal gyrus, frontal operculum and basal ganglia)	ischemic	acute	1	-	moderate
19	M	42	16	frontotemporal and parietooccipital and in the area of the thalamus	ischemic	acute	3	apraxia	mild
20	M	67	14	parietooccipital	ischemic	chronic	10	-	mild
21	M	63	12	basal ganglia	hemorrhagic	chronic	8	-	mild
22	M	46	16	supply area on the left ACM	hemorrhagic	chronic	9	apraxia	moderate
23	M	74	16	supply area on the left ACM	ischemic	chronic	9	-	moderate
24	M	35	16	FT with ventricular penetration	hemorrhagic	chronic	6	-	mild
25	F	43	12	supply area on the left ACM	ischemic	chronic	79	apraxia	mild
26	F	70	16	frontoparietal	ischemic	chronic	44	apraxia	moderate
27	M	73	12	parietooccipital	ischemic	chronic	11	-	moderate
28	F	59	11	Ischemia after operative treatment of ACI stenosis	ischemic	chronic	12	dysarthria/apraxia	moderate
29	M	56	11	supply area on the left ACM	ischemic	chronic	5	-	moderate
30	M	86	12	insular sulcus	ischemic	chronic	18	apraxia	moderate
31	F	46	16	supply area on the left ACM	ischemic	chronic	15	apraxia	moderate

32	M	68	12	frontotemporoparietal	ischemic	chronic	9	apraxia	mild
33	F	57	16	ICH frontal, in basal ganglia and temporal and left frontal smaller SAH	hemorrhagic	chronic	72	-	mild
34	M	84	16	supply area on the left ACM	ischemic	chronic	60	dysarthria	mild
35	M	60	12	supply area on the left ACM	ischemic	chronic	6	dysarthria	moderate
36	M	40	12	supply area on the left ACM	ischemic	chronic	20	-	moderate
37	M	50	12	supply area on the left ACM	ischemic	chronic	9	-	moderate
38	F	32	12	the postero-caudal part of the insular cortex, and at the transition from the temporal to the parietal lobe	ischemic	chronic	6	-	mild

Figure S1. Picture from the Croatian version of the Comprehensive Aphasia Test (CAT-HR, Swinburn et al. 2020; published with the permission of Naklada Slap).

Table S2. Content units and main concepts produced by healthy speakers (HS).

	All Produced Concepts	*Total (in %)*	*Main Concepts >30%*
1	Descriptive: The action takes place in the kitchen/room/living room/house + naming the characters	21	
2.	There are toys/a teddy bear/blocks in the corner/on the floor.	34.21	MC1
3.	Little girl plays with toys, a teddy bear and blocks.	31.58	MC2
4.	Little girl stopped playing/stopped the game.	5	
5.	Father is sleeping.	63.16	MC3
6.	Father is tired/he is tired.	2.5	
7.	Father is sitting/lying/leaning back/resting in the armchair.	39.47	MC4
8.	Father keeps his feet on the table/ raises his feet on the table.	29	
9.	Father drinks coffee/drank coffee/won't have time to drink coffee/has drunk a half of coffee.	26	
10.	Father/little girl cooked/prepared coffee/tea.	8	
11.	Coffee/tea is on the table.	26	
12.	There are books/ newspapers under the table.	10.5	
13.	Curtains are open.	5	
14.	Little girl stands next to (grand)father/little girl looks after (grand)father/stands next to the armchair/stands next to (grand)father	24	
15.	Little girl/granddaughter/daughter shows her father/warns/indicates/informs/explains/speaks/addresses/asks for/calls/begs/wants attention.	71.05	MC5
16.	The girl noticed.	8	
17.	Little girl/granddaughter/daughter is pulling/pulls her father's sleeve/wakes the father up.	60.53	MC6
18.	Cat climbed/jumped/stood/went on the wardrobe/shelf/dresser.	31.58	MC7
19.	Cat entered the room.	2.5	

20.	The cat hunts/eats/tries/wants/wants to catch/eat/grabs/catch/get/steal fish from the aquarium/in the aquarium.	89.47	MC8
22.	Books fall (on the father's head, on the floor), the books will hit the father.	29	
22.	The cat knocks down/throws/has knocked down/has knocked down/scatters/has scattered the books.	50	MC9
23.	The cat makes a mess.	8	
24.	Description of the space (there are shelves, a wardrobe, a sideboard,…).	21	
25.	The father should prevent (it).	10.5	
26.	The father does not wake up, the father will wake up.	10.5	
27.	(Grand)father gets up and walks.	5	
28.	(Grand)father looks after his granddaughter.	2.5	
29.	The bear is sitting.	5	

Table S3. Examples of main concept codes produced by PwA.

Main Concepts	Target	Inaccurate/ Incomplete	Inaccurate/ Complete	Accurate/ Incomplete	Accurate/ Complete
MC1	There are toys/a teddy bear/blocks in the corner/on the floor.	*Imala je još jednu medu i kocke. She had one more bear and blocks.*	-	*Tu su kockice. Here are blocks.*	*Dolje igračke stoje na podu. Downstairs, the toys are on the floor.*
MC2	Little girl was playing with toys, a teddy bear and blocks.	*Djeca medu...razdvaja kockice. Children teddy bear … separates the blocks.*	*Igraju se igračkom. They are playing with a toy.*	*Igra se djevojčica. A girl is playing.*	*Ona se igra sa kocicama i medom. She plays with blocks [phoneme omission] and teddy bear.*
MC3	Father is sleeping.	-	*Djevojčica je zaspala na fotelji. The little girl fell asleep on the armchair.*	*Spava u fotelji. Sleeps in the armchair.*	*Gospodin spava. The gentleman is sleeping.*
MC4	Father is sitting/lying/leaning back/resting in the armchair.	*Ovo je fino položeno. This is well laid out.*	*Muškarac sjedi na klupi. A man is sitting on a bench.*	*Čovjek leži. The man is lying down.*	-
MC5	Little girl/granddaughter/daughter shows her father/warns/indicates/informs/explains/speaks/addresses/asks for/calls/begs/wants attention.	*Zanovijeta. (She is) nagging.*	*Dijete oće nešto od njega. The child wants something from him.*	*Curica pokazuje na mačku. The girl points to the cat.*	*Ona bi htjela njemu pokazati. She would like to show him.*

MC6	Little girl/granddaughter/daughter is pulling/pulls her father's sleeve/wakes the father up.	*Ovaj da učenik ne spava.* *This one, so that the student doesn't sleep.*	*Djevojčica ga drži za ruku.* *"The little girl is holding his hand.*	*I vuče kćer, sigurno, za rukav.* *And the daughter pulls, for sure, by the sleeve.*	*Curica ga budi.* *The girl wakes him up.*
MC7	The cat climbed/jumped/stood/went on the wardrobe/shelf/dresser.	*Gore će je mačak.* *Up where the cat is.*	-	-	*I mačak je na vrhu polica.* *And the cat is on top of the shelves.*
MC8	The cat hunts/eats/tries/wants/wants to catch/eat/grab/catch/get/steal fish from the aquarium/in the aquarium.	*Mačka je ribe nosila.* *The cat carried the fish.*	-	*Mačak lovi ribice.* *The cat catches fish.*	*Sad vidim, mačka ribe hvata po ekva, akvariju.* *Now I see, the cat is catching fish in the aqu…aquarium.*
MC9	The cat knocks down/throws/has knocked down/has knocked down/scatters/has scattered the books.	*Mačka tura.* *The cat pushes.*	*Mačka kad je hvatala ptice tak je gurnula kišobran.* *When the cat was catching the birds, it pushed the umbrella.*	*Knjige tu bacio.* *Threw the books here.*	*… i da (mačka) ruši knjige.* *… and that (the cat) is knocking down books.*

Figure S2. Error bars that represent means and standard deviations of the entire data set.

N of words / N of MC
R² Linear = 0.127
N of words
N of MC
y=19.96+5.19*x
120.00
100.00
80.00
60.00
40.00
20.00
.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00

(**a**)

N of verbs / N of MC
R² Linear = 0.115
N of verbs
N of MC
y=5.76+1.51*x
35.00
30.00
25.00
20.00
15.00
10.00
5.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00

(**b**)

N of CIU / N of MC
R² Linear = 0.132
N of CIU
N of MC
y=18.28+5.07*x
100.00
80.00
60.00
40.00
20.00
.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00

(**c**)

(**d**)

(**e**)

Figure S3. (**a**) Scatterplot for significant correlations; group of HS: N of words/N of MC. (**b**) Scatterplot for significant correlations; group of HS: N of verbs/N of MC. (**c**) Scatterplot for significant correlations; group of HS: N of CIU/N of MC. (**d**) Scatterplot for significant correlations; group of HS: N of clauses/N of MC. (**e**) Scatterplot for significant correlations; group of HS: N of T-units/N of MC.

(**a**)

(**b**)

(**c**)

Figure S4. (a) Scatterplot for significant correlations; group of PwA: N of CIU/N of MC. (**b**) Scatterplot for significant correlations; group of PwA: CIU/words/N of MC. (**c**) Scatterplot for significant correlations; group of PwA: N of clauses/N of MC.