

Supplemental Material S2. Examples of the picture descriptions by participants.

Participant	Transcription
Healthy control	<<Oh, OK.>> So there's <<cough>> a boy <<cough>> in a striped shirt trying to get some cookies. The cookie- +there are two cookies on the shelf. One cookie's falling down. There are a bunch of cookies on the floor. The dog is <<uh>> eating one of the cookies. There's a girl next- +the- +next to the boy who's raising her hand and eating a cookie at the same time. There's a man who's standing in front of the sink that has dishes and a pot in- +in- +it that is overflowing onto the floor. The man is washing the dish with a blue object, perhaps a sponge. Outside, there's a woman mowing the lawn. It looks like she's mowing the flowers while she's talking on the phone and perhaps not <<uh>> paying attention. There's a cat <<uh>> attending to a bird and there are two other birds that are flying. And, <<uh>> <<cough>> she's outside on what looks like <<uh>> a- +on a day with a blue sky.
Poststroke Broca's aphasia (Case 1), low content, normal efficiency	I think I- +I <<unintelligible>> Think why <<unintelligible>> Oh her dog ... polka dot curtains. Curtains. Kids doing ...
Poststroke Broca's aphasia (Case 5), low content, poor efficiency (due to paraphasias)	this guy's dog is...whether it's a many...manny dog... washing clean and the <<um>> bowl of soup, not soup, it's and cactus, not cactus. <<um>> Ice cream, not ice cream, <<uhh tr— ahhh>>, the sink and a ...and bowl, and the soup is...not working on the telephone and birdie and <<umm>> <<I don't know>> <<umm>> the picture, not picture, the sinks, the... <<is um>> the bowl is, not soup. It's <<um. okay.>> The papers, not, the...the scaffolding in the street. Yeah street, the and the flowers in yardwork and...
Logopenic PPA, inefficient (anomic, circumlocutions)	This is a family that lives in a house and the father was trying to do something with what he... they would be eating on but the... the water was pouring down and there is two kids who thought okay, my dad is being so busy. So what we are going to do, the sunset... I am going to jump up quickly and I am going to get cookies for my sister and myself and we are just going to eat, eat, eat a lot because my dad isn't going to be watching us because he is working so hard on with the water because there is a problem going on and it's stripping off and of course my mom is working out in the yard. So she is not even in to see what's going on but I am... had so much fun jumping up and our dog was not paying attention down below. I might have been dropping some cookies for the dog too and so the time was coming and I was bringing it down to my daughter and I wanted to get some but I was hurrying up and all of a sudden, what I was standing on, I was pushing so far and it <<ff>> fell off and I am going to fall down and I think I

am going to get hurt and then that's not going to be very nice and my dad is going to have to stop with all that water and he's going to have to take care of me because I am going to be crying and I hurt.

Semantic variant PPA, low content, inefficient (empty phrases, semantic paraphasias)

One fell down. Well that was cookies and ... falling down. The dog likes it. He didn't. I don't understand there. Yeah I don't know. Get the dog know that. I don't know that one. No. She is out there. He is inside. He is cooking. I mean not cooking but washing and then she is over there and then the kids are doing nothing and not saying anything.

Notes. Content Units (CUs) are underlined. PPA = primary progressive aphasia.