The application of construction grammar to language in aphasia

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Construction grammar (e.g. Goldberg and Suttle 2010) remains relatively untested in aphasia, despite being applied with apparent success to other areas of language such as acquisition (e.g. Brandt et al. 2011), yet this approach could shed new light on language usage and processing in aphasia.

Much linguistic research into aphasia to date (e.g. Thompson and Shapiro 2005) has been underpinned by generative theory (Chomsky 1957 onwards) proposing that language is generated through the application of syntactic rules to base forms. This differs sharply from the usage-based view adopted in construction grammar that language is learned holistically from the input as constructions (or 'fixed' combinations of constructions) of various sizes, from morphemes and words to more complex multiword strings. While other research has addressed 'formulaicity' in aphasia, this has mainly examined multiword utterances in only the severe forms of aphasia (e.g. Blanken and Marini 1997), despite 'formulaic sequences' occurring in most main aphasia types (Wray 2002). Also, such utterances have often been analysed under proposed dichotomies of 'propositional' versus 'non-propositional' or 'formulaic' versus 'non-formulaic' language (e.g. Code 1994), which may be problematic due to a lack of agreed definitions and categorization methods for such groupings (Wray 2002) and viewing these as clear dichotomies rather than as clines. Construction grammar, regarding all language as of equal communicative importance, could offer a more inclusive approach to the analysis of aphasic language, which, in turn, may have implications for aphasia diagnosis and therapy. Equally, aphasia could provide a fresh focus for testing the plausibility of construction grammar.

This paper presents as a starting point for such research an examination of noun pluralisation 'errors', in which the plural form of a noun is produced when the singular would be expected from the narrative or linguistic context, for example

and one . one (2.5) one . shoes (Case IB reported on the PATSy database, Lum, et al. 2012)

Spoken narrative data is presented from twelve stroke survivors with a range of aphasia severities, including five participants from the PATSy database (Lum, et al. 2012). 'Error' patterns appear to support constructionist theory: if an individual produces the plural form of the noun when the singular is seemingly required, it may be that the plural form is being retrieved holistically rather than generated through the application of a rule to inflect the singular. Furthermore, the form erroneously used is often more frequent than the form required (measured using the British National Corpus, Davies 2004-), which may support the constructionist view that language is acquired holistically from the input, and that more frequent forms are therefore likely to be more entrenched and perhaps more easily activated. The discussion thus exemplifies how construction grammar could help to elucidate aphasic language and, consequently, the storage and processing of language generally.

Keywords: construction grammar, aphasia, usage-based approaches, holistic processing, grammatical number.

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